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# **GENDER & HEALTH**



**INTEGRATING GENDER INTO MEDICAL EDUCATION**

**COLLABORATIVE CURRICULUM  
COUNCIL OF ONTARIO FACULTIES OF MEDICINE**

**2005**



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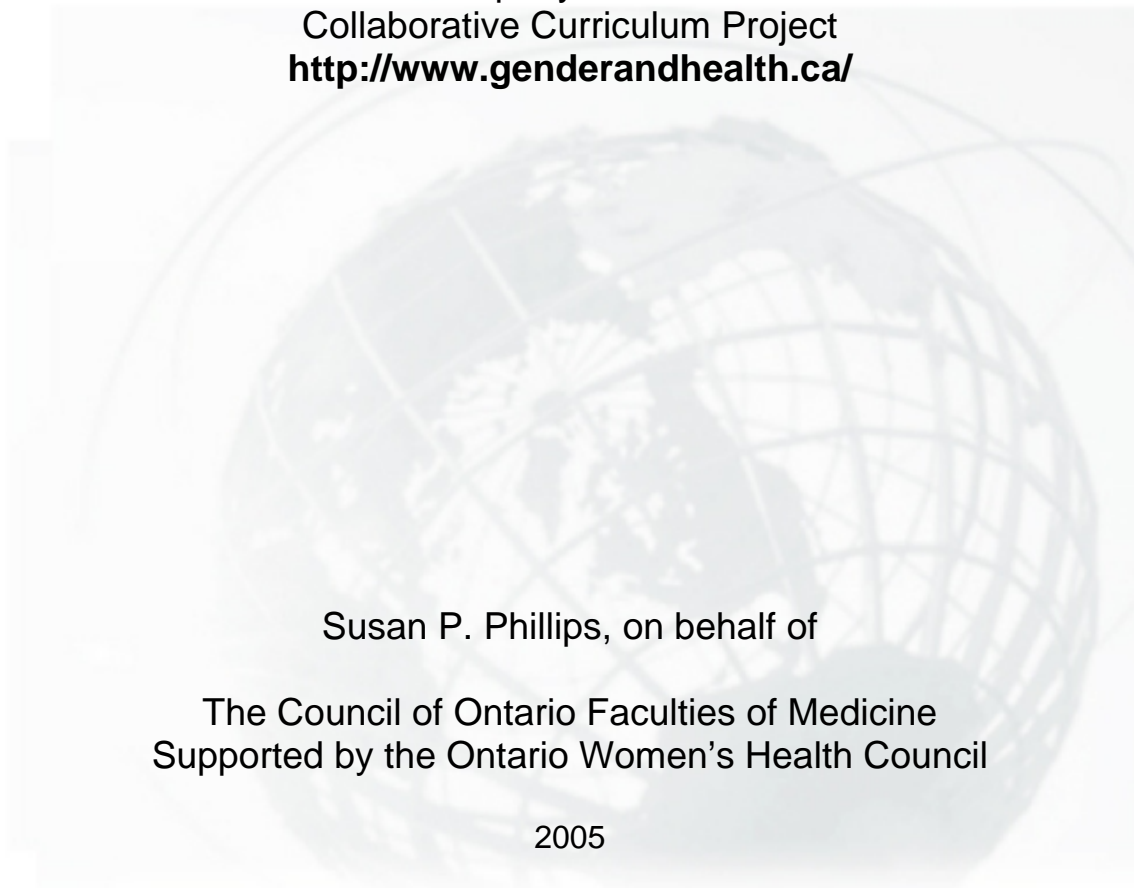
*The Gender and Curriculum Project is a unique collaboration amongst all of Ontario's six medical schools, the Council of Ontario Faculties of Medicine, and the Government of Ontario (Ont. Women's Health Council). Each school had four faculty participants: the Dean, the Associate Dean of Undergraduate Education, the Gender Issues Representative, and a Site Coordinator for the project, as well as numerous students whose input was integral to the project.*

We would like to thank the Ontario Women's Health Council for their generous financial and moral support for the project.



# GENDER AND HEALTH: Integrating Gender into Medical Education

A manual to accompany the Gender and Health  
Collaborative Curriculum Project  
<http://www.genderandhealth.ca/>



Susan P. Phillips, on behalf of

The Council of Ontario Faculties of Medicine  
Supported by the Ontario Women's Health Council

2005



***What this teaching manual offers:***

- a guide to why gender matters in medicine
- access to web based resources, developed by Ontario's 6 medical schools, for lectures and small group teaching, self directed learning, and research
- practical tips for teaching

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# The Gender and Health Collaborative Curriculum Project

*A collaboration of Ontario's medical schools,  
funded by the Ontario Women's Health Council.*

## Our Goal:

To improve women's and men's health care through the development of a collaborative, web-enabled medical curriculum that integrates gender and health into all aspects of medical education.

The Curriculum Project's **content is gender**, but its **medium is a model for using the internet** to deliver a common curriculum which can be adapted to the needs of local medical schools.

From: **LCME Accreditation Standards**, June, 2004

*ED-22. Medical students must learn to recognize and appropriately address gender and cultural biases in themselves and others, and in the process of health care delivery.*

*The objectives for clinical instruction should include student understanding of demographic influences on health care quality and effectiveness, such as racial and ethnic disparities in the diagnosis and treatment of diseases. The objectives should also address the need for self-awareness among students regarding any personal biases in their approach to health care delivery.*

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The Gender and Curriculum Project is supported by the Deans of Ontario's medical schools. Faculty and students from all schools have written and reviewed all modules on the website. Local "experts" can be contacted via your school's Dean of Undergraduate Education or representative to the Gender Issues Committee of the Council of Ontario Universities (COFM).

<http://www.genderandhealth.ca>



## Integrating Gender into Medical Education

### ***INTRODUCTION: Sex and Gender***

Amongst Canadian men under age 60, the main cause of death is...

1. respiratory disease
2. cardiovascular disease
3. accidents
4. infections
5. metabolic disease (diabetes, lipid abnormalities)

*Correct answer: 2*

In Canada, female life expectancy is almost 10% greater than male life expectancy. The age range at which the ratio of excess male to female deaths is greatest is...

1. 0-14
2. 15-29
3. 30-44
4. 45-59
5. 60-74

*Correct answer: 2*

In all but the most repressive countries of the world, women outlive men. Although we generally attribute this advantage to the protective effect of estrogen on the female heart, that is, to a biological or sex difference, the data offer a different explanation. Under age 60, the main cause of excess male death in Canada is accidents, or behaviour, that is, gender. Male risk taking behaviour kills approximately 50% more men, up to age 60, than does cardiovascular disease. This epidemic of preventable death is just part of expected and accepted behaviour in most cultures.

The MCQs above highlight **sex differences** in longevity. The explanation for these sex differences lies in gender, that is, in the roles men and women are assigned in any culture.



## **TERMINOLOGY**

*“We all have a gender, a skin colour, a race, a level of ability. It’s not about us and them . . .”*

**Sex** refers to biological differences such as chromosomes, hormonal profiles, internal and external sex organs.

**Gender** describes the characteristics that a society or culture attributes to, and expects from men or women.

While sex is a biological fact that is the same in any culture, what that sex means in terms of gender roles can be quite different across cultures. These ‘roles’ have an impact on health.

### **Examples of sex and gender:**

**Sex:** as estrogen production decreases all women eventually cease to menstruate

**Gender:** While about 30% of Canadian women suffer from hot flashes in menopause, only 9.7% of Japanese women experience them. The words experience vs suffer are intentionally chosen as in Japan women are not troubled by this symptom – in fact there is no Japanese word for a hot flash – there is no need to name something that is not a problem. (Lancet 1991:337:1270-2.)

Gender is not an etiology or a diagnosis. It is a proxy term for a set of social determinants of health like human rights, socio-economic status (SES), and access to resources.

### **Teaching tip:**

Ask students whether they can identify sex differences in the presentations of diseases? Can they identify gender differences in health and disease?

### **Teaching tip:**

Highlight diversity within each sex by asking students how the case being discussed would be different if the patient involved were, for example, wealthy rather than poor, or from India rather than Canada



To ensure that students understand different presentations of disease amongst diverse populations we must only generalize when appropriate.

**Beware of using the term “adult” to mean male.**

The tendency to allow neutral terminology to mean male, while specifying sex when talking of a female patient may arise from **gender differences**. Historically, medical texts often described findings for men without specifying a sex, perhaps because the research on which teaching was based rarely included women. In general, in our culture, adult has meant men, while women are described in comparison to men (smaller than, different reproductive organs than, atypical presentations of).

***Teaching tip:***

Always specify the sex of a patient in a case, unless the disease being discussed is unique to one sex.



## **WHY GENDER RATHER THAN WOMEN'S HEALTH?**

1. Gender includes men.
2. It does not assume that women throughout the world and across generations are all the same.

*Example: African-American women are nearly three times as likely to die from pregnancy complications and childbirth as are white women. (March of Dimes 2003, Maternal, Infant and child health in the US)*

3. It acknowledges the broader determinants of health such as power and powerlessness, class, race, SES.

### **Teaching tip:**

Can students explain why income is the strongest correlate of cardiovascular disease and of most cancers? Does being male or female minimize or add to that association?

### **Teaching tip:**

Ask students whether men's shorter life expectancy is due to biology or risk-taking behaviour, or both.



## **WHY SEX AND GENDER MATTER:**

### **A gender perspective of...**

**Research** acknowledges the clinical consequences of gender blind medical research and the resulting medical evidence

*Of 11 lung cancer screening trials done before 1997, only 2 included women. (Chest 1997,112(4)229S-234S.)*

*Of the trials included in the 30 reviews pertaining to treatment of cardiovascular disease that make up the Cochrane Library, only 33% examine outcomes by sex. Twenty percent of those studies that did disaggregate data by sex found significant differences in outcomes between women and men. (J. Womens Health 2003,12(5):449-57.)*

**Patient care** acknowledges that men's and women's different social roles affect their health differently.

*94% of workplace fatalities occur in men. (Canadian Men's Health network)*

**Provision of medical care** acknowledges the ways in which the sex or gender of the provider impacts on the health care event

*Nurses are more willing to serve and defer to male physicians, even when the medical decisions those physicians make seem erroneous. (International Journal for Equity in Health 2003;2:1)*

**Clinical practice** acknowledges the way in which the gender of the patient impacts on clinical testing, diagnostics, treatment and outcomes

*For women without cardiovascular disease, lipid lowering drugs do not affect total or CHD mortality. Women with cardiovascular disease and taking such drugs have decreased CHD events, and decreased CHD mortality, but no decrease in overall mortality. (JAMA 2004,291;2243-52.)*

*Physicians are more likely to initiate discussion about smoking cessation with male rather than female smokers. (Tobacco Control 1998,7:360-3.)*

**Medical education** identifies the gendered nature of some aspects of medical education/texts/teaching styles and environments



**Teaching tip:**

Ask students to find evidence as to whether men and women with chest pain receive different interventions.

**Biologically, men and women are more alike than they are different...**

. . . but it is the subtle differences that may have profound consequences for health. Where evidence of difference is available, we should use it. Logically this means if it is not available we should state that it is *unavailable* rather than stating or implying that *there is no sex difference*.

**Teaching tip:**

Offer students research that explains the link between steroid use and osteoporosis in women and ask whether they think the data is applicable to men.

**Teaching tip:**

Ask students to look at practice guidelines to see whether there is any indication of the presence or absence of women in the trials on which data is based.



# HOW TO INTEGRATE GENDER INTO TEACHING

## A) PBL and Small Group teaching

*After reading or hearing a clinical scenario ask:*

1. Is gender important here?
2. Will the patient be any better served by an MD who is aware of gender?

*Perform a sex change – i.e.*

*After discussion of the case ask:*

3. How would this scenario be different if the players were male/female?

*And, specifically:*

4. How would this presentation be different if the patient were male/female?
5. How would the treatment be different if the patient were male/female?
6. How would the outcomes be different if the patient were male/female?
7. How would the consultation be different if the doctor were male/female?
8. Would this situation seem reasonable if the players were male/female?

Answering the last question may reveal whether our gender-neutral language hides assumptions about men and women.

*Seeing what's there:*

*Look at PBL cases as a unit.*

9. Do the patient presentations reinforce stereotypes? For example, do the relationships of male and female patients to family and children differ? Are they stereotypic? Do the women in the problems rely on men for their support, definition, etc? Do the men drink, refuse to communicate, or avoid medical care until it's "too late"? These roles provide a teaching opportunity, and should be raised to conscious level rather than left as underlying "givens" in the problem.

**Sex** refers to biology, e.g. chromosomes, hormonal profiles, sex organs.

**Gender** describes the characteristics that a culture attributes to, and expects from men or women.

While sex is a biological fact that is the same in any society, gender roles can be quite different across cultures.

### **Examples:**

**Sex:** *Women are at greater risk of acquiring HIV after unprotected sex with an infected partner than are men.*

**Gender:** *Throughout much of the world, women's primary risk factor for HIV infection is their inability to control when and whether to be sexually active. Forced sex is a gender issue with deadly consequences.*

<http://www.genderandhealth.ca>



# HOW TO INTEGRATE GENDER INTO TEACHING

**Sex** refers to biology, e.g. chromosomes, hormonal profiles, sex organs.

**Gender** describes the characteristics that a culture attributes to, and expects from men or women.

*“Gender awareness goes beyond recognizing differences in risk factors, and responses to interventions. Certain diseases and conditions are unique to, more prevalent in, or more serious amongst each sex. Women generally outlive men but appear to suffer more ill health and chronic illness than men. Stereotypes about men may have limited our understanding of their emotional needs, risk taking behaviours, or the connection between gender and shortened life expectancy. The narrow confines of “male as normal” that have shaped research and practice exclude, or pathologize not only women in general, but also anyone who fails to conform physically, psychologically, racially, or sexually.”*

(Can. Med. Assoc. J. 1997;156(9):1297-1300.)

<http://www.genderandhealth.ca>

## B) Lectures

*The Content:*

Include men and women in examples and describing findings for both.

Identify when the research on which practice is based does, and does not include both sexes.

Differences in the normal anatomy/ physiology, etc, between males and females, should be presented as such, using neither sex as the norm.

Try to present the variety of occupations and family types in our society.

Use existing inequalities, as an opportunity for discussion and education.

*The Language:*

Use language to reveal and dispel, rather than reinforce stereotypes.

When sex is irrelevant, use gender neutral terms such as s/he, human, person, or the plural term “they”, but use sex specific terms when appropriate

*The Hidden Curriculum (the messages embedded in our delivery of the content)*

Some potential pitfalls:

Beware of overemphasizing female psychological status or underemphasizing psychology in men.

Avoid shifting from epidemiology to stereotyping, e.g. – gay men have a higher prevalence of HIV but not all gay men are HIV positive.

Break stereotypes by including family roles equally when describing women or men.



# HOW TO INTEGRATE GENDER INTO TEACHING

## C) Assessment

**Sex** refers to biology, e.g. chromosomes, hormonal profiles, sex organs.

**Gender** describes the characteristics that a culture attributes to, and expects from men or women.

While sex is a biological fact that is the same in any society, gender roles can be quite different across cultures.

*“Standardized assessment tools in use evaluate students’ knowledge and skills but the assessment of attitudes and behaviours, if undertaken at all, has generally remained secondary. The implication, which students readily grasp, is that knowledge and skills matter, while attitudes and behaviours don’t.”*

(AJOG 2002;187:S22-4.)

<http://www.genderandhealth.ca>

1. Can students take a comprehensive women’s health history?
2. Ask students to critique research results that show gender bias, e.g. failure to analyse by sex or generalization of results from men to women.
3. Present students with the abstract of research including only women, and ask them to apply the findings to the case of a man with the same illness.
4. Ask students to identify differences in etiology, pathogenesis, clinical presentation, and treatment of disease between men and women.
5. Make a brief video illustrating control of, or lack of respect for a patient by a physician and ask students to comment on the observed interaction.
6. Have students identify sources and effects of power imbalances in doctor patient relationship.
7. In an OSCE evaluate whether students demonstrate power sharing with the patient.
8. The OSCE format could be used to assess awareness of violence as a cause of a patient’s presenting symptoms and signs.
9. In an OSCE, ask how students would alter their approach if the patient were of the opposite sex.
10. Assess boundary issues in an OSCE, by having a “patient” of the same sex as the student ask the candidate for a date.



## Appendix 1

# **GOALS AND OBJECTIVES IN WOMEN'S HEALTH AND GENDER ISSUES**

Phillips SP. Evaluating women's health and gender in medical education. AJOG 2002;187:S22-4.

### **GOALS**

1. To recognize that health involves emotional, social, cultural, spiritual and physical well-being, and is determined by an individual's social, political, and economic context, as well as by biology.
2. To explain the breadth and depth of research in women's health, as well as the limitations of medical knowledge in this area
3. To evaluate the effect of personal biases and limitations resulting from socialization, gender and racial stereotypes.
4. To recognize the existence of power differentials in relationships, particularly the relationship between doctor and patient and to:
  - explain the sources of power imbalances
  - suggest ways to minimize the effect of the imbalance between doctor and patient
  - describe the variety of manifestations and consequences of power differentials
  - identify ways that gender, race, class, culture, ethnicity, ability/disability, age and sexual orientation can affect these differentials
  - behave in ways that enhance empowerment of the patient and minimize the hierarchical nature of that relationship
5. To use gender sensitive language and behaviour to minimize the negative impact of gender stereotypes and to foster respect for the equality, individuality, and value of all people



**OBJECTIVES** of relevance to *specific disease entities* include being able to answer the following:

1. Are the symptoms of a particular disease the same for women and men? (e.g. chest pain, depression)
2. Are the findings for a particular disease the same for men and women? (e.g. chest pain, depression)
3. Is the etiology of a particular disease the same for women and men? (e.g. substance abuse)
4. Are there differences in the appropriate investigation of particular findings between men and women? (e.g. headache, abdominal pain, chest pain, back pain)
5. Is treatment of a disease the same for men and women? (e.g. dosage, treatment during pregnancy or lactation, timing of treatment and menstrual cycle)
6. Are risk factors for a particular disease the same for women and men? (e.g. lung cancer, angina)
7. What are the symptoms, signs, and treatment of a particular disease when the patient is pregnant?
8. How does a relative lack of control over one's home or workplace impact on health, and the treatment of illness for women and for men?
9. Do wealth and health interact differently for men and women?
10. What are the social determinants of a particular disease?

**Objectives** regarding *gender based analysis of research* evidence include being able to answer the following:

1. Is there gender bias inherent in the hypothesis of a study?
2. Is the inclusion or exclusion of women as participants in a study appropriate?
3. Does data analysis properly identify results by sex?
4. Can findings from studies that exclude particular groups such as women, children, or particular races, be generalized and applied to those groups?



**Objectives** regarding *language* include being able to answer the following:

1. How does language used by the physician either reinforce or minimize gender stereotypes?
2. How should the physician respond to patient communication patterns that reflect gender or racial stereotypes?
3. When is gender neutral language appropriate? When is it inappropriate?
4. How can the physician use language to minimize the power imbalance between doctor and patient?



## Appendix 2

### *The Gender Lens*

Use the Gender Lens Tool Chart to guide your exploration of your topic.

#### **Step 1**

Start by choosing an area that interests you (eg. asthma, lung cancer, diabetes) and start to fill in the table.

#### **Step 2: Are there gender differences in...**

You will need to identify whether there are any gender differences in the condition with respect to the items in the right hand column: incidence/prevalence, etc.

Often the data exists but has never been looked at from a gender perspective - go ahead and "mine" the data !

In other circumstances, there are no data as to whether gender differences exist in this areas and you may need to do the research yourself !!

#### **Step 3: What factors might contribute to these differences?**

Start hypothesizing as to which biological and gender factors might contribute to the differences that you have discovered.

See if there is any information available in the literature to support your hypotheses. You may be very surprised about the results, or that, in fact, there are significant gaps in our knowledge.

#### **Step 4: Identify the gaps, address the gaps...**

This is your opportunity to identify the gaps and start to addressing them. We are all scientists at heart.

Engage your colleagues, your teachers, your friends. This is how we acquire new knowledge!

For more information, visit the [Gender Lens module](#) of the Gender and Health Collaborative Curriculum Project.



## The Gender Lens Tool\*\*

1. Are there gender differences in...  _____		2. What factors (might) contribute to these differences?					
		Biological	Psychosocial				
			Social	Cultural	Economic	Political	Educational
Incidence/ Prevalence	Y N ?						
Diagnosis/ Investigation	Y N ?						
Risk Factors	Y N ?						
Natural History	Y N ?						
Treatment and Response	Y N ?						

**3. Identify the gaps... address the gaps.**

*\*\*Developed by A. Day, University of Toronto.  
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