

Taking a Second Look:

Analyzing Health Inequities in British Columbia with a Sex, Gender, and Diversity Lens

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***Prepared for Dr. John Millar by:
British Columbia Centre of Excellence for Women's
Health - Steve Chasey, Ann Pederson, Putu Duff***

***This report is available online at
www.phsa.ca/takingasecondlook***

***Provincial Health Services Authority
700-1380 Burrard St.
Vancouver, BC, V6Z 2H3 Canada
www.phsa.ca/PopulationHealth***

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Foreword

The Women's Healthy Living Secretariat, Ministry of Healthy Living and Sport was created in March 2009 to advance the health and well-being of women in British Columbia. The development of the Secretariat affirms gender as an important determinant of health and recognizes that women's and men's lives result in different social, physical, and emotional conditions. One of the roles of the Secretariat is to provide a sex and gender perspective, wherever possible, in the development of healthy living policies and programs.

Taking a Second Look: Analyzing Health Inequities in British Columbia with a Sex, Gender and Diversity Lens systematically applies a sex and gender based analysis to two sets of health indicators. The first is an examination of cardiovascular and respiratory disease, and diabetes, and their relationship to women's life expectancy. The second examines poverty, food insecurity and homelessness from a sex and gender perspective.

Worth a Second Look: Considerations for Action suggests responses and actions that can be taken as a result of the sex and gender based analysis. It provides examples of the application of the analysis into concrete actions that everyone involved in policy and program can undertake.

Both documents provide pertinent illustration of how sex and gender interacts to create health and social conditions that may be more unique, serious or prevalent in one group or another. It is an analysis that can help guide planning around health promotion and prevention initiatives and is certain to provide many 'aha!' moments for those who are unfamiliar with the significant insights gained through sex and gender analysis.



Joan Geber
Executive Director
Women's Healthy Living Secretariat
Ministry of Health Living and Sport

In November, 2008, the Health Officers Council of BC released the report *Health Inequities in British Columbia: Discussion Paper* (see www.phabc.org). The Health Inequities paper was intended to contribute to a better understanding of health inequities and the extent to which they exist in British Columbia, support informed discussion about health inequities among a broad range of audiences, and promote consideration of policy approaches for tackling this issue.

Health Inequities contribution was significant – it began to identify and characterize the health inequities that exist in BC. However, in order to most effectively understand and address these inequities, it is useful to unpack the data through a sex- and gender-based analysis (SGBA).

Taking a Second Look demonstrates how using SGBA to discover the linkages across health indicators deepens our understanding how health inequities tend to cluster in ways that put some populations at higher risk for health problems than others. The techniques and analysis presented in the report should be employed whenever health inequity research is conducted to help us zero in on this need.

Worth a Second Look offers an initial response to the question of what action can be taken with the results of SGBA? It responds to a number of the policy options proposed in the original *Health Inequities in British Columbia* report by extending the policy analysis, identifying at-risk populations, and offering refined and/or strengthened policy responses.

Taken together, these papers should stimulate further discussion by relevant stakeholders, help guide future policy work, and improve our ability to address health inequities - I look forward to your participation in those conversations.



John Millar
PHSA Executive Director
Population Health Surveillance & Disease Control Planning

Executive Summary

By a number of health outcome measures, British Columbia ranks ahead of other Canadian provinces. For example, average life expectancy at birth in British Columbia is 81.2 years, nearly a full year longer than the national average of 80.4 years. However, outcomes such as average life expectancy can mask health inequities that exist between different populations in the province. Efforts to reduce health inequities require an understanding of the social and physical conditions which produce and sustain them. Sex (biology) and gender (social relations) are crucial pieces of this context as they can exacerbate, sustain, or even create health inequities.

The release of *Health Inequities in British Columbia (2008)* initiated a process of identifying and characterizing health inequities in British Columbia. That report noted that inequities generally fall along two strong gradients: geography (urban/rural location) and socioeconomic status. The prevalence of heart disease in BC provides a striking example – households in the lowest quartile in terms of income report two and a half times the prevalence of heart disease compared to households from the highest quartile. However, this picture changes when sex is considered. Women from low income households report a prevalence of heart disease over three times that of women in the highest quartile, while men from low income households report over two times the prevalence compared to men in the highest quartile. To properly address inequities such as these, it is imperative that we understand how socioeconomic status and geographical location intersect with gender as the interactions between them have powerful implications for health policy and planning.

To that end, *Taking a Second Look* applies a sex- and gender-based analysis to two clusters of interrelated health indicators. The first is life expectancy, with a focus on issues of respiratory disease, cardiovascular disease, and HALE (health adjusted life expectancy). Analysis of this cluster of indicators reveals that while on average women live longer than men, women tend to live a smaller percentage of their lives in full health. The second cluster of indicators concerns poverty, including the related issues of food insecurity and homelessness. Analysis of this cluster of indicators results in a reframing of child poverty as women's poverty, or more specifically, poverty of single mothers (a group three times more likely to live in poverty than the rest of the BC population).

Taking a Second Look contributes to ongoing national and global discussions of the importance of gender in health equity. By illustrating these concepts in a BC context, this paper provides an illustrative, evidence-based example for decision makers of the value of adopting sex- and gender-based analysis and the insights it offers into health inequities in British Columbia.

Introduction

Health inequities occur when one population group experiences unfair, avoidable or remediable differences in health outcomes than another group. It is widely accepted that health inequities often exist along a socio-economic gradient, with more advantaged socioeconomic groups enjoying better health than low socioeconomic groups.¹ However, health inequities also appear along other gradients, including gender, age, ethnicity and disabilities,² which are often overlooked in health inequity analyses.

The British House of Commons Health Committee pointed to this oversight in its report on health inequalities: “a review of the measures used is needed to ensure that important areas of health inequalities- including age and gender related inequalities, and those relating to mental health- are not neglected.” This paper adopts the broader approach supported by the Committee and uses a sex- and gender-based analysis (SGBA) to investigate how the social effects of gender create health inequities in BC.

In December 2008, the Health Officers Council of BC released *Health Inequities in British Columbia*, which took a traditional socioeconomic and disease-centred approach to identifying health inequities in BC. Though the report did not focus on gender, it did reveal consistently higher levels of disease in lower income groups, while pointing out that poverty is more common among women than among men in British Columbia. Women were also found to have poorer health status than men for many health indicators including: heart disease, self-perceived health and overnight hospital stays, as well as being at higher risk for homelessness and food insecurity. These gendered results serve as the baseline for this paper.

The paper begins with a brief introduction to sex, gender and health followed by an SGBA of BC health inequity data. Two clusters of interrelated indicators are examined: 1) life expectancy, heart disease, respiratory disease, and HALE, and 2) poverty, homelessness, and food insecurity. These clusters were selected to explore and reframe two salient trends in women’s health:

1. The decreasing gap between men and women’s life expectancies
2. The high prevalence of food insecurity among low-income women and high rates of female lone-parent and child-poverty in British Columbia.

One prominent finding in *Health Inequities in British Columbia* is the BC Paradox, which states that despite having by some measures the best overall health outcomes in Canada, BC also has some of the highest rates of socioeconomic disadvantage in the country.³ *Taking a Second Look* identifies specific populations in which this paradox plays out, as well as some of the underlying causes of the dramatic health inequities that exist in BC. Its findings highlight specific areas of concern for policy makers, care providers, men, and women.

While SGBA demonstrates health inequities for men and women, historically the majority of the burden of health inequities has fallen on women. This represent a clear social injustice, one which has been the centre of the work of the WHO Commission on the Social Determinants of Health which argues that “taking action to improve gender equity in health and to address women’s rights to health is one of the most direct and potent ways to reduce health inequities and ensure effective use of health resources.”

Background

Health equity has been defined by the World Health Organization (WHO) as “the absence of unfair and avoidable or remediable differences in health among population groups defined socially, economically, demographically or geographically.”⁴ As a corollary, *health inequity* refers to the presence of unfair, avoidable and/or remediable health differences among population groups. Generating equity in health entails eliminating unnecessary or avoidable and unfair or unjust differences in health among population groups and communities.

Social constructions of sex and gender (e.g. gender roles and relations) can impede attainment of good health by limiting access to resources such as income, food, housing, medical care and social services, which directly affects one’s health status. In many countries for example, girls are less likely than boys to receive health care, food or education.⁵ In Canada, women are more likely than men to be impoverished, limiting their access to housing, food and health care services that are necessary to achieve and maintain good health.^{115,92} Male stereotypes that promote physical ruggedness can lead men to ignore physical ailments and avoid consultations with medical professionals, thus increasing their morbidity and mortality.

Gender norms often shape women’s and men’s choices in occupation, which make them vulnerable to certain health problems. For example, unpaid care-giving is largely performed by women. Caregivers are at higher risk for stress, emotional strain and musculo-skeletal injuries.^{6,7,8} In many countries, men are often socialized to exhibit their masculinity by demonstrating physical prowess.⁹ This stereotype encourages men to work in physically demanding jobs such as the military, mining, logging and construction and increases their risk of morbidity and mortality.¹¹⁵

Gender health inequity refers specifically to unjust and avoidable differences in health that stem from the social construction of sex and gender. Achieving gender health equity implies that men and women (boys and girls) have an equal opportunity and access to conditions and services that enable them to achieve good health.¹⁰

The dominant approach to the study of health inequity arose out of the Whitehall studies¹¹ and emphasizes the impact of social hierarchy and income on health, but gives little attention to the role that gender plays in health inequity.

A Sex and Gender-based Analysis (SGBA) of health inequity integrates a sex, gender and diversity perspective into data analysis and the development of policies, programs and legislation.¹² This type of analysis involves asking new questions such as:

- Do women and men (girls and boys) have the same experiences (e.g., life expectancy, disease prevalence, morbidity)?
- How do we account for these similarities or differences?
- What is to be done about them?
- Which populations are affected?
- Where do the affected populations live?

- What are the implications of any diversity we see among women or among men for action?

The answers to these questions provide a clearer understanding of the issues and often point to the need for more appropriate policy, practice, and research options.

SGBA includes an analysis of diversity such as ethnicity, socioeconomic status, disability, sexual orientation, migration status, age and geography to determine their influence on health and wellbeing. Incorporating an analysis of diversity reveals health trends among important subpopulations that may be hidden by aggregate population reporting.

Analyzing data using a gender lens uncovers trends and causal links between health determinants and health status that may be missed in general statistics. SGBA provides a more holistic view of health determinants so that proposed policies, legislation and programs can be inclusive and equitable.

This paper applies SGBA to British Columbia health inequities data to reveal how sex, gender and diversity interact to affect health inequities in the province.

Methods

Taking a Second Look is a complementary paper to *Health Inequities in BC*, released in 2008 by the Health Officers Council of BC. While there are numerous ways to conduct an SGBA (for details see Appendix A), this discussion is based upon reanalyzing a previous study and assessing components of it relating to sex and gender.⁹² This method involves asking additional questions using data that have already been collected as well as pulling in relevant supplementary data. Specifically, this paper drew on already existing data sources such as Statistics Canada data tables, Census data and Community Profiles, the Canadian Community Health Survey, and others.

Health inequities tend to occur in clusters. For example, *Health Inequities in BC* reported that people with higher socioeconomic status (SES) are more likely to be in good health, as are people living in urban as opposed to rural areas. This paper introduces a gendered approach to the analysis of health inequities for low-SES populations as well as introducing a new analysis of life expectancy for men and women in British Columbia.

While life expectancy at birth (*LEo*) is growing for both men and women in BC, women's life expectancy is not growing as fast as men's.¹³ As a result, the gender gap in *LEo* has been shrinking in recent years. This paper details the context and health implications for this trend by asking a number of questions:

- Is there inequity in the causes of mortality and morbidity for men or women?
- For what diseases are incidence rates changing differently for men and women?
- How do these mortality trends relate to the social context of men and women's lives?
- Even though women are living longer than men, are there ways to estimate if they are living healthier lives? How does this affect how we perceive the benefits of living longer?

While it is beyond the scope of this paper to answer all of these questions in depth, they inform the following discussions.

Similar questions are asked to explore the effects of sex, gender and diversity on poverty, homelessness and food insecurity:

- What is the prevalence of poverty among men/women?
- Which women/men/subgroups are affected by poverty homelessness and food insecurity (by ethnicity, family group geography)?
- How do income levels among men/women compare?
- What are the reasons behind income disparities among men and women?
- How/ why does homelessness and food insecurity affect men, women and population subgroups differently?

These questions, combined with British Columbia data on poverty among lone mothers and lone fathers, leads us to reframe the BC Paradox of rising child poverty into a larger problem involving poverty that affects parents and children.

The availability of British Columbia-specific data was a limiting factor in choosing which indicators to analyze in this discussion paper. Sex-disaggregated data are generally available for mortality and morbidity rates and are of high quality, however social determinants such as poverty and social support are more difficult to quantify and to date there are fewer data of high quality collected or reported. In addition, health trends for Aboriginal people (defined as First Nations, Inuit and Metis) are difficult to quantify because of gaps in reporting and data quality.

SECTION 1: Gender and Life Expectancy at Birth in BC

While life expectancy at birth (*LEo*) is growing for both men and women in BC, women's life expectancy is not growing as fast as men's.¹⁴ As a result, the gender gap in *LEo* has shrunk from 6.2 years in 1989 to 4.4 years in 2003.¹⁵

To put the closing gap in perspective, it is helpful to compare British Columbian *LEo* to other developed nations. For example, Fang et al. recently reviewed *LEo* in British Columbia and report that British Columbian men have ranked 1st in the world in terms of *LEo* since 2003 and are projected to remain at that level through 2010. In contrast, British Columbian women ranked 3rd in *LEo* in 2003 and are projected to fall to 7th place by 2010.

This trend is partially encouraging in that it means for men, the efforts to reduce disease (particularly heart disease) and mortality have assumedly had effect. However, the relative decline in women's health status in BC is a concern and can be identified as a gendered health inequity.

One method of investigating this health inequity is to examine the major causes of mortality for men and women and identify gendered trends. These trends do not necessarily involve the largest causes of mortality for men and women, however trends involving those causes are given more weight based on their impact on overall life expectancy trends.

Fang et al. identified three main reasons that women are not fairing as well as men in terms of *LEo* gains, specifically trends in heart disease, diabetes, and respiratory disease. Based on the findings in Fang et al, the Provincial Health Services Authority commissioned evidence reviews on each of these three causes, which revealed significant sex- and gender-related health inequities.

Health Inequities associated with Heart Health

Though mortality rates due to heart disease have fallen steadily for men and women over the past 30 years, improvements for women have been outpaced by improvements for men. In 2000, more Canadian women died of heart disease than men for the first time.¹⁶ The underlying causes of heart disease are social, environmental, and service-related, and many exhibit significant health inequities between men and women.

Smoking, obesity, lack of physical activity, and poor diet and nutrition are the individual risk factors for heart disease for which women, or some groups of women, are at higher risk than men.¹⁷ For example, in recent years smoking rates among young women have been equal to or surpassing those among young men, and women are more likely to be exposed to second-hand smoke. Additionally, partially due to gender norms, women are less likely to engage in physical activity, a fact that is especially true in young girls.¹⁸ Gender affects women's social roles in ways that creates health inequity in each of these risk factors, and in many cases women are faced with multiple risk factors. While currently limited in scope, gender-sensitive programming and policy making has the potential to significantly improve these risk factors for women.

As *Health Inequities in British Columbia* points out, cardiovascular disease is more prevalent in populations that have a low socio-economic status (SES). Men from the lowest economic quartile are twice as likely to

report heart disease as men from the top quartile, whereas women in the lowest quartile are three times more likely than women in the top quartile to report heart disease. As women on average are more likely to have low SES compared to men, particularly single mothers, this burden is borne unequally by women compared to men.¹⁹

Health inequity in heart disease also exists at the level of service delivery. Traditionally, heart disease has been considered a “man’s disease” and women have been underrepresented in studies of cardiovascular disease. This bias has skewed findings towards heart disease as it presents in men,²⁰ however newer research indicates that men and women present symptoms of heart disease differently. Specifically, while chest pain, pressure, or tightness are the leading signs of heart attack for both sexes, women are more likely to report atypical symptoms, such as nonspecific chest pain, mid-back pain, nausea, palpitations, and indigestion,^{21,22} which are more difficult for a physician to recognize and can therefore lead to delayed diagnosis. Additionally, it has been shown that when presented with male and female patients presenting identical symptoms, there is a tendency among physicians to ascribe women’s symptoms to psychogenic rather than organic causes,²³ further delaying treatment. Treating signs and symptoms of heart disease promptly has a significant protective health effect, one that currently benefits men more than women.

Health Inequities associated with Diabetes

There are three main types of diabetes mellitus: type 1, type 2, and gestational diabetes. While the incidence rates of type 1 and gestational diabetes have remained relatively stable in recent years, the incidence rate of type 2 diabetes has been rapidly increasing. Over the past decade, the diabetes incidence rate for women has risen 105% compared to 45% in men.²⁴ This trend is projected to continue into the future; the incidence rate of diabetes in British Columbia is expected to rise 77% between 2005 and 2015.²⁵ Examining trends in the underlying risk factors for diabetes reveals troubling health inequities for women.

The overarching risk factor that contributes to health inequity in diabetes is low socioeconomic status. People with low SES are typically exposed to a combination of risk factors for diabetes that put them at significant overall risk. These include low education and health literacy, low access to and utilization of healthcare services, and poor quality of care.²⁶ As women are more likely to be poor, experience social deprivation, and have a low SES, they also experience an unfair burden from diabetes.

Diabetes-related health inequities also exist for girls and adolescent women. Type 2 diabetes was historically a disease that occurred past the age of 50 but recent American studies have identified a 10-to-30 fold increase in children with type 2 diabetes and the Canadian Diabetes Association projects that this trend will occur in Canada as well.²⁷ This finding is of particular interest for BC, as the obesity rate for children has nearly tripled from 1978 to 2004.²⁸ Obesity is a strong risk factor for type 2 diabetes in children as 95% of children diagnosed with type 2 diabetes are overweight or obese.²⁹ Regular physical activity has a preventive effect on overweight/obesity yet the percentage of young people engaging in physical activity in British Columbia is on the decline - 48 per cent of youth aged 5-17 and 58 per cent of youth aged 12-19 are not active enough to promote optimal growth and development.³⁰ This trend is particularly pronounced among young girls and adolescent women, most likely as a result of gendered social roles which tend to discourage physical activity in girls.

The trend towards earlier diabetes onset also means that more women are affected by diabetes during pregnancy. Diabetes during pregnancy, both type 2 and gestational, increases the rate of spontaneous

abortion and large babies, thus creating risks for the mother and the baby. Additionally, babies exposed to diabetes during pregnancy are at higher risk for being overweight/obese and developing type 2 diabetes later in life.³¹

Health Inequities associated with Respiratory Disease, Lung Cancer, and Smoking Rates

Diseases of the respiratory system are the third highest cause of mortality for men and women in British Columbia.³² This analysis focuses specifically on lung cancer, the leading cause of cancer deaths in Canada. Lung cancer has shown markedly different changes in incidence rates for men and women over the last decade and this disparity is projected to continue in the future.³³ Sex and gender differences also appear across the province in the rates of smoking, the main risk factor for lung cancer.

Differences exist in the presentation of respiratory disease among men and women and often lead to women being under-diagnosed or misdiagnosed for certain diseases.³⁴ For example, women with lung cancer tend to have more asymptomatic presentations than men, causing lung cancer in women to be more difficult to diagnose.

The incidence of lung cancer has decreased for men since 1987, but over the same period, it has been increasing for women.³⁵ This is likely due to the fact that the peak in smoking rates for women occurred roughly ten years after the peak for men and the corresponding peak in lung cancer incidence in women has not yet peaked while it has passed for men.³⁶ There is evidence suggesting that the peak in lung cancer for women will be more dramatic than for men. For example, female smokers are at a higher risk for developing lung cancer than male smokers,³⁷ female non-smokers are at higher risk of being exposed to second-hand smoke (which increases the risk of lung cancer by 30-50%),³⁸ and women are more likely to develop lung cancer at an earlier age and with a more severe expression.^{39,40} Additionally, women experience a wider range of types of lung cancer than men, leading to difficulty in diagnosis and treatment.

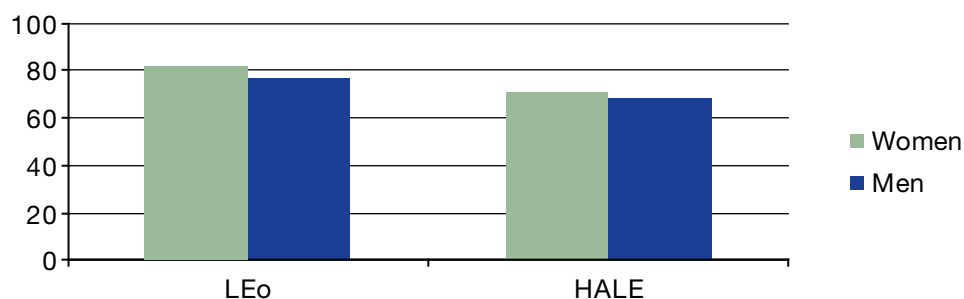
Across British Columbia, the rates of smoking for men and women are very similar (17% vs 16%),⁴¹ however there are subpopulations within which the rates are significantly higher. For example, Status Indian women and men in British Columbia have smoking rates that are roughly double the rates of the rest of the population.⁴² Smoking rates among Aboriginal teenage girls are the highest of any teenage group in British Columbia. 32% of female Aboriginal teenagers report current smoking, compared with 22% of Aboriginal male teenagers, 17% of all BC female teens and 13% of all BC male teens.⁴³ These current smoking patterns suggest that preventive programs should take cultural context and gender into account.

Gender and Quality of Life in BC

The above discussion of causes of premature mortality uses aggregate life expectancy at birth as presented in *Health Disparities in BC* as a baseline for analysis. By asking gender- and sex-related questions, this paper has shown how aggregated reporting of *LEo* can conceal significant gendered health inequities. However, *LEo* only measures the length of life, not the quality of life, so to obtain a fuller picture of what *LEo* is attempting to represent – the health of men and women in BC – it is useful to consider other related health indicators.

In recent years, a few indicators have been developed to help supplement the life expectancy measurement with some indication of quality of life. The main indicator in use today is Health Adjusted Life Expectancy (HALE), which measures the average number of years that a person can expect to live in “full health” by taking into account years lived in less than full health due to disease and/or injury.⁴⁴ Women have a higher HALE than men, but by a much smaller margin than the gap in life expectancy. Additionally, though women have a longer life expectancy, men live a larger proportion of their lives in good health.⁴⁵ This profound gender inequity warrants further investigation.

Health Adjusted Life Expectancy versus Life Expectancy for Men and Women, 2001



(Source: Statistics Canada. Health-adjusted life expectancy, at birth and at age 65, by sex and income group, Canada and provinces, occasional (years) (CANSIM Table 102-0121). Ottawa, Statistics Canada, 2006.)

There are numerous sources of ill health causing the drop from *LEo* to HALE that affect men and women, men only, women only, or either gender in different ways. These include but are not limited to diseases such as cancer and cardiovascular disease, physical and mental disability, social, emotional, and financial resources.

(NOTE: The following investigation into HALE uses Canadian data due to a lack of BC-specific data.)

Negative Impacts of Arthritis and Chronic Pain

Chronic conditions such as arthritis and chronic pain contribute to a lower HALE as they can impose significant disability. Each of these conditions has significant sex- and gender-related components. For example, research has shown that men have a genetic protection against arthritis of the knee,⁴⁶ and Canadian women report a higher prevalence of disability related to arthritis at nearly all age levels.⁴⁷ There is also a sex-related difference in chronic pain; 18% of Canadian women report chronic pain as opposed to 14% of Canadian men.⁴⁸ From a gender perspective, a recent study found that physicians were more likely to recommend total knee arthroplasty for male patients when both men and women present with similar levels of disability.⁴⁹

The Burden of Mental Illness

Approximately 20% of Canadians will experience mental illness in their lifetime.⁵⁰ Due to this prevalence and the long period of disability associated with mental illness, it can play a major role in HALE calculations. Depression is the worldwide leading cause of years lived with disabilities, and women experience depression nearly twice as often as men; major depression is experienced by ten to 25 percent of women.⁵¹ Women are also more affected by stress-related disorders, such as post-traumatic stress disorder, than men.⁵² Additionally, women are at particular risk of developing eating disorders. Men, on the other hand, have a mortality rate due to suicide that is four times higher than women.

Effects of Social Support

Social support has been identified as a determinant of health by Health Canada as it can improve health through a variety of mechanisms, including emotional assistance, care-giving, support for access to treatment, and monetary or physical assistance. Spouses provide a large amount of social support, which for men has led to a 40% lower risk of death.⁵³ However, there have been no demonstrated benefits for women from spousal social support.

As the above analysis shows, relying only on estimated life expectancy at birth as a measure of population health provides an incomplete picture. Supplementing *LEo* with HALE captures not only the length of a person's life, but its health-related quality. Women may live longer than men, but men live healthier lives – understanding how and why this health inequity exists should inform policy development and program planning.

Conclusions

By using an epidemiological perspective to examine life expectancy, or more specifically the reasons for premature mortality, we have analyzed a cluster of interrelated health inequities for women. Heart disease, diabetes, and lung cancer all have underlying risk factors (smoking, food/diet/nutrition, lack of physical activity, low SES) which impose disproportionate burdens on women as opposed to men, with some groups of women being affected more than others. These trends are both historical and are projected to continue into the future and should be taken into account as the BC healthcare system moves to balance health inequities in the province.

While the epidemiological perspective provides insight into the cluster of health inequities underlying chronic disease incidence rate, other perspectives can be used to examine additional clusters of health inequities. The second section of this paper focuses on the health implications for low socioeconomic status and its relationship to other gendered determinants of health.

SECTION 2: Understanding Child Poverty in British Columbia as Women's Poverty

Health Inequities in British Columbia described a “BC paradox”: although British Columbians as a whole enjoy high standards of living and rank among the healthiest people in the world, the province also has the highest rate of poverty in the Canada, in particular “child poverty.” However, “child poverty” does not exist on its own, but is determined by parental poverty, and more specifically, by women's poverty. This section of the paper examines how poverty affects women and the link between women's poverty and child poverty in BC.

The most common measure of poverty in Canada is the Statistics Canada Low Income Cut-Off Rate (LICO), which measures the proportion of income an individual or family spends on food, shelter and housing. Individuals and families who spend a disproportionate amount of their income on food, housing and clothing are below the LICO and are considered low-income.⁵⁴ Using this measurement, income can be measured before or after tax. After-tax income may be a more appropriate measure of poverty as it reflects the redistributive impact of Canada's tax/transfer system.⁵⁵

Health Inequities in British Columbia showed that the distribution of poverty varies by family type. Lone mothers with children were found to have the highest poverty rate, with 37% of lone-parent women living in poverty compared to the poverty rate of two-parent families which was less than 10 percent.⁵⁶

Poverty also varies by gender, with more women (14%) than men (13%) in the province being classified as low income.⁵⁷ Recent Canadian data mirror this gendered income discrepancy, showing that men working full time earned an average of \$51,700 compared to women who earned just under \$36,500.⁵⁸ This gendered income difference is often referred to as the “gender income gap.” Canada's income gap of 25% is the second highest gender income gap among 15 of Canada's peer high-income countries.⁵⁹

Gender and Poverty

A sex- and gender-based analysis reveals how sex, gender and diversity shape poverty among men and women. There are a number of structural factors that make women more vulnerable to low-income status and poverty such as: unpaid housework and care giving; low wages for “women's work”; women's lower pensions; and lack of financial autonomy.

Lower Wages for Women in General

As the gender-income gap data suggests, women are generally paid less than men. Though increased educational attainment among women has narrowed the income gender gap, men continue to receive higher wages, despite having the same educational attainment and position.⁶³ For example, in 2005, women aged 25-29 holding a graduate or professional diploma working on a full-time basis earned 96 cents for every dollar earned by their male counterparts; women with bachelor's degrees earned 89 cents per dollar earned by their male counterparts; and women with a registered apprenticeship or trades certificate earned only 65 cents for every dollar earned by men in the same position.⁵⁸

Unpaid Household Work and Care-giving

Traditionally, unpaid tasks in the home such as caring for children, informal care-giving to other family members, cooking, cleaning and other household work have been seen as a woman's role.⁶⁰

According to Statistics Canada, unpaid work consumes about one quarter of women's waking hours.⁵⁷ Despite an increase in the number of women entering the workforce, women are still expected to perform the majority of household and care-giving duties. According to Statistics Canada, in households where both partners worked full time, 52% of women performed all of the housework, 28% performed the majority, and 10% shared the responsibility with their partners.⁶¹

Women often sacrifice their incomes by not entering the workforce, reducing the number of hours worked, refusing promotions or quitting their jobs to fulfill care-giving duties, whereas men generally do not.⁶¹ Over time, this pattern negatively affects women's wages, experience in the workforce, and accumulation of pension benefits.⁶² Moreover, the majority (70%) of part-time workers are women who cannot work full time due to competing housework and care-giving responsibilities.⁶³ Despite a shift towards men assuming more responsibility for care-giving and housework, women still constitute the majority of unpaid household workers.⁶⁴

Low Wages for “Women’s Work”

The majority of employed women (70%) work in female-dominated sectors, such as health, teaching, clerical, sales and service. These jobs that mimic “women’s work” (cooking, cleaning, care-giving, nursing, caring for the sick, serving others, teaching of children) that women traditionally do for free, are undervalued, poorly paid and, in some cases, provide limited access to benefits and job security.⁶³

Women Have Lower Pensions

Women are overrepresented in jobs that are part-time, insecure and poorly paid.⁶⁵ Due to a lifetime of low wages, inconsistent employment and part-time work, women earn less money to put towards their Registered Retirement Savings Plans (RRSP), Old Age Pension (OAP) and Canadian Pension Plan (CPP).⁶³ In 2002, the majority of Canadians covered by a private pension plan were male, and men aged 65-69 received on average about \$230 more per month than their female counterparts.^{63,66,67}

Women’s Financial Autonomy

Women's access to household finances is important to consider as it affects their autonomy, decision-making power and health. Canadian women's increased participation in the workforce has improved women's financial autonomy, allowing them to establish their own homes, raise children on their own and leave abusive and/or unhappy relationships.⁶⁴ A Canadian study found that access to and control over household resources was reflected by each family member's circumstance and that women with higher earnings had more control over money.⁶⁸ Since women in British Columbia generally earn less than men, this puts women at a disadvantage. A lack of financial autonomy and/or dependence on one's spouse for money can restrict a

woman's independence, access to health-care services and treatment, or force her to stay in an abusive and unhealthy relationship.

These are some examples of the structural inequalities that make women more vulnerable to poverty. Taking a closer look at the data further reveals that poverty is not evenly distributed, but often clusters among population subgroups.

Poverty and Diversity

Poverty has an immense effect on health and is associated with acute and chronic ill health, increased susceptibility to infections, increased risk of heart disease, depression, arthritis, mental illness and poor coping behaviours.⁶⁹ Poverty also limits choice and increases vulnerability and exposure to violence and abuse.⁷⁰

A closer look into labour force data suggests that specific sub-populations, such as Aboriginal populations and immigrants may be disproportionately affected by unemployment, and hence poverty, than the general population.

British Columbia data show that immigrant women tend to have lower employment rates in full- and part-time jobs compared with Canadian-born women. Canadian-born women's labour participation rate was 65%, compared to 50% for immigrant women who have immigrated to Canada over ten years ago and 60% for new immigrants of five to ten years.⁷¹ Moreover, immigrant women appeared to have more difficulty finding work than immigrant men, having an overall unemployment rate of 5.4% compared to 4.7% unemployment in men.⁷⁰

According to Statistics Canada, disparities in labour force participation may also result from racial prejudice in the workforce.⁷² A lack of recognition of foreign professional credentials can also explain lower employment and income levels among immigrants, despite higher than average educational credentials.⁷¹ Language obstacles may also be a major barrier to employment, since many female immigrants are accepted to Canada based on the qualifications of the principle applicants who are usually the husbands. The low employment rate among immigrant women compared with men may also reflect a number of women involved in unpaid work at home, rather than seeking paid work outside of the house.

British Columbia labour force data from 2006 show significantly higher rates of unemployment among Aboriginal people compared with non-Aboriginal people. Unemployment for Aboriginal and Métis were reported to be 17% and 8% respectively, compared to only 5% in Non-aboriginal populations.⁷³

These details highlight gender and social inequities in poverty and illustrate how gender places women at risk for poverty. Gender norms that encourage unpaid work and care-giving, compounded by low wages for women and women's work make women more vulnerable to poverty in general, than men. Poverty is "arguably the most significant determinant of health",⁷⁴ giving rise to other problems such as homelessness and food insecurity, both of which are inextricably linked and pose significant threats to one's health.

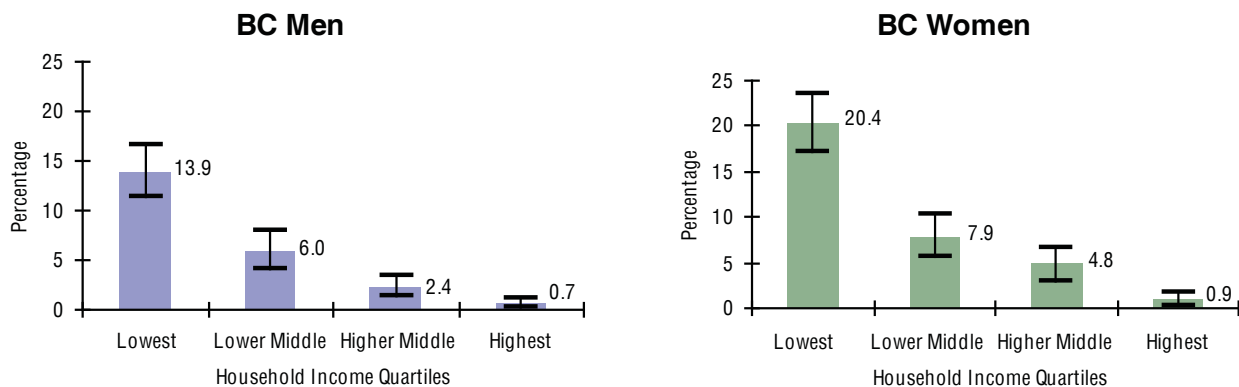
Gender, Homelessness and Food insecurity

Homelessness and food insecurity often stem from poverty and exist hand-in-hand. Many Canadians earn incomes that are insufficient to cover rent, mortgage payments, utilities, food and/or other basic necessities. Unaffordable housing costs can divert resources away from food, exacerbating food insecurity. Likewise, money spent on food may divert resources away from rent/mortgage payments, sometimes forcing individuals into homelessness.^{75,76} Recent upsurges in housing prices have increased food insecurity by reducing the income available to purchase food (currently available data do not reflect current market trends).⁷⁷

Food Insecurity

Few Canadians grow and eat their own food, which means that food security is dependent on economic access (most often household income). As women represent the majority of impoverished Canadians, it is not surprising to see that food insecurity rates in British Columbia are higher among women than men. The following graph, included in *Health Inequities in British Columbia*, illustrates these rates.

Prevalence of BC men and women with food insecurity in the past 12 months by gross household income quartiles (i.e. before taxes and transfers) (2005)



Data source: Statistics Canada, Canadian Community Health Survey (CCHS) Cycle 3.1 Share File (2005).

In Canada, food insecurity disproportionately affects Aboriginal people, lone parents (in particular female lone parents), renters and the homeless. Off-reserve Aboriginal households were found to have food insecurity rates of 33% compared with 9% in non-Aboriginal households. The food insecurity rate among female lone parents in Canada was 25% compared to 23% in lone parents in general, and 8% in households led by a couple.⁷⁸

Gender and Homelessness

The pathways into homelessness are strongly gendered. For both women and men, a lack of income represents the most common cause for homelessness. However for women, domestic violence is also a significant cause of homelessness.⁷⁹

The number and composition of the homeless population is difficult to measure, primarily due to the transience and variety of living arrangements of homelessness persons (e.g., living in emergency shelters, hostels, on the streets, living with family and friends). The numbers of homeless women are likely to be underestimated, as these measures are based on emergency shelter use, which are generally used more by men than women. Women's homelessness tends to be much less visible than men's, since women often choose to 'couch-surf' with friends or relatives, or refuse to utilize housing services which often do not cater to women's (and their children's) needs.^{80,81,82} Many lone mothers try to meet their children's needs for food, clothing and education and opt to stay with friends or rental spaces, which are more child-friendly than many shelters. Furthermore, to ensure their children are not removed by child welfare agencies, women often conceal their homelessness, ironically increasing their invisibility.⁸⁵

Diversity and Homelessness

A number of subgroups are overrepresented in the homeless population including: people with severe addictions and/or mental illness, Aboriginal people, immigrants and refugees.

People with addictions and mental illnesses make up 33% to 60% of the homeless population.⁸³ Whether mental illness precedes homelessness or is a byproduct is still a matter of debate, however it is likely that mental illness is a contributing factor.⁸⁴

An estimated 41% of Aboriginal people in BC are at risk of homelessness and 23% are absolutely homeless.⁸⁵ In addition to the common risk factors for homelessness, Aboriginal people are affected by historical colonial events such as the separation of families, residential schools, wardship through the child welfare system as well as social and economic exclusion from mainstream Canadian society.⁸²

Immigrants, but more specifically refugees, face unique challenges when it comes to housing, as many are impoverished, face language and cultural barriers and do not have access to government support until they have attended their first immigration interview to apply for permanent residency.⁸² Though immigrants and refugees may not be visibly homeless, many are at risk of homelessness and live in overcrowded and unsafe housing conditions.⁸²

As mentioned above, abused women and their families are over-represented among the homeless population. Though many women become homeless to escape domestic violence, 20% of these women continue to be abused after the separation.⁸⁵ To make ends meet, many women are forced to panhandle, shoplift and sometimes turn to prostitution and the drug trade, increasing their exposure to physical and sexual violence.^{86,87}

The Link between Child Poverty and Lone-Mother Poverty: The BC Paradox

Health Inequity in British Columbia showed lone mothers in British Columbia to be the most vulnerable group to poverty in the province as well as in the country.⁷³

In British Columbia, there are 175,160 lone-parent families, 139,770 (81%) of which are female-headed households compared to only 35,390 (20%) which are male-headed households.⁸⁸ Average after-tax income in 2006 for male lone-parent families in British Columbia was \$52,248 compared to only \$39,031 for female lone-parent families.⁸⁷ Since women constitute the majority of lone parents and are also the most impoverished of the group, many impoverished children live in female-headed, lone-parent families. Women's poverty is therefore at the root of child poverty.⁸⁹

A number of social and economic factors are responsible for the poverty of lone-mothers. Since women are traditionally the primary caregivers to children, some women forego employment while others choose jobs which accommodate their care-giving duties. Priorities for choosing jobs include: those that are close to home/children's school; work hours that match children's school hours; and jobs that are easy to exit and enter.⁹⁰ Jobs such as these are likely to be part-time, poorly paid and lack extended healthcare benefits. The lack of affordable and quality childcare available may also limit employment options and hours. Additionally, lone mothers are subject to the gendered wage disparities that exist and are likely to earn less than men working the same hours.⁸⁹

Geographical distribution of lone parents

The lone-parent population is not evenly dispersed throughout the province, but is concentrated in certain regions. Vancouver, Fraser North and Fraser South regions have the highest proportion of the provinces' lone-mother population at 17.5%, 10% and 13.2% respectively.⁹¹ The highest proportions of the male lone-parent population can be found in Vancouver (20.7%), Fraser South (15.4%) and North Shore/Coast Garibaldi (14.3%).⁹⁰

Conclusions

Drawing on British Columbia data to analyze income levels in the province reveals that significantly more women than are affected by poverty than men. Structural factors such as low wages for women's work, unpaid household work and care-giving roles, as well as a lack of financial autonomy make women particularly vulnerable to poverty.

Homelessness and food insecurity are consequences of poverty and are experienced differently by men and women. As women are disproportionately affected by poverty, it is likely they experience higher rates of homelessness and food insecurity. Women's poverty (in particular lone-mother poverty) is highly associated with "child poverty" and is reflected in the high rate of child poverty described in the "BC Paradox."

Discussion

Traditionally, reporting on population health has been done through monitoring specific health indicators such as rates of diseases or access to healthcare services. As an overall measurement, these measurements are standardized, comparable, and relatively easy to grasp, making them effective for large-scale evaluation. However, when seeking ways to improve a population's health, relying on aggregated health indicators can be detrimental. Reporting by health indicator combines the data from at-risk subpopulations with that from the general population, resulting in masking populations who are in the most need of aid.

Health inequity analysis is a tool for identifying the population groups that are at highest risk for specific diseases or conditions and assessing their needs. In doing so, the analysis recognizes that there is no "general population," and in order to achieve impact and minimize risks, it is imperative to be able to define specific at-risk subpopulations.⁹² Examples included in this report include the health risks for lone-mothers and diabetes rates in Aboriginal communities. Given the limited resources of every health care system, this ability to target subpopulations at need is a valuable tool for planning, policy, and practice.

Because health inequity analysis focuses on populations, it also allows for a closer examination of the way social determinants of health combine and interact to have a profound effect on population health. Determinants such as HALE and poverty are explored in this report to contextualize health within social, emotional, and physical circumstances. Understanding the relationships between all of these determinants will help guide appropriate health prevention, promotion, planning, policy and treatment efforts.

Appendix A

Understanding the Terminology – A Primer on Sex, Gender, and Health

Understanding the distinction between sex and gender is essential to grasping the concept of sex- and gender-based analysis (SGBA).

Sex and Gender

Sex refers to the biological characteristics of an individual and is comprised of one's physiological, anatomical, genetic and hormonal make up. Typically, most phenotypic females possess two X chromosomes, whereas males typically possess an X and a Y chromosome. However, there are variations in chromosome presentation, including XXY, XYY, XXX and X0 (no sex chromosome), which indicate that sex exists on a continuum. Furthermore, sex characteristics can be changed hormonally or via sex assignment surgery, further blurring the line between male and female sex.⁹³

Differences in health status and disease prevalence in males and females may stem from sex differences. Biological differences in body composition, metabolism and hormones among males and females create differences in the susceptibility and development of diseases as well as responses to treatment.⁹² For instance, men tend to have heart attacks at younger ages than women as they lack the protective effects of pre-menopausal estrogen that women do.

“Gender refers to the array of socially constructed roles and relationships, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to two sexes based on a differential basis. Gender is relational- gender roles and characteristics do not exist in isolation, but are defined in relations to one another”.⁹⁴

Gender is not a static concept, but varies according to the prevailing social and cultural norms. *Gender identity* refers to how one perceives him/herself as being male or female and is shaped by societal messages about “correct” ways for presenting sex.⁹² These socially prescribed gender roles influence our “aspirations, social interactions, behaviours, traits, characteristics and body image”.⁹² Gender relations reflect how we relate to, interact with and are treated by those around us. Gender shapes how we interact and behave in larger social units, such as families, at work and in the community. In many societies, a power differential between women and men is implicit in relationships and often disadvantages women.⁹² Institutionalized gender refers to the distribution of power for women and men in many arenas including: political; educational; religious; medical and social.⁹² These institutions shape and uphold gender norms and influence expectations for men and women, such as family roles, employment opportunities, dress code, political power, access to resources and health practices.⁹² These gender roles can restrict women's choices in occupation, income and roles in the family and community, thus affecting their socioeconomic status and health. Often, institutionalized gender norms empower men while at the same time disempowering women.

Sex, Gender and Health

The complex interactions between sex and gender shape women's and men's identities, behaviours, occupations and ultimately, their health.

Health has been defined by the World Health Organization (WHO) as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”⁹⁵ Health is considered a fundamental human right by the United Nations and is articulated in Article 25 of the Universal Declaration of Human Rights: “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control” [sic] and “Motherhood and childhood are entitled to special care and assistance.”⁹⁶ Health is not a privilege, but a basic human right that should be accessible to and enjoyed by every man, woman, boy and girl, regardless of circumstance.⁹⁵

Institutionalized gender roles and gender relations can impede attainment of good health by limiting access to resources such as income, food, housing, medical care and social services, which directly affects one's health status. In many countries for example, girls are less likely than boys to receive health care, food or education.⁹⁷ In Canada, women are more likely than men to be impoverished, limiting their access to housing, food and health care services that are necessary to achieve and maintain good health.^{115,92} Male stereotypes that promote physical ruggedness can lead men to ignore physical ailments and avoid consultations with medical professionals, thus increasing their morbidity and mortality.

Gender norms often shape women's and men's choices in occupation, which make them vulnerable to certain health problems. For example, unpaid care-giving, which is generally seen as a female role, is largely done by women. Caregivers often experience health problems such as stress, emotional strain and musculoskeletal injuries which are attributable to care-giving work.^{98,99,100} In many countries, men are often socialized to exhibit their masculinity by demonstrating physical prowess.¹⁰¹ This stereotype encourages men to work in physically dangerous jobs such as the military, mining, logging and construction and increases their risk of morbidity and mortality.¹¹⁵

Sex and gender often interact to produce health outcomes, as is the case for HIV infection in women. Biologically, the vagina is more susceptible than the penis to HIV transmission.¹⁰² In fact, women are two times more likely to contract HIV through heterosexual transmission than males,¹⁰³ and are more likely to be infected by multiple variants of the virus than men.¹⁰⁴ Additionally, women often lack power and control in relationships, making it difficult to negotiate safe sex, elevating their risk of HIV infection.¹⁰⁵ Lack of control over family finances, competing childcare demands and delayed/avoidance of partner serostatus disclosure from fear of violence, abandonment and loss of economic support may delay HIV treatment seeking and initiation.^{106,107}

Gender can interact with other health determinants to influence health. For example, the cardiovascular disease (CVD) rate in women is strongly influenced by gender, socioeconomic status and education. Women are less likely to receive preventative counseling, treatment of referrals to a specialist due to stereotypes that men are more at risk for CVD. These stereotypes also result in delayed or missed diagnoses in women. Ethnically diverse populations are at greater risk of developing CVD due to social and environmental conditions and barriers to accessing preventative care. For example, CVD is 1.5 times higher among First

Nations and Inuit Populations than in the general population.¹⁰⁸ As well, CVD rates are higher among the less educated and low-income women, who often report more risk factors such as smoking, physical inactivity, being overweight and lack of access to proper nutrition.¹⁰⁹

Health Inequity

Health equity has been defined by the World Health Organization (WHO) as “the absence of unfair and avoidable or remediable differences in health among population groups defined socially, economically, demographically or geographically.”¹¹⁰ Conversely, *health inequity* refers to the presence of unfair, avoidable and/or remediable health differences among population groups.

The scope of *gender health inequity* is more focused and refers to unjust and avoidable differences in health that stem from the social construction of gender, socioeconomic class, age, region and sexual orientation. Achieving gender health equity implies that men and women (boys and girls) from all backgrounds have an equal opportunity to conditions and services that enable them to achieve good health.¹¹¹

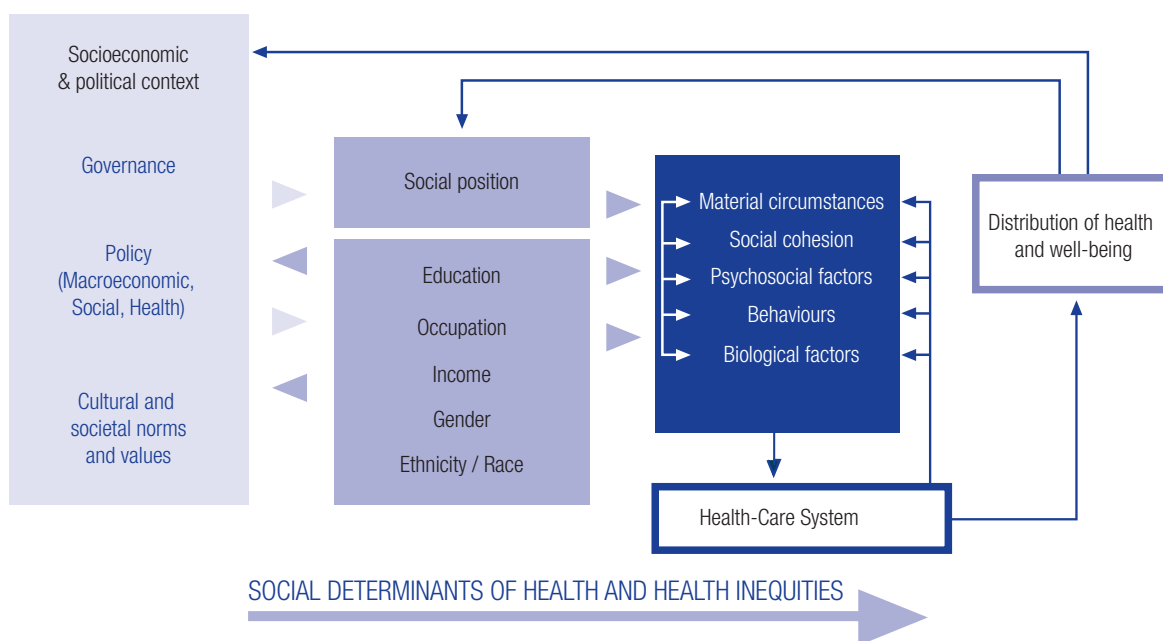
Gender health inequities exist across the globe. The international Women and Gender Equity Knowledge Network submitted a report in September 2007 to the WHO Commission on the Social Determinants of Health and argued that “Gender inequality damages the physical and mental health of millions of girls and women across the globe, and also of boys and men, despite the many tangible benefits it gives men through resources, power, authority and control. Because of the numbers of people involved and the magnitude of the problems, taking action to improve gender equity in health and to address women’s rights to health is one of the most direct and potent ways to reduce health inequities and ensure effective use of health resources.”¹¹²

Low income is an example of gender inequity and is a major determinant of health inequity. Low income disproportionately affects women throughout the world,¹¹³ and restricts their access to resources necessary to attain good health. This gendered income difference, often referred to as the “gender income gap” is also evident in Canada; in 2006, men working full time earned an average of \$51,700 compared to women who earned just under \$36,500.¹¹⁴ British Columbia data mirrors this trend, with 13.6% of women compared to 12.6% of men being classified as low income.¹¹⁵

Gender-Inspired Health Determinants Conceptual Frameworks

The Health Inequities in British Columbia discussion paper referred to the WHO’s *Commission on Social Determinants of Health* conceptual framework which identifies key determinants of health and their pathways to health and health inequity.

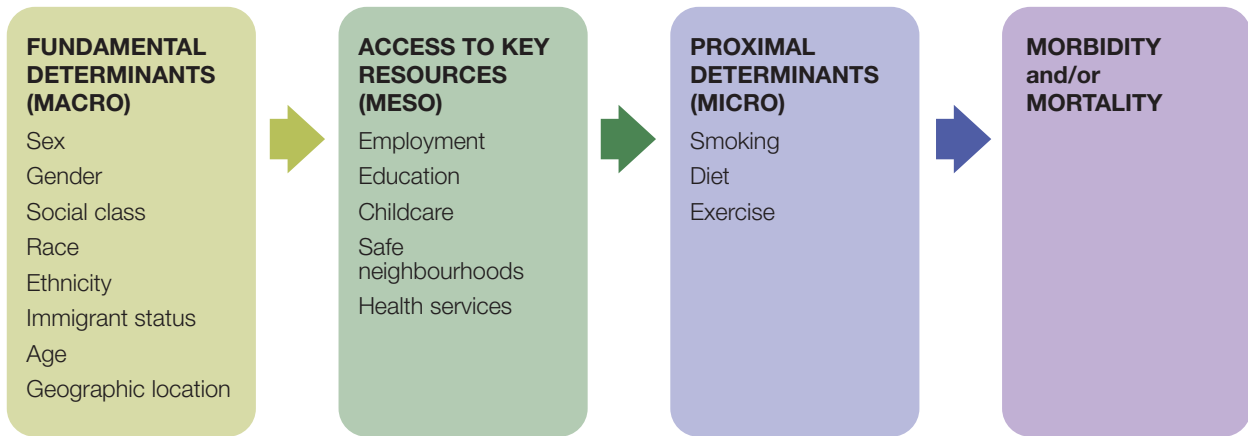
Commissions on Social Determinants of Health Conceptual Framework



Source: CSDH Final Report, 2008 (Amended from Solar & Irwin, 2007).

This framework identifies socioeconomic and political factors such as governance, policy, cultural and societal norms and values as fundamental determinants of health that can influence social position (education, occupation, income, gender, ethnicity and race). These social positions influence specific determinants of health (material circumstance, social cohesion, psychosocial factors, behaviours and biological factors) which in turn affect the distribution of health and well-being.¹¹⁵ In this framework, governance, policy, cultural and social norms and values are considered at the root of health inequities.

Benoit and Shumka have proposed an alternate model which posits that sex and gender are primary determinants of health rather than attributes of individuals.¹¹⁶ This framework considers sex and gender as fundamental or 'macro' determinants and places them on equal footing with other determinants as social class, race, ethnicity, immigrant status, age and geographic location.¹¹⁵ These fundamental determinants influence access to key resources and interact with these determinants to influence health behaviours to generate health outcomes.¹¹⁵



A dynamic gender-inspired health determinants model

There is no consensus on the most appropriate conceptual framework, particularly for the purposes of a sex- and gender-based analysis. It may be useful to consider Benoit and Shumka’s framework, as it situates sex, gender and diversity as fundamental determinants which generate, structure and uphold social hierarchies that give rise to health inequities and health outcomes.

Putting it All Together: Sex and Gender-Based Analysis

The dominant approach to the study of health inequity arose out of the Whitehall studies¹¹⁷ and emphasizes the impact of social hierarchy and income on health, but gives little attention to the role that gender plays in health inequity.

A Sex and Gender-based Analysis (SGBA) of health inequity integrates a sex, gender and diversity perspective into data analysis and development of policies and legislation.¹¹⁸ This type of analysis involves asking new questions such as: Do women and men (girls and boys) have the same experiences (e.g., life expectancy, disease prevalence, morbidity)? How do we account for these similarities or differences? What is to be done about them? Which populations are affected? Where do the affected populations live? What are the implications of any diversity we see among women or among men for action? The answers provide a clearer understanding of the issue and often point to more appropriate policy, practice, and research avenues.

The WHO noted the value of SGBA in analyzing health inequities in the final report of the Commission for Social Determinants of Health: “Gender intersects with economic inequality, racial or ethnic hierarchy, caste domination, differences based on sexual orientation, and a number of other social markers. Only focusing on economic inequalities across households can seriously distort our understanding of how inequality actually works and who bears much of its burdens. Health gradients can be significantly different for men and for women; medical poverty may not trap women and men to the same extent or in the same way”.¹¹⁹

SGBA includes an analysis of diversity such as ethnicity, socioeconomic status, disability, sexual orientation, migration status, age and geography to determine their influence health and wellbeing. A diversity lens reveals health trends among subpopulations that may be hidden in aggregate data.

Analyzing data using a gender lens uncovers trends and causal links between health determinants and health status that may be missed in general statistics. SGBA provides a more holistic view of health determinants so that proposed policies, legislation and programs are inclusive and equitable.

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