

Gendering the health determinants framework: WHY GIRLS' AND WOMEN'S HEALTH MATTERS

















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CONTACT INFORMATION: Women's Health Research Network Simon Fraser University - Harbour Centre Campus Room 3277, 515 West Hastings Street Vancouver, BC V6B 5K3 tel: 778.782.8589 fax: 778.782.5288 www.whrn.ca

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Cecilia Benoit, PhD Leah Shumka, MA



WOMEN'S HEALTH RESEARCH NETWORK VANCOUVER, CANADA

Women's Health Research Network

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Biological and Social Factors that Influence Health

While medical and epidemiological studies have tended to focus on biological (especially genetic) causes of disease in individuals and populations, social epidemiologists and social scientists have examined the contribution of non-biological factors to health, specifically the contexts within which individuals and groups live and act. This broader view of the pathways of disease prevention and health promotion is captured under the umbrella term "determinants of health" (Glouberman and Millar, 2003). In this primer, we use *health determinants framework* (HDF) to refer to the empirical, theoretical, and policy interest in understanding the set of myriad and interrelated social, cultural, environmental, and biological factors that affect the health of individuals and communities.

The primer aims to clarify the concepts in the health determinants framework (HDF) and to examine its usefulness in understanding the health of a unique population group — girls and women — who face disadvantage due to structural inequities (i.e., differences among societal groups that are avoidable and unfair) that limit their access to, and control over, material and symbolic resources, and over their bodies and lives. Compared to males, females utilize health-care services more frequently. Because their social positions vary by socioeconomic position, ethnicity, race, and migrant status, some girls and women are especially vulnerable to social disparities and deserve special consideration. Health, which we define as a state of complete physical, mental, and social well-being, is created and lived by people within the setting of their everyday lives — where they learn, work, play, and love (World Health Organization, 1986), and their health outcomes can all be seen as fundamentally *gendered*. This is evident by the fact there are not only significant gender differences in morbidity and mortality worldwide but also in how health-related risks are diagnosed and treated.

We begin with a brief overview of the main health determinants discussed in the academic literature, and then consider how sex and gender as health determinants interact with other key factors like socioeconomic status, ethnicity, race, migrant status, age, and geographical location in shaping health outcomes. The HDF has a lot to contribute to understanding women's health *if* it takes gender into





consideration and places equity at centre stage to capture the multiple levels of health determinants and their intersections. Of course, even the best evidence on the fundamental factors affecting women's health will do little to change health inequities unless there exists the political will to carry through necessary policy recommendations. These recommendations must extend beyond the mainstream health sector.

The HDF offers a way to conceptualize the origins of *inequalities* in health outcomes among populations. Throughout this document, when referring to health inequalities and health inequities we mean the unfair distribution of those resources that are necessary for each person to attain their health potential (Whitehead, Dahlgren, & McIntyre, 2007). These terms are commonly employed in the Canadian and international literatures and differ somewhat from *health disparities* — a phrase largely confined to US research on the topic. What is especially useful about the HDF is that it points to the interaction between predisposing genetic and biological pathways with social and cultural factors that shape individual attitudes and behaviours to positively or negatively influence health (Canadian Institute of Health Information [CIHI], 2006; Evans, Barer, & Marmor, 1994; Marmot, 2003; Marmot & Wilkinson, 1999). The goal of the HDF, however, is not merely to understand how various factors individually affect health within a population, although this is certainly an essential component. The framework also aims to identify the reasons why there are differences in disease states and health outcomes and how these differences are shaped by individuals' unequal access to key resources. According to Rachlis, a "particular population's health status is as unique to that society as fingerprints are to an individual" (2004, p. 304).

Identifying "Health Determinants"

As table 1 indicates, the World Health Organization (2007) recognizes ten health determinants, while the Public Health Agency of Canada identifies a dozen (Public Health Agency of Canada, 2006). Dennis Raphael, the editor of a recent 2004 volume called *Social Determinants of Health: Canadian Perspectives*, offers eleven determinants that overlap while making important distinctions from these two other lists. However, all three lists call attention to the multiple factors — social, structural, genetic, biological, and environmental — that operate outside of individual control and serve as the basis upon which differentiations within a population can be found.



Even the best evidence on the fundamental factors affecting women's health will do little to change health inequities unless there is political will to carry through necessary policy recommendations, which must extend beyond the mainstream health sector.

WORLD HEALTH ORGANIZATION	PUBLIC HEALTH AGENCY OF CANADA	DENNIS RAPHAEL
Income and social status	Income and social status	Income and its distribution
Social support networks	Social support networks	Social safety net
Education	Education and literacy	Education
Economic environment	Employment/ working conditions	Employment/ working conditions
Social environment	Social environments	Social exclusion
Physical environment	Physical environments	Housing
Personal individual characteristics and behaviour	Personal health practices and coping skills	
	Healthy child development	Early life
Genetics	Biology and genetic endowment	
Health services	Health services	Health-care services
Gender	Gender	
	Culture	Aboriginal status
		Food security
		Unemployment and employment security

TABLE 1. Lists of key health determinants by source

Dahlgren and Whitehead (1991) offer a model that shows the relationships of these health determinants to one another along with key outcomes (see figure 1). However, while age, sex, and genetic makeup undoubtedly influence people's health potential, this model makes such determinants appear fixed when in fact they are more fluid than they seem in the model. According to Dahlgren and Whitehead, other factors in the surrounding layers of the model can potentially be modified to achieve a positive impact on population health.



FIGURE 1. The main determinants of health (Dahlgren & Whitehead, 1991, used with permission)

Barbara Starfield has also highlighted the interaction among the different health determinants, which she defines as "the wide variety of interacting proximate and distal influences on the health of individuals and populations" (2001, p. 452). Link and Phelan (1995) likewise recognize that some health determinants are "fundamental" and others "proximate." They emphasize that access to key resources is crucial for health, including access to knowledge, money, power, prestige, and social connections that determine the extent to which people are able to avoid a range of risks for morbidity and mortality (Link & Phelan, 2005). Health determinants that operate at the middle/meso-level of society, such as public health care, housing, and transportation, also influence individual health (Wilson, Jerret, & Eyles, 2001). At the "proximal" or micro-level, Link and Phelan (1995) locate risk factors that have been the focus of classical and social epidemiological studies over the last 150 years. These risk factors include poor individual health, including overcrowding and poor sanitation in the nineteenth century and, more recently, smoking, unhealthy diets, and lack of exercise. In their recent work, they urge us to pay more attention to more fundamental issues affecting equity — most importantly, socioeconomic status — if health reform is to have its maximum effect in the coming decades (Link & Phelan, 2002, p. 266-67).

Age and other environmental factors



Gender inequalities in politics, employment, and income opportunities result in health concerns that burden girls and women in particular ways. It is important to understand the link between these gendered inequalities and health in order to develop appropriate policies to help reduce these biases.

Even though the health determinants literature includes research on many of the fundamental causes of health, it critically either fails to include sex and gender in its list of health determinants or includes one but not the other. Even Raphael (2004), who argues that gender is a feature of social life that intersects with other *social determinants*, does not include gender in his list of determinants, and, because sex is considered a biological determinant, it gets no mention at all (see table 1).¹ Similarly, Link and Phelan (1995, p. 87) discuss both sex and gender only briefly.

Our examination of sex and gender as key health determinants aims to better understand the fundamental factors shaping the health of girls and women. We focus on females because they have historically been and continue to be more likely to be poor, to live in inadequate housing, and to exert less control over their bodies and lives. This is the case in high-income/wealthier countries as well as middle- and low-income/less wealthy countries. As we will show, gender inequalities in politics, employment, and income opportunities result in health concerns that burden girls and women in particular ways. It is important to understand the link between these gendered inequalities and health in order to develop appropriate policies to help reduce these biases. Furthermore, because gender inequalities are often based on sex-based differences, sex should always remain a primary concern in health research, policy, and practice.

Sex and Gender as Health Determinants: How Do They Differ?

Sex has long been considered a factor linked to the health of males and females. However, until recently, sex has been conflated with gender in health research and therefore analyzed relatively uncritically. For this reason, the independent effects of sex and gender on health outcomes, as well as how sex and gender both interact and intersect with other determinants, have not been clearly articulated (Lorber, 1996). These oversights are based first on a systemic bias among researchers resulting in: 1) the exploration of women's health as an aberration of a health norm historically based on the experience of men; and 2) an inability to disentangle biological and

1 Social determinants of health are broad institutionalized factors that exert influence on the health of groups of people within a society because they are deeply entrenched in the social order and the related structure of opportunities and constraints accessed by individuals (Marmot, 2003).





social conditions underpinning health outcomes (Davidson, Kitzinger, & Hunt, 2006; Doyal, 2003).

For these and other reasons, feminist health researchers have focused attention in recent decades on bringing sex and gender, especially the unique health concerns of girls and women, to the forefront of research (Andrew et al., 2003). This began with the North American women's health movement in the 1970s and '80s. Until then, explorations of women's health were largely concerned with either reproductive or mental health. By comparison, studies of men's health were more likely to incorporate physical health and ignore mental and reproductive health issues altogether. In response, the women's health movement "aimed to take [women's] bodies back from the institutions of medicine and reframe [their] knowledge and experience [of their] bodies in ways not configured by sexism and androcentrism" (Tuana, 2006, p. 2). At the heart of this movement was a concern with power and the production and application of scientific knowledge. Women activists sought to take control of health knowledge production in order to shed light on their unique health concerns and, in the process, transform health care and policy. Activists and feminist scholars also joined together to change the male-dominated medical care system by marrying research with action around issues ranging from the legalization of midwives and home birth to women-centred care more generally (Bourgeault, Benoit, & Davis-Floyd, 2004; DeVries, Benoit, Van Teijlingen, & Wrede, 2001; Shroff, 1997).

Clarifying Sex

It is generally agreed that sex is a biological construct based on one's sex chromosomes (that is, XX = female, XY = male) and manifested in one's anatomy, physiology, and hormones, and that these attributes tend to be more or less constant across societies (Phillips, 2005). While most people assume there are only two sexes, in reality there is a relatively high incidence of asymptomatic people with sex chromosome anomalies (e.g., Turner's syndrome [XO] and Klinefelter Syndrome [XXY], among others). As well, secondary sex characteristics such as facial hair, breast size, and hormone levels vary greatly among individuals. For instance, although testosterone is a hormone usually associated with males, it is found to greater and lesser degrees in both males and females, depending on their age, health status, and use of pharmaceutical drugs. As Johnson, Greaves, and Repta put it, as a health determinant, sex can influence how female and male bodies "respond differently to alcohol, drugs, and therapeutics due to differences in body composition and metabolism, as well as differences in hormones" (2007, p. 4). Research in the addictions field, for example, has shown how gender roles can influence interpretations of and patterns in substance use, whereas complementary research in the area of sex has revealed how biological factors influence the impact of substances on the body.

Clarifying Gender

Gender is a social construct that extends beyond the boundaries of biologically defined categories of sex to include the socially mediated roles and norms typically enacted and ascribed to women, men, and other gender groups (e.g., transgendered, two-spirited, and queer).² Gender refers to the roles and expectations attributed to these groups in a given society — roles that change over time, place, and stage in life (Doyal, 2003; Oakley, 2000). In other words, gender is a dimension of social organization, shaping our access to material and symbolic resources, how we interact with others, and even how we think about ourselves. For example, although women make up half of the world's population, their median representation is just 16.6 percent of seats in the 180 parliaments. While this represents a small increase in women's political involvement from fifty years ago, only in Rwanda (48.8) and Sweden (45.3) does the share of parliamentary seats held by women approach their share of the population (Inter-Parliamentary Union, 2006). Canadian data on income echo this observed gender hierarchy in politics: in 2004, the average earnings for women working full-time year-round was just under \$36,500, while men working full-time earned an average of \$51,700. This means that for every dollar earned by men, women earned 70.5 cents (Statistics Canada, 2006). This is why sociologists speak of gender stratification — the unequal distribution of wealth, power, and privilege between men and women shaping the opportunities and limitations each of us faces throughout our lives (Lorber, 2001).

As previously noted, health inequalities between women and men are not static but vary historically and cross-culturally. One evident inequality is the impact of social policies on women. Research shows that gendered outcomes are especially sensitive to the organization of welfare states. The social policies of "women-friendly" welfare states include employment equity, publicly funded parental leaves, and child and elder care, all of which have significant influence on reducing inequities between the genders (Benoit, 2000; Benoit et al, 2005; Hernes, 1987; Johnson, 2007; Leira, 1992; Orloff & Shaver, 1999; Sainsbury, 1996).

Gendered "norms" also shape experiences of illness, what health-care problems come to the attention of researchers and get investigated, what health services are made available through the public purse, and the norms and values influencing patient care (Davidson, Kitzinger, & Hunt, 2006; Spitzer, 2005). Research in

2 For a more in-depth analysis of the difference between "sex" and "gender," please refer to *Better Science* with Sex and Gender: A Primer for Health Research which can be found on the WHRN website: http://www.whrn.ca.





the addictions field, for example, has shown how gender roles can influence interpretations of and patterns in substance use, whereas complementary research in the area of sex has revealed how biological factors influence the impact of substances on the body (Bureau of Women's Health and Gender Analysis, 2005).

Impact of Gender Stereotypes on Men's and Women's Health

Gender stereotypes negatively affect men's health. In fact, in high-income countries such as Canada, biologically sexed females have better health than men throughout the life course.³ First, females enjoy a natural biological advantage since, for example, female fetuses are less likely to abort spontaneously, females overall have a lower risk of developing cancer, and, on average, females also live longer than males. There are also a wider variety of genetically predisposed diseases (e.g., hemophilia or Duchenne Muscular Dystrophy) that have a greater impact on the mortality rates of males.

Socialization into gender roles plays an important role in health outcomes. Men in high-income countries are expected by society to display their masculinity in a form that includes physical prowess and avoidance of emotional expression — the so-called hardy man (Riska, 2002). This expectation leads to men being employed in potentially physically dangerous jobs such as the military, mining, logging, and fishing as well as their greater participation in more aggressive and/or individualistic activities (contact sports, race-car driving, etc.). The result for men is higher rates of morbidity and mortality due to accidents, interpersonal violence, and suicide, a phenomenon that Durkheim (1897) observed more than a century ago (Sachs-Ericsson & Ciarlo, 2000). While some biologists argue that aggressive behaviour is part of men's biological makeup, anthropologists have shown that there is a great deal of cultural variation in gender roles around the world. In some societies men are equally as likely as females to be supportive and sensitive to others as women are assumed to be in contemporary Western societies (Leacock, 1978).

Despite women's biological advantage and health-conscious socialization, they typically report poorer overall mental health than men. Women also tend to seek more health services compared to men (Annandale & Hunt, 2000; Das Gupta, 1997;



³ This is not the case in many middle- and low-income countries where gender differences in life expectancy, among other measures, favour males. In countries such as China and India, new sex pre-determination techniques like ultrasound are used to reinforce anti-female prejudice, resulting in unnaturally low femaleto-male ratios at birth (Jhaa et al., 2006; Sen, 2003).

Recent Canadian research also shows that, when other risk factors are taken into account, depression is significantly associated with increased risk of heart disease among women but this is not the case among men experiencing depression.

Davidson et al., 2006; Haw 1982; Jick & Mitz, 1985; Shumka & Benoit, 2008). Studies indicate that the lifetime prevalence of major depression for women is double that of men, and women are also more prone to experience stress caused by life course events (Stephens, Dulberg & Joubert, 1999). Women are twice as likely as men to be given a diagnosis of unipolar depression, anxiety, panic disorder, and agoraphobia, and three times more likely to be diagnosed with a borderline personality disorder (Kessler & Magee, 1993). Recent Canadian research also shows that, when other risk factors are taken into account, depression is significantly associated with increased risk of heart disease among women but this is not the case among men experiencing depression (Gilmour, 2008).

While these disparities in mental health status between and among men and women are daunting enough, other research has shown that diagnostic processes and criteria for some mental health conditions may be gender biased, allowing women (and their clinicians) to more readily identify mental health concerns than men, with the consequence that women's mental states are more likely to be medicalized (Conrad, 2005; Conrad & Leiter, 2004). In fact, the causes of women's depression often lie elsewhere — for example, in unequal access to wealth and other resources, low social status in the household and society, and so forth (Rosenfield, 1989).

Research has also shown a clinical bias in favour of males in the diagnosis of chronic diseases that are common to both genders. As a case in point, heart attack (myocardial infarction) is a leading cause of death for both men and women. Male risk exceeds that of females' in the earlier stages of life for what appear to be genetically and hormonally related reasons. However, because clinicians once assumed the "prototype" of the heart disease patient was male, the primary indicator of impending health failure that they have used in their diagnosis has been acute chest pain. Recent studies have shown that for women, fatigue, rather than chest pain, is the most common symptom of myocardial infarction. This gendered assumption that coronary artery disease is primarily a male affliction may help explain why women are more likely to die after a heart attack than men are (Vaccarino et al., 1999). According to Pilote and colleagues who studied the sex and gender determinants of cardiovascular disease (CVD),

The lack of good trial evidence concerning sex-specific outcomes has led to assumptions about CVD treatment in women, which in turn may have resulted in inadequate diagnoses and suboptimal management, greatly affecting outcomes. This knowledge gap may also explain why cardiovascular health in women is not improving as fast as that of men. (Pilote et al., 2007, p. S1)





In short, in the interest of equity and sound science, there is a vital need to mainstream sex and gender in medical and social epidemiological studies (Doyal, 2003).⁴ More research is also needed to understand under what conditions these factors, separately or together, impact girls' and women's health and the strength of this impact. According to Nancy Krieger (2003), the relevance of gender relations and sex-linked biology to a given health problem can be answered only empirically.

Intersections of Girls' and Women's Health⁵

Research needs to investigate when and how sex and gender intersect with other crucial factors, especially socioeconomic status, race, ethnicity, migrant status, age, and geographic location to create a *social gradient* — the patterning of health whereby people in poorer socioeconomic circumstances are not as healthy as those in the middle class and the middle class is not as healthy as those at the top (Public Health Agency of Canada, 2006) — especially among girls and women (Barbeau, Krieger, & Soobader, 2004; Bartley, Blane, & Montgomery, 1997; Kobayashi, 2003; Pederson & Raphael, 2006; Raphael & Bryant, 2004). Figure 2 provides an illustration of how we understand sex and gender intersecting with these other key determinants to create health inequalities among girls and women within and across regions and countries.

Although it builds on previous health determinants models, especially that of Dahlgren and Whitehead (1991) and Link and Phelan (1995) mentioned earlier, what is unique about our model is that it places sex and gender on equal footing with other fundamental determinants, including race, ethnicity, migrant status, geographical location, and age. The figure shows their causal connection to access to key resources, including knowledge, money, power, prestige, and social connections. Access to resources in turn determines the extent to which one can or cannot avoid a range of risks that epidemiologists link to increased morbidity and premature mortality.

⁴ Gender mainstreaming is a term that was defined by the United Nations Economic and Social Council in 1997 as a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programs in all political, economic, and societal spheres. The ultimate goal of gender mainstreaming is equality/equity between women and men in all spheres of life.

⁵ For a detailed examination of the intersectionality approach, please refer to Intersectionality: *Moving Women's Health Research and Policy Forward*, which can be found on the WHRN website: http://www.whrn.ca.

Access to resources determines the extent to which one can or cannot avoid a range of risks that epidemiologists link to increased morbidity and premature mortality.

In our model, naming some determinants "fundamental" refers to their primary importance for shaping health outcomes and is closely associated with a macrolevel perspective. However, these macro determinants interact with meso-level determinants in important ways — that is, access to key resources such as employment, education, and childcare — and these in turn influence the micro-level or individual determinants related to behaviours such as smoking, diet, and exercise. Together, these health-shaping factors interact to create health inequalities by way of morbidity and mortality. Our model is dynamic in that it can be amended over time and according to location to include emerging fundamental determinants of interest to researchers, such as sexual orientation or access to clean water for those living in less-privileged areas of the globe. Similarly, we might add drug-use and selfharming behaviours to our proximal determinants. In other words, we want to move away from a static understanding of the HDF and consider instead all the relevant contours of individual and population health.

FUNDAMENTAL DETERMINANTS (MACRO)

- Sex
- Gender
- Social class
- Race
- Ethnicity
- Immigrant status
- Age
- Geographic location

ACCESS TO KEY RESOURCES (MESO)

- Employment
- EducationChildcare
- Safe
- neighbourhoods
- Health services

PROXIMAL DETERMINANTS (MICRO)

- Smoking
- Diet
- Exercise

MORBIDITY and/or MORTALITY

FIGURE 2: A dynamic gender-inspired health determinants model

Gender and Social Class

Recognition of how inequalities in health are associated with social class or socioeconomic status (SES) — as measured by education, occupation, and income — is one of the main contributions of HDF research. Mackenbach and colleagues reported inequalities in morbidity across SES groupings in ten western European countries during the 1980s (Mackenbach et al., 1997). A more extensive study examining the link between SES and health inequalities in twenty-two European



countries in the last decade and a half confirmed and extended the authors' original findings (Mackenbach et al., 2008). Individuals with less education, which is a key marker of low SES, were found to have higher rates of death from all causes except breast cancer. With respect to mortality rates associated with cardiovascular disease, one-third of deaths among males and one-half of those among females have been linked to education-related inequalities (Mackenbach et al., 2008).

Researchers refer to this phenomenon as the "opportunity structure" through which people who are privileged gain access to health-enhancing physical environments (e.g., clean water and quality food and shelter), access to a local configuration of resources (e.g., good schools, safe and high-quality childcare centres, betterequipped recreation centres), and social environments that foster social support and community participation (MacIntyre & Ellaway, 2000). While difference in this opportunity structure is clearly evident between males and females, it is equally as important to recognize its importance for understanding inequalities between groups of women.

For example, women from low-SES backgrounds are more likely to smoke, be overweight, live in unsafe neighbourhoods, maintain greater or sole responsibility for child and/or elder care, and perform substantial amounts of unpaid domestic labour. Ironically, it is economically privileged women who, through the purchase of paid help, frequently employ poor women at the bottom of the opportunity structure (Armstrong, 2004; Whittle & Inhorn, 2001). This suggests that there are structures of power in place whereby the health advantage of more privileged women is supported by the labour of others from lower SES groups, the majority of whom tend to be poor women. Their social location exposes them to a broader range of physical and psycho-social health concerns, including muscle strains and injuries, anxiety, stress, and postpartum depression, than their more privileged sisters (Benoit, Carroll, & Chaudhry, 2003; Gottleib, 1988; Seguin et al., 1999; Stacey, 2005).⁶

This is not to say that high SES protects women from particular health concerns. Women who are relatively well-off can be more vulnerable to health problems such as endometriosis — which is the presence of uterine lining in other pelvic organs and characterized by cysts and long and/or painful menstruation. This is related

⁶ Social location refers to the multiple "roles" or "statuses" that one individual can occupy at any given time. It is, in large part, conditioned by an individual's age, gender, ethnicity, health status, and occupation. Individuals can move in and out of various social locations as the circumstances of their lives change (Shumka, 2006; Veenstra, 2004).

The literature on home-care workers provides a compelling example of how intersecting disadvantages relating to gender, social class, and occupation maintain health inequities among certain groups of women.

to better-off women's higher use of estrogen-based birth control, later age at first birth of children, and dieting during sexual maturation (Fromer, 1998; Lark, 1995). However, these health concerns are less pervasive and also less likely to threaten the overall health, safety, and security of those women affected, unlike what we see for women who are less well off.

SOCIAL CLASS, WORK, AND HEALTH The literature on home-care workers (who are also commonly referred to as home-care aids) provides a compelling example of how intersecting disadvantages relating to gender, social class, and occupation maintain health inequities among certain groups of women (Aronson & Neysmith, 1996). While women globally are gaining access to interesting jobs that are well paid and provide access to health and wellness benefits, including maternity leave, dental care, and extended health insurance (i.e., women in professorial and managerial positions), lower-income women are more likely to work in socially vulnerable occupations. These occupations are marked by one or all of the following: poor compensation, little or no health benefits, unsafe working conditions, unregulated hours (forced to work too much or too little), and discrimination. Such jobs often involve "caring" for or providing services to others. In Canada, and across other high-income countries, one such job is home care work for older adults.

Home care involves performing a wide range of personal and household services from bathing, dressing, and monitoring the health of older adult clients in their own homes, to doing their cooking, cleaning, and shopping (Aronson & Neysmith, 1996). What makes this job vulnerable is, in part, that it straddles both the informal and formal economies (Benoit & Hallgrímsdóttir, 2008). Specifically, the work mirrors the unpaid family-care work that women have traditionally been responsible for and yet it holds paraprofessional standing — a home-care worker is an unlicensed but trained assistant to a professional practitioner — through its association with the health care industry, and nursing work in particular. In Canada older adult care is one of the fastest growing occupational fields due to restructuring programs that have "downloaded" the responsibility for the care of the frail from hospitals and other social institutions onto families (Aronson & Neysmith, 1996; Stacey, 2005). Because many young adults are separated by physical distance from their elders and/or are busy with careers and their own children, such care has fallen to "unskilled, untrained, and underpaid" women (Aronson & Neysmith, 1996; Stacey, 2005, p. 832). Empirical research shows how the conditions of the job lead to diminished health outcomes for many home-care workers.





A recent US study confirms findings from an earlier Canadian study indicating that as many as 80 percent of home-care workers are women and of those there is an "over-representation of racial and ethnic minorities" as well as immigrants (Bureau of Labor Statistics, 2003; Stacey, 2005, p. 836). Compensation for the average worker in both countries is low, with the median hourly wage at the time set at \$7.81 (US) and \$10.50 (CAD). In addition to near-minimum-wage conditions, these workers must also be flexible in terms of when and where they work and be willing to accept part-time and/or other contingent work arrangements. The physical costs associated with the job are also frequently high. According to Stacey, home-care workers and home-nursing aides "suffer from the highest number of musculoskeletal disorders of any occupational group in the US" (2005, p. 843). This is partly a result of the strain associated with transporting and manoeuvring frail and/or immobile clients.

The emotional impact of care work for an aging population can also be high. Some workers have found it difficult to forge the necessary interpersonal relationships with their clients in order to make it feasible to work in their homes under highly intimate circumstances. On the other hand, some workers find themselves overly investing in their clients' well-being, especially those who are poor in health, lonely, and as financially constrained as the home-care workers themselves. Stacey (2005) showed that when home-care workers too closely identify with their clientele, they tend to work unpaid overtime to keep lonely or scared clients company. Other workers lend money or pay for necessities, including prescriptions, for economically vulnerable clients, perform duties beyond their skill level and training (e.g., provide medical care), and/or drive their clients to/from doctors' appointments (potentially making the worker liable). These varied tasks can place care workers in a compromised economic position and be emotionally taxing, which increases their psychological distress and burnout. While it is important to emphasize that there are many rewards associated with care work — Stacey (2005) points to the autonomy, skill building, and dignity associated with providing a much-needed service — it is clear that low SES intersects with gender (as well as race, ethnicity, and migrant status) to constrain the opportunities and health status of women in this line of work.

SES AND DISEASE The link between social class and gender is also evident in recent research on metabolic syndrome, which is a clustering of risk factors for cardiovascular disease and diabetes including elevated blood pressure, abdominal obesity, and insulin resistance. Loucks and others (2007) revealed significant disparities between men and women toward developing metabolic syndrome, with



According to many feminist theorists, women's social mobility has long been, and still continues to be, inhibited by patriarchal social and political norms that equate "women's worth" with their "visual appeal."

women aged 25 to 65 years showing a marked vulnerability. Low-income women in the study were also at an even greater risk for cardiovascular disease than their high-income counterparts. These findings confirm earlier research which suggests that women of low SES experience poorer health outcomes due to "higher co-occurring psychosocial determinants of health, including single parenting, depression, income below the poverty threshold, and unemployment, compared with men with low education." The researchers also found that years of education is a strong predictor of number of live births which, in turn, is associated in prospective studies with weight gain and a decrease in high density lipoproteins (i.e., so-called "good cholesterol" which seems to protect against cardiovascular disease) (Loucks et al., 2007, p. 788). Weight gain which, in societies that idealize physical fitness, youth, and beauty like many Westernized countries, can be especially problematic for women because obesity discrimination has been shown to have a stronger effect on limiting the upward social mobility of women than men (Bordo, 1993; Reischer &Koo, 2004). According to many feminist theorists, women's social mobility has long been, and still continues to be, inhibited by patriarchal social and political norms that equate "women's worth" with their "visual appeal." Research on poverty and obesity also indicates that "people with low incomes may preferentially purchase high-calorie [less expensive] energy-dense foods, resulting in greater caloric intake and risk for obesity" (Loucks et al., 2007, p. 24). This example is clear evidence of a cycle of disadvantage that occurs when fundamental determinants such as gender and SES intersect to shape both women's physical health but also their access to key resources, which in turn influences individual behaviours.

GLOBALIZATION AND HEALTH INEQUALITY By turning our gaze globally, we find a wide range of "developogenic" diseases recognized as especially prevalent in poor areas of the world. These are diseases that reach epidemic proportions due to restructuring and development projects funded by agencies like the World Bank, such as hydro-electric dam construction. The consequences of the projects are often rapid urbanization and deforestation (in association with sub-standard urban and rural planning) which leave certain ecological niches vulnerable (Farmer, 2006). The result is the spread of diseases like malaria, tuberculosis, cholera, malnutrition, and venereal syphilis, especially among those who are impoverished and lack the resources and power to change their circumstances. These problems are also systematically gendered, in part due to the division of labour between women and men within these communities but also, as a recent study in a poor agrarian area of India exemplifies, because gender is the major factor predicting who receives health





care and the quality of care received. For example, among rural Indian families, social class has been shown to have a significant impact on the quality of care a person receives once treatment for a health problem begins. In short,

Gender and economic class operate at different levels and interact in important ways. If we think of being treated at all versus never being treated as the first level, it is gender (pure bias and possibly some rationing bias) that discriminates between people ... Once people begin to receive treatment, economic class seems to become more important than gender per se, but even here, class bias operates mainly through women. (Iyer, Sen, & George, 2007, p. 551)

Policy-makers and health-care providers need to be sensitive to potential gender bias in people's treatment seeking, even when economic barriers to access have been removed at the household level. This research indicates the value of combining gender and social class to enhance our understanding of health inequities, both in Canada and in disadvantaged areas of the world.

Gender and Race, Ethnicity, and Migrant Status

Social categories of race, ethnicity, and migrant status do not appear on any of the official lists of health determinants in table 1. Instead they are only alluded to under such headings as "personal individual characteristics and behaviour," "genetics" (World Health Organization, 2007), "culture" (Public Health Agency of Canada, 2004), and "Aboriginal status" (Raphael, 2004). Link and Phelan's (1995) work is an exception, however, to the extent that they discuss how race and ethnicity are closely linked to access to education, money, power, and social connectedness, and implicitly to health inequalities. We include both race and ethnicity in our model (figure 2). However, we go further by adding migrant status because it too can be seen alone as well as in intersection with race and ethnicity.

While it is important to recognize that each of these factors represents an important health determinant in its own right, untangling their relative importance can be difficult. For example, race, a socially constructed category that categorizes people based on biologically shared traits such as skin colour, facial features, hair texture, and body shape, can determine the incidence of certain forms of diseases such as sickle cell anaemia. At the same time, race is closely related to a person's ethnicity — a group's shared cultural heritage based on common ancestry, language, music, food, and religion. Both can lead to vulnerabilities to certain social determinants of

Similarly difficult to untangle are migrant status and ethnicity, especially for firstgeneration Canadians who may face specific health problems related to the stress, anxiety, and physical hardships associated with transitioning from culturally familiar "home" to uncharted "foreign" environments.

health (e.g., poverty, stigma, and/or marginalization) and can, in combination, give rise to specific health disadvantages for certain groups of people. In the case of Canada's Aboriginal, Inuit, and Métis, for example, is it their biological differences (hair and skin colour) or is it their ethnic differences (language, spiritual beliefs, and cultural practices) that make them one of Canada's most vulnerable populations when it comes to their health? Similarly difficult to untangle are migrant status and ethnicity, especially for first-generation Canadians who may face specific health problems related to the stress, anxiety, and physical hardships associated with transitioning from culturally familiar "home" to uncharted "foreign" environments. However, what is perhaps even more important, in terms of our discussion here, is how all three intersect with gender to create a patterning of disadvantage, in particular among women. A few case studies will explore these issues.

BREAST CANCER AND THE RELATIONSHIP BETWEEN ETHNICITY AND MIGRANT

STATUS A large population-based study looking at the social and biological factors linked to the severity of breast cancer among women in the United States provides one example of the gradient in morbidity and mortality by race and ethnicity (Miller, Hankey, & Thomas, 2002). This study compared ten different racial groups, including African-American, White, Japanese, Hispanic, Korean, Hawaiian, Filipino, Chinese, Vietnamese, and American-Indian women (authors' categories). The study showed that African-American and Hispanic women were significantly more likely to be diagnosed with metastatic breast cancer where the breast lesions were large and had greater malignancy (i.e., higher grade). White and Japanese women, on the other hand, were located at the opposite end of this continuum — their condition tended to be diagnosed earlier, they tended to have smaller tumours, and the tumours were more likely to be less malignant (i.e., lower grade). While hormonal differences between these different racial and ethnic groups of women explained some of the observed health inequalities, "sociodemographic factors accounted for 50-80 percent reductions in the odds ratios for distant stage and larger size breast tumors among African American patients and Hispanic patients" (Miller et al., 2002, p. 537). In other words, African American and Hispanic women were more likely to be less educated, living below the poverty line, single parents, and living in homes with one or more children, and these social factors conspire to delay detection and diagnosis of breast lesions. In part, these social burdens prevent women from recognizing early signs of the disease and seeking appropriate care in the early stages of the disease. At the same time, low-income and other marginalized women tend to live close to areas that are polluted or contaminated with toxic wastes. These women are also less





likely to have access to nutritious food for themselves and their children. Moreover, marital status was also found to be correlated with breast cancer. This is because married women had greater social support which encouraged them to invest in their health. Married women also had more time and higher household incomes, which gave them greater access to health-care services. While the focus in this study links race and gender, Miller and colleagues' (2002), findings clearly indicate that ethnicity, and potentially even migrant status, were also contributing to these discrepancies. They revealed that cultural practices and beliefs accounted for some of the observed variation among their diverse sample of women.

Canadian research expands on the importance of ethnicity and migrant status for understanding the epidemiology of breast cancer and how cultural practices and beliefs can shape the detection and outcomes among women of diverse backgrounds. While early detection leads to favourable prognosis and improved health outcomes, breast self-exam, clinical breast exams, and screening mammography programs are generally underutilized by ethnic women in Canada. Ahmad and Stewart studied breast cancer among South Asian women who are the "second largest but fastest growing" group of new immigrant women in Canada (2004, p. 118). The authors found that these women underutilize breast cancer screening programs because the women believe that they are at a "low risk" for developing the disease since the incidence in their country of origin is low. Such a belief has been maintained despite a significant body of recent research on the "healthy immigrant effect." This phenomenon involves new immigrants experiencing a health advantage when they first immigrate, but losing that advantage over time as they adopt mainstream beliefs, attitudes, and lifestyle behaviours (e.g., smoking, dietary changes, increased alcohol consumption) (Gee, Kobayashi, & Prus, 2004). The research also shows there are "patriarchal norms and gender roles" (Ahmad, Cameron, & Stewart, 2005, p. 276) that lead many immigrant women to neglect their own health, particularly breast cancer screening. This neglect arises from their obligation to fulfill multiple care-giving responsibilities that range from caring for children and older relatives to sole responsibility for cooking and cleaning at home. Compounding this problem is inadequate money for transportation and other costs (e.g., payment for childcare) associated with going to the doctor. Finally, cultural barriers play a role in that both clinical and self-exams and assessments challenge ethno-cultural beliefs related to the appropriateness of self-touching or being touched by a doctor of the same or opposite sex (Ahmad & Stewart, 2004). These findings indicate the need for multicollaborative, culturally sensitive cancer-screening programs that emphasize

Despite the overrepresentation of Aboriginal women with HIV/AIDS and other related health problems in Canada's poorest neighbourhood, they are also much less likely to seek help from outreach centres. This is due to the lack of both culturally sensitive and gender-sensitive health services.

special training for health-care providers on the specific needs and concerns of recent immigrant women.

ABORIGINAL STATUS AND HEALTH DISADVANTAGE Aboriginal women in Canada are also at a greater disadvantage compared to other women, which research has found to be partly associated with systematic discrimination against Aboriginal people in Canadian society (Browne, 2007; Edmonds, 2001). The situation of Aboriginal women who reside in Vancouver's Downtown Eastside (DTES) and work as sex workers provides a troubling case in point because they encounter increased morbidity and mortality compared to other women living and working in the same area. Approximately 70 percent of women working in the DTES as sex workers are Aboriginal women (Benoit, et al., 2003). Their average age is 26 years — the majority have three or more children and are without a high school education (Currie et al., 1995). Teen births are thirteen times higher in the DTES than in other regions of Vancouver, half of all Aboriginal families there are headed by lone mothers, and as many as 80 percent of Aboriginal children in the urban ghetto live in poverty (Joseph, 1999). These combined factors place Aboriginal women in the DTES at an increased risk for health problems, including HIV/AIDS. According to Joseph (1999), Aboriginal women are the fastest growing group of HIV-positive individuals in the DTES and are three times more likely to die of HIV/AIDS than other Vancouver women. In general, unprotected sex and reliance on the street-sex industry to garner a living leave Aboriginal women at a much higher risk of having health problems than their non-Aboriginal counterparts living in the DTES (Parry, 1997). Despite the overrepresentation of Aboriginal women with HIV/AIDS and other related health problems in Canada's poorest neighbourhood, they are also much less likely to seek help from outreach centres. This is due to the lack of both culturally sensitive and gender-sensitive health services (Benoit et al., 2003). When asked, Aboriginal women living in the DTES indicate that they need access to traditional healing centres, more Aboriginal and female doctors/counsellors, and a "healing place" where their children are welcome and where they and their children are safe from abusive partners, law enforcement officers (seeking to apprehend their children or who have warrants out for their arrest), clients, or drug dealers (Benoit et al., 2003). Once more, this is clear evidence for how structural inequalities associated with gender, race, ethnicity, and even age can cluster to place certain groups of individuals at risk for poorer overall health as well as for having fewer options for addressing those health concerns.





Gender and Geographic Location

While overall the health of Canadians is enviable, especially compared to our counterparts living in some middle- and low-income countries, the health of individuals living in Canada is also highly contingent on the place where they reside. As our example of Aboriginal women living in Vancouver's Downtown Eastside highlights, there are marked differences in health based on whether one lives in a high- or low-income neighbourhood of a city or town.

Within Canada, the connection between place and health is especially evident when we consider the differences between urban and rural settings — those living in more isolated geographic areas face greater disadvantage due to the lack of both economic and social resources. As a recent Canadian study entitled, *How Healthy are Rural Canadians*? (CIHI, 2006) reveals, health decreases the farther a person resides from a major urban centre. This can be especially true for rural women who have significantly higher mortality rates than urban women (DesMeules, Manual, & Cho, 2003; Dolan & Thien, 2008). A combination of factors are the cause, including lower educational achievement and lower labour force participation among rural compared to urban women. Rural women also tend to have higher fertility rates, more high-risk pregnancies, and to report greater stress, anxiety, depression, domestic/ interpersonal violence, and to smoke (Dolan & Thien, 2008; Lee & Lutz, 2005; Morrow, Hankivsky, & Varcoe, 2004; Stout, Kipling, & Stout; 2001; Varcoe & Dick, 2008; Varcoe & Irwin, 2004). According to Dolan and Thien, by virtue of their isolation, limited economic opportunities, and access to health and social services,

Certain subsets of rural women are considered especially vulnerable, including Aboriginal, elderly and disabled women. In Canada, Aboriginal women die younger, and suffer higher rates of violence, substance abuse, suicide, and chronic diseases (e.g., arthritis, hypertension, heart problems, diabetes) compared to non-Aboriginal women; a result, in part, of the significant challenges of living in rural and northern communities. (2008, p. 38)

PLACE, RACE, AND RISK OF VIOLENCE AND STIs Recent research in northern British Columbia exemplifies precisely how and why Aboriginal women living in rural and remote locations might find themselves especially vulnerable to these, and other, health concerns. Varcoe and Dick (2008) for example, conducted research looking at the "intersecting dynamics" of gender, rural living, race, and poverty Due to systemic racism and the "neocolonial context of Canadian society," rural and on-reserve Aboriginal women were particularly likely to find themselves in these difficult situations.

for determining women's risk of violence and exposure to sexually transmitted infections (STIs) and HIV. The majority of the women in the study had experienced multiple forms of abuse and these experiences were "compounded by poverty, drug and/or alcohol use and limited access to support services, all of which put them at significant risk for exposure to HIV and other sexually transmitted infections (STIs)" (Varcoe & Dick, 2008, p. 44). For many women, the lack of career opportunities and limited resources in rural locations forced them to stay in abusive relationships for the conditional economic security they provided. Others were compelled either by these abusive partners or by their dire economic circumstances into unwanted or unprotected sex and this in turn left them at risk to contagious infections. Due to systemic racism and the "neocolonial context of Canadian society," rural and onreserve Aboriginal women were particularly likely to find themselves in these difficult situations. The legacy of residential schools and the associated loneliness and despair associated with being separated from friends and family, losing language and traditional culture, and sexual, physical, and emotional abuse, has shaped rural Aboriginal women's lives in very particular ways and left many vulnerable to drug and alcohol misuse and entering and staying in abusive relationships (Browne & Fiske, 2001; Browne & Smye, 2002).7

Varcoe and Dick (2008) also note that geographical isolation and the realities of living in economically depressed outlying regions means that women residing there often lack access to the educational, childcare, and other services and resources that could help them improve their lives. Instead, "many of the participants talked about how they had to move to urban centres for education and employment opportunities, better health care, greater anonymity, and safety from various forms of violence. This both disconnected the women from their support networks and depleted human resources in the rural area" (Varcoe & Dick, 2008, p. 48). Further, government cuts in health and social services, including legal aid and social assistance, mean these women either have to leave their communities where they have no social support or they are compelled to remain in abusive relationships. Funding cuts to these regions also means less education and fewer prevention programs about violence and HIV, fewer street nurse services to address immediate health concerns, and fewer women's centres and support groups (Dolan & Thien, 2008; Hanlon & Halseth, 2005).



⁷ This is clearly a highly complex issue and we do not do it justice here. For instance, residential schools have perpetuated a cycle of harm that not only affects those who attended these institutions but also subsequent generations. Many survivors have indicated that their ability to parent was compromised by their lack of role models and the damage done to traditional beliefs and practices.



PLACE AND CHILDBIRTH At the same time that resource-related funding cuts have limited the social services available to many women living in rural and remote regions of Canada, the federal and provincial governments have been "down-sizing health-care services, broadly characterized in rural communities by centralization of services (e.g., maternity care, rural hospital, bed and clinic closures), privatization of services (e.g., more fee-for-service models of care) and shifting responsibility for services to the community level (e.g., deinstitutionalization of care)" (Dolan & Thien, 2008, p. 40). As a result, pregnant women living in rural and remote locations in Canada are facing a particular set of health challenges. Since 2000, twenty hospitals in British Columbia's most northern regions alone have stopped offering maternity care services (BC Perinatal Database Registry, 2000-2007; Centre for Rural Health Research, 2008). Rural and remote women are thus forced to leave their homes and travel to a major urban centre to give birth in a regional hospital. For many women, this means paying out-of-pocket costs for travel, food, and lodging while they are away. Because of the inevitable uncertainty about when women will actually go into labour, they may end up being away from home for several weeks. Not only is this situation financially stressful, it also poses a number of health risks for women. For instance, being away from family to give birth, especially if there are other young children at home, can be very emotionally distressing. Other women who choose to wait until closer to their due date to travel can run the risk of going into labour en route, which can pose a risk to both themselves and their newborn (Centre for Rural Health Research, 2008). While some women may decide to stay home and have unassisted home births, they too can run into trouble if they find they have a difficult labour or encounter any unexpected health emergencies. One possible solution to this problem is more and better-trained midwives available throughout the province, perhaps working in concert with nurse-practitioners (CIHI, 2004).

Benoit, Carroll, and Westfall (2007) have similarly found that Canada's Aboriginal women living in remote reserve communities have unequal access to important maternity care services compared to both their urban and non-Aboriginal counterparts. While this unequal access is due, in part, to geographical distribution, with greater densities of Aboriginal people living on reserves, in the North, and in other remote locations, there are also systemic issues surrounding race and ethnicity at play (Leitenberger, 1998). For example, in recent decades, Aboriginal birthing women have been separated from their families and communities due to a government policy that evacuates all rural and remote pregnant women, who are largely Aboriginal women, to urban centres in their final weeks of pregnancy (Benoit, Carroll, & Westfall, 2007). Many Aboriginal women have suggested they need more trained Aboriginal midwives who live in their communities and speak their languages The assumption that girls are always victims and boys always perpetrators of dating violence is based on researcher presuppositions more than participants' reported experiences.

(Benoit et al., 2005). However, while Aboriginal women have lobbied for, and some have received midwifery programs (e.g., as some Inuit women have done), these programs have to date been established in only a handful of locations. Substantial resources have been funnelled away from these communities into urban obstetric and gynaecological services where the majority of doctors and obstetricians are willing to work.

Not only is there insufficient funding to establish and sustain midwifery programs in most rural Aboriginal communities but potential applicants also encounter barriers in the high cost of Canadian midwifery training programs and requirements to maintain standards and accreditation once trained. Equally difficult is that these regulated programs are based on biomedical (Western) models of health care that do not readily acknowledge or incorporate traditional Aboriginal health practices which are of vital importance both to the women wishing to become midwives as well as those desiring access to their services. Rural pregnant Aboriginal women are therefore in an unenviable situation: there are too few physicians to tend to their prenatal and childbirth needs, publicly funded midwives are too few in numbers and generally located in urban centres, and the biomedical establishment largely lacks the cultural sensitivities to appropriately train women who want to live and work in their own communities.

Gender and Age

Age is another fundamental determinant of health that can interact with gender (and other factors) to create health inequalities among populations, though the relationship is complex. There have been, for example, a large number of studies looking at sexual health and well-being among adolescents (Shoveller et al., 2004; Shoveller & Johnson, 2006). According to the Centers for Disease Control and Prevention (2004), "risky sexual behavior is one of six health behaviors most associated with mortality, morbidity, and social problems among youth" (Banister & Leadbeater, 2007, p. 125). Researchers also argue that girls are more likely to be the victims of sex exploitation and abuse at the hands of adults and/or experience dating violence, unprotected sex, STIs, and unwanted pregnancies compared to sameaged males (Banister & Leadbeater, 2007; Saewyc, Mackay, et al., 2008). A recent report on "sexual exploitation" of a sample of BC youth indicates that the interaction between gender and age can sometimes have a more negative impact on younger males but the reverse appears to be the case for older youth.⁸ As Saewyc and colleagues report:

8 Sexual exploitation is the exchange of sexual services for resources such as money, drugs, food, shelter, transportation, clothes, and similar things among youth under age 19.





Among younger street-involved youth (ages 12-18), a greater percentage of males were exploited (34% vs. 27% of females in 2006). Among older street-involved youth (ages 19-25), a higher percentage of females reported sexual exploitation (53 percent females vs. 32 percent males). (2008, p. 6)

Of the youth surveyed, Aboriginal youth were disproportionately represented with one-third to as many as one-half reporting having been sexually exploited.

ADOLESCENCE AND EARLY ADULTHOOD A look at dating relationships among adolescents tells a similar story. As Banister and Leadbeater (2007) highlight in their study of adolescent dating, both male and female youth take part in perpetuating and sustaining violence in romantic relationships. In the past, there has been a bias in reporting to indicate that females were more likely to be the "victim" of dating violence. Banister and Leadbeater (2007) suggest that the assumption that girls are always victims and boys always perpetrators of dating violence is based on researcher presuppositions more than participants' reported experiences.

Nevertheless, dating violence is a concern that is particularly relevant to girls because they become involved in romantic relationships at an earlier age and tend to have boyfriends older than themselves (Banister and Leadbeater, 2007). While many adolescent dating relationships are positive and set the stage for positive growth and healthy adult relationships, girls can be at risk for relationships that "disrupt normal developmental processes such as the development of a stable self concept and integrated body image and may lead to impairments in behaviours, thoughts, and feelings" which can ultimately "affect self-esteem and emotional health" (Banister & Leadbeater, 2007, pp. 124-25). Not surprisingly, the authors also found that girls who come from lower social classes are more likely to report having been in an abusive relationship and they have more difficulty leaving these relationships as well.

These findings confirm others comparing BC street-involved female youth with a random sample of same-aged females from the Capital Metropolitan Area (CMA) of the province (Victoria area). Benoit, Jansson, and Anderson (2007) found that female youth between the ages of 14 and 19 in the general population commonly enjoy healthy, disease-free lives while those who are street-involved report much poorer psychological and physical health. These problems include high rates of depression, anxiety and panic attacks, attempted suicide, and self-harming behaviour (e.g., slashing or cutting oneself). Young women who spend much or all of their time on the city streets also use comparatively higher quantities of addictive substances,

Over three-quarters of youth who reported harming themselves were female and those youth who reported that their families had difficulty affording basic necessities were the most likely to report this behaviour.

including cocaine, crystal methamphetamine, and heroin. The authors link these health outcomes to a "clustering of vulnerabilities" that begin in early childhood and extend through to the experience of becoming homeless. Many street-involved female youth describe their childhoods as unstable with frequent moves between different family and non-family situations. Unlike female youth in the random sample, street-involved youth tend to have weak or even severed ties to kin-based and other social support networks. Many young women report being left at an early age to meet basic necessities, including food, clothing, and safe shelter. By the time they were in their early teens, many of these vulnerable young women were generating the bulk of the money for their living expenses through precarious and typically illegal activities, which increases their likelihood of being harassed and arrested and heightens their exposure to interpersonal injury (Benoit, Jansson, & Anderson, 2007).

Self-harming behaviour is another specifically age-related health concern that interacts with both gender and social class. In their analysis of non-suicidal selfharming behaviour, Nixon, Cloutier, and Jansson (2008) found that almost 17 percent of youth from their random sample had harmed themselves (research done in the US, UK, and Australia note similar prevalence rates). Self-harming includes cutting, scratching, self-hitting, and burning with the purpose of mediating tension, anxiety, distress, and restlessness and/or self-punishing, sensation seeking, and anti-dissociation. While there are a number of factors associated with self-harm behaviour (including awareness of this behaviour among peers and family members, drug misuse, depression, anxiety, and other behavioural disorders), the authors also found a significant association between self-harm behaviour, gender, and social class. Over three-quarters of youth who reported harming themselves were female and those youth who reported that their families had difficulty affording basic necessities were the most likely to report this behaviour (Nixon et al., 2008).

VULNERABILITY IN MID- AND LATE LIFE A discussion of the intersection of age and gender does not, of course, limit itself to a discussion of young people. There are also gendered patterns to the incidence, diagnosis, and health-seeking behaviours of individuals at other stages of the life course, including among middle-aged and older adults (Kobayashi, 2003). The connection between the health of older men and women, geography, and social integration has recently been examined in the Canadian context by Cloutier-Fisher and Kobayashi (2009). Using data from the 2000-2001 Canadian Community Health Survey, the authors conclude that when individual characteristics are considered together with broader contextual variables like gender and place of residence, a more comprehensive and layered portrait of





vulnerability among socially isolated people begins to emerge with insights into their unique patterns of health and service use. For example, home care may be an extremely critical resource for keeping older women in their place of residence and out of hospital. On the other hand, among socially isolated older men, those living in rural communities may be particularly "invisible," neither benefiting from home care nor having strong social supports. It seems plausible, then, that both men and women may need targeted interventions and programs to help them to remain, or to become, more socially integrated in their communities as they age "in place." For example, it may be prudent to focus outreach efforts on promoting regular physician visits for health maintenance or specific health checkups for socially isolated rural males, whereas assistance in getting urban females out to events by subsidizing transportation options may be a more useful course in the promotion of their health and well-being. Research is needed at the personal or micro level to illuminate and probe these effects. We also need more creative ways of identifying and reaching such individuals. In providing support to vulnerable, socially isolated older men and women, it is therefore critical to continue to work to untangle the complex web of relationships (i.e., between gender, geography, age, and social integration) that contribute to knowledge about the factors that influence their health status, utilization of services, and need for care.

While it may be true that older men are underrepresented in health research, older women are similarly overlooked, either in favour of younger women (often in their childbearing years), or of younger men. For example, Kosiak and her team of researchers (2006) point out that both older men and women are underrepresented in clinical trials of cancer and heart disease, even though these two disease are the biggest killers of men and women aged 65 and older. While all older adults require research that focuses on their specific health-care needs, these researchers go on to say that older women are of immediate concern because they are "the fastest growing group of older adults" (Kosiak, Sangl, & Correa-de-Araujo, 2006, p. 89). Beyond this demographic reason, Kosiak and colleagues (2006) further suggest that older men and women have different types of health problems. Men suffer from largely acute health problems whereas women have more co-morbidities (e.g., diabetes and hypertension) and chronic health problems. Because health care systems in most high-income countries are organized around the care of acute problems, men are better served. Doctors are also more likely to interpret older women's health concerns as emotionally based and a "normal" part of aging and so many of their conditions are ignored (Kosiak et al., 2006). The authors go on to



Fundamental in the long run is the ability to reach out to society's most vulnerable members and provide them with the basic necessities of living that promote health and well-being, including high-quality education, safe and secure housing, meaningful employment, and good nutrition.

say that older women are also more likely to be living below the poverty line and therefore lack the resources that men have to access the health care they need, which is a particular concern in the US where co-payments and other up-front costs limit lower-income seniors' access to physicians and hospitals. As a result of these and other factors, older women are much less likely than men to be screened for colon cancer, despite the incidence of colon cancer being slightly higher in females. On the other hand, they are more likely to "receive aspirin or beta-blockers upon hospital admission or discharge for acute myocardial infarction" (Kosiak et al., 2006, p. 89; Richards et al., 2000). Older women are also less likely than younger women to be screened for breast cancer. This is despite the fact that the incidence of breast cancer increases with age. In support of an intersectional perspective, Kosiak and others also show that both white and highly educated older women have better access to high-quality health care than those who are non-white and less educated (2006).

Summary and Policy Implications

While the HDF is beneficial for how it directs attention to the clustering of disadvantage that is associated with health inequalities, the traditional framework has pitfalls, including being vague, incomplete, and difficult to put into concrete action. In this primer, we have documented recent research findings that help us broaden the HDF to include sex and gender and to shed light on how these factors intersect with other determinants of health, including socioeconomic status, race, ethnicity and migrant status, geographic location, and age (Adelson, 2005; Fee & Krieger, 1994; Krieger et al., 1993). Failing to examine gender and sex within the context of other fundamental determinants homogenizes the experiences of women (and men), reifying existing inequities while at the same time overlooking important sources of within-group inequity (Butler, 1990; Hankivsky, 2005; 2007; Varcoe et al., 2007). As Janzen succinctly points out, "the determinants of women's health are no doubt complex ... likely arising from a combination of interacting economic, social, psychological, and biological forces" (1998, p. 34).

Despite the work that has recently been conducted from an HDF perspective, broader structural and societal barriers still need to be considered because they threaten the translation of this research into policy and practice. Global economic shifts are affecting the nature and structure of the working environment on local, national, and international levels. Similarly, neo-liberal policies have led to cutbacks to social





support systems and the privatization of health services. These cutbacks signal the lack of political will to help shoulder the "care burden" of society's vulnerable members — a responsibility that remains largely with women in both the public and private spheres (Armstrong, 2004; Armstrong, Armstrong, & Coburn, 2001; Armstrong & Laxer, 2006; Doyal, 2003; Reid and Herbert, 2005; Stein, 2001; Walters, 2003; Weibe & Keirstead, 2004).

It is worth reminding ourselves of a key message of the HDF, namely, that the maintenance and promotion of a population's health is only partly achieved by public investment in health services such as hospitals, physicians, and advanced medical technology. More fundamental in the long run is the ability to reach out to society's most vulnerable members and provide them with the basic necessities of living that promote health and well-being, including high-guality education, safe and secure housing, meaningful employment, and good nutrition (Beiser & Stewart, 2005; Whitehead, Dahlgren, & McIntyre, 2007). For this to happen, an equitable distribution of resources is crucial. This could be achieved with gender equality in paid and unpaid work, social rights such as parental leave and benefits, public child and elder care, ethno-culturally appropriate health care aimed at our Aboriginal, visible minority, immigrant, and refugee communities, and social inclusion of all citizens in our country's political, educational, and symbolic institutions. These strategies have been more successfully incorporated by welfare states in countries such as Sweden and other Northern European than in Britain, Canada, and the United States to date (Blomquist, 2004; Raphael & Curry-Stevens, 2004). According to the Public Health Agency of Canada, herein lies the ultimate challenge: "the health sector has been reluctant to champion policies that improve social conditions because areas of social and economic policy largely fall outside of the health department's jurisdiction" (2004, p. 5). The consequences of this inaction will not only worsen the health of vulnerable girls and women and other disadvantaged groups but will also affect the health of all Canadians and the communities in which they reside. By contrast, the uptake of these messages will improve everyone's health and create a more equitable and productive society.



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WOMEN'S HEALTH RESEARCH NETWORK Simon Fraser University -Harbour Centre Campus Room 3277, 515 West Hastings Street Vancouver, BC V6B 5K3 778.782.8589

The Women's Health Research Network (WHRN) is based in British Columbia, Canada, and brings researchers together who are interested in women's health, and gender and health issues. The WHRN fosters the generation, application, and mainstreaming of new knowledge to improve women's health and women's health research and encourages the brokerage of knowledge regarding the health of girls and women in British Columbia and Canada.

For more information about the network, please visit our website at www.whrn.ca

