Example Teaching Guide: *"Beyond Reproductive & Maternal Health: Reframing Gender and Women's Health in Health Systems & Policy Setting"*

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Supplementary Materials

Supplemental Readings

Required

1. Krieger, N. (2003). Genders, sexes, and health: What are the connections — and why does it matter? *International Journal of Epidemiology, 32*(4)*,* 652–657. https://doi.org/10.1093/ije/dyg156
2. Warren, A., Garrett, K., & Frame, L. A. (2025). Disparities in women's health and clinical considerations from a translational science perspective: A narrative review and framework for future directions. *Women's Health*, *21*, 17455057251399009. https://doi.org/10.1177/17455057251399009

Recommended

3. Mehta, L.S. et al. (2016). Acute myocardial infarction in women: A scientific statement from the American Heart Association. *Circulation, 133*(9), 916–947. https://doi.org/10.1161/CIR.0000000000000351
4. Li, W., Feng, H., & Ye, Q. (2025). Factors contributing to the delayed diagnosis of endometriosis: A systematic review and meta-analysis. *Frontiers in medicine*, *12*, 1576490. https://doi.org/10.3389/fmed.2025.1576490
5. Ellis K., Munro, D. & Clarke, J. (2022). Endometriosis is undervalued: A call to action. *Frontiers in Global Women's Health, 3*, 902371. https://doi.org/10.3389/fgwh.2022.902371

Background on Case Conditions

The two in-class vignettes draw on well-documented patterns in the literature. The following background is provided to orient instructors who are not specialists in gender and women's health; it is not intended to be read aloud or distributed to students. The recommended readings in the section above provide the primary source of evidence. However, this can be recapped with students in the introductory presentation or in the full group debrief.

Cardiovascular Disease (CVD) in Women *(Mehta et al., 2016; Warren et al.,2025)*

CVD is the leading cause of death among women in the United States, yet it has been systematically under-recognized as a "women's health" issue. Women's cardiac symptoms frequently differ from the "classic" male presentation (crushing chest pain), presenting instead as fatigue, shortness of breath, jaw or neck pain, and nausea. These atypical presentations are more frequently attributed to anxiety or stress by clinicians, leading to delayed or missed diagnoses.

Women are less likely than men to be referred for cardiac testing, less likely to receive guideline-directed therapy following a cardiac event and were historically excluded from or underrepresented in the foundational cardiovascular trials that shaped clinical guidelines.

The sex/gender distinction in CVD: Biological sex shapes cardiovascular disease (CVD) risk in important ways; hormonal differences affect lipid profiles, vascular function, and the timing of disease onset (women typically develop CVD approximately 10 years later than men). Social gender shapes the clinical encounter; women are more likely to minimize or delay reporting symptoms (consistent with socialized norms around caregiving and stoicism), and providers are more likely to attribute women's cardiac complaints to psychological causes. Both biological sex and social gender are operating in Rosa's vignette (described in detail below).

Endometriosis *(Li et al., 2025; Ellis et al., 2022; Warren et al., 2025)*

Endometriosis affects an estimated 1 in 10 women of reproductive age, yet takes an average of 7–10 years to diagnose from symptom onset. The condition occurs when tissue similar to the uterine lining grows outside the uterus, causing chronic pelvic pain, dysmenorrhea, and in many cases gastrointestinal and urinary symptoms. Diagnosis requires laparoscopy, but patients routinely face years of dismissal before being referred for imaging or surgical evaluation. Chronic pelvic pain is normalized in clinical encounters, telling patients that it is simply part of menstruation, or attributed to psychological causes. Research investment has been disproportionately low; endometriosis affects as many people as diabetes, yet receives a fraction of the funding from the National Institutes of Health (NIH).

The sex/gender distinction in endometriosis: Biological sex is directly relevant, endometriosis involves reproductive anatomy. Social gender shapes the diagnostic delay: gendered assumptions about women's pain credibility, the normalization of menstrual suffering, and the historical deprioritization of conditions primarily affecting women have all contributed to delayed diagnosis and underinvestment in research. Both dimensions are present in Maya's vignette, and are further complicated by race; documented evidence shows Black women face longer diagnostic delays and greater dismissal of pain than white women, compounding the gendered pattern.

In-Class Vignettes and Discussion Questions

Instructions for instructor: Begin the class with a brief 5-minute presentation using the slides provided (attached as a separate supplementary file). Divide students into at least two groups and distribute one vignette to each group along with the shared discussion questions below (as a printout or on a shared screen). Groups work for approximately 15 minutes, then reconvene for a full class debrief.

Instructors should name explicitly at the outset that the vignettes focus on cisgender women as a documented starting point and that the discussion will expand to consider how these dynamics operate differently, and often with compounding harm, for transgender and non-binary

individuals. Question 4 of the discussion questions is designed to prompt this expansion beyond cisgender experiences.

Vignette #1: "It's Probably Just Stress"

Rosa is a 54-year-old Mexican American woman who works as a home health aide. For the past three months, she has been experiencing unusual fatigue, shortness of breath when climbing the stairs, and occasional jaw and neck pain. She initially dismissed these symptoms as stress from work and caring for her elderly mother.

When Rosa finally visits her primary care physician, she describes her fatigue and mentions the jaw pain briefly. Her physician asks about her anxiety levels and recent stressors, orders routine blood work, and suggests she try stress reduction techniques. A cardiac workup is not ordered.

Six weeks later, Rosa is admitted to the emergency room with a myocardial infarction. A subsequent review of her chart notes that her symptoms had been consistent with atypical myocardial infarction presentation for over two months before her cardiac event.

Vignette #2: "It's Just Part of Being a Woman"

Maya is a 26-year-old Black graduate student who has experienced debilitating pelvic pain since she was a teenager. Every month, her pain is severe enough to cause her to miss class or work. She has seen four different providers over the past several years to ask about her pain. The first told her that painful periods were normal and recommended ibuprofen or a heating pad. The second prescribed hormonal birth control without further investigation. The third, after Maya pushed for imaging, noted a "possible finding" but recommended watchful waiting. The fourth finally referred her for diagnostic laparoscopy.

Following the laparoscopy, Maya is diagnosed with stage III endometriosis. Her primary care provider later notes that some of her longstanding gastrointestinal symptoms, which she had reported to multiple providers, were also consistent with endometriosis.

Maya is told by a nurse during her post-operative visit: "At least now you finally have an answer." She has been living with undertreated symptoms for almost 10 years. The provider does not follow up with her to discuss long-term management for endometriosis.

Small Group Discussion Questions:

1. In your vignette, where does biological sex play a role in the causal story? Where does social gender play a role? Can you identify moments where both were operating at the same time?
2. What research gaps, in clinical knowledge, in diagnostic criteria, or in provider training, may have contributed to what happened to this patient?

3. How do race/ethnicity, socioeconomic status, or other aspects of this patient's identity appear to compound the patterns you see? What might be different if the patient's social position were different?
4. How would the causal story change if the patient in your vignette were a transgender man or non-binary individual with the same anatomy? What additional barriers, in research, clinical systems, or policy, would they face? What does this tell us about the limits of framing these as "women's health" conditions?
5. Using Kingdon's Multiple Streams Model, what would it take for conditions like this one to reach the policy agenda? What would need to be true in the problem stream, the political stream, and the policy stream?
6. If you were drafting a policy recommendation, what is one concrete change, in research policy, clinical guidelines, or insurance coverage, that could reduce the harm seen in your vignette?

Optional Take-Home Policy Brief-Assignment

For use with MPH105 Policy Memo Option #5: Health Outcomes for Marginalized Populations or as a new supplementary option: Reframing Gender & Women's Health in Policy Agenda Setting.

Assignment Instructions:

This assignment may be submitted as the MPH105 Policy Memo for Policy Option #5 or as a supplementary Policy Memo option. All standard MPH105 formatting requirements apply.

Topic: Select a current public policy related to gender and/or women's health around which to frame and write your memo. Your memo may address any relevant national or global organization (e.g., WHO, NIH, World Bank, a national ministry of health, or a non-governmental organization).

Role: Choose one real life public policymaker to whom you will address your memo. Assume the role of a staff person, adviser, or colleague relative to your memo target.

Scope: You may focus on any context within the space of gender and women's health, including but not limited to: cardiovascular disease, chronic pain conditions, mental health, occupational health, global health inequities, gender-based violence, or health system design. Your chosen policy and organization should be real and current.

Your memo must:

- Describe the policy problem in the context of the current policy
- Apply a gender-based analysis that distinguishes where biological sex, social gender, or both contribute to the problem, and, where relevant, how the policy affects people of different gender identities (including transgender and non-binary individuals) differently

- Address how intersecting social factors (e.g. race, socioeconomic status, nationality, sexual orientation, gender identity) shape who is most affected
- Evaluate the policy according to your selected criteria, identifying key points of controversy or gaps
- Propose 2-3 policy options with brief pros and cons
- Include a clear recommendation

Policy Memo Grading Rubric (65 points total)

In addition to the standard MPH105 rubric criteria, this assignment is evaluated on the quality of the gender-based analysis applied here. The rubric below reflects the standard MPH105 structure with an additional criterion specific to this teaching example.

Criteria	Description	Points
Executive Summary	Includes a one-paragraph executive summary with a brief overview of the policy problem, ***gender-based framing,*** and recommendations. This is your memo's "elevator speech".	9
Policy Background	Clearly identifies the specific policy and organization under examination. ***Provides research and facts that contextualize the gender and women's health dimensions of the problem.***	8
Gender-Based Analysis	***Distinguishes the roles of biological sex and/or social gender in the policy problem. Identifies how gendered assumptions shape the policy context, research base, or distribution of health outcomes. Explicitly addresses how intersecting social factors, such as race/ethnicity, socioeconomic status, nationality, sexual orientation or gender identity, shape who is most affected and how those dimensions compound gendered patterns of inequity.***	9
Policy Options	Describes and explains 2-3 policy options to address the problem, with brief pro/con arguments for each. May consider the Agenda Setting or Strategic Triangle framework.	9
Recommendation	Includes a clear, evidence-based recommendation from among the policy options presented.	9
Conclusion	***Situates the memo's recommendation within the broader policy context of gender health equity.***	7
Audience	Written with a specific, real-world audience in mind. Demonstrates awareness of the policymaker's interests, obligations, and political context.	4
Organization, Style, Mechanics	Well organized with well-constructed paragraphs, transitions, and subheadings. Sentences are well written and with varied structure. No grammatical, spelling, or punctuation errors.	5
Sources	A minimum of three (3) high-quality sources are included and correctly formatted in Chicago Manual style, done as Endnotes and NOT as Footnotes.	5

***Note to instructor:** The "Gender-based Analysis" criterion (9 points) replaces the standard MPH105 "Key Policy Issues" criterion for this submission. This criterion requires engagement with intersectionality, including analysis of how gender intersects with race/ethnicity, socioeconomic status, and gender identity to shape health inequities and policy outcomes. Students should consider transgender and non-binary experiences where relevant, not only sex/gender distinctions, as a core analytical expectation. The vignettes and discussion questions are designed to prompt this analysis explicitly. All other rubric components and point values are

identical to the standard MPH105 Policy Memo rubric. Students should be informed of this substitution when the assignment is introduced.

BEYOND REPRODUCTIVE AND MATERNAL HEALTH

REFRAMING GENDER AND WOMEN'S HEALTH IN HEALTH SYSTEMS AND POLICY SETTING

MPH-105 SUPPLEMENTARY MATERIALS

BACKGROUND

How "Women's Health" Has Been Defined and What It Costs

The Dominant Framing	What Gets Left Out
Women's Health = Reproductive Health • Pregnancy and Maternal Care • Contraception • Cervical and Breast Cancer Screening This framing shapes research funding, clinical guidelines, and policy agendas.	• Noncommunicable Diseases (NCDs) • Chronic pain and autoimmune conditions • Mental health beyond perinatal depression • Occupational and environmental exposures • Conditions dismissed as "atypical" or psychosomatic • Health experiences excluded from cisnormative clinical frameworks

Instructor note: Ask students: when you think "women's health" what comes to mind first? Use responses to frame the gap.

EXAMPLE 1 – CARDIOVASCULAR DISEASE

The Leading Killer of Women – Hiding in Plain Sight

#1 cause of death among women in the U.S.

Yet, women are less likely to be referred for cardiac testing.

Sex

Biological sex shapes presentation
Women's cardiac symptoms such as fatigue, jaw pain, nausea, shortness of breath, differ from the "classic" crushing chest pain described in most clinical training materials, which were developed from trials conducted predominantly in populations of men.

Gender

Social gender shapes clinical response
Women's symptoms are more frequently attributed to anxiety or stress by clinicians. Women are less likely to receive guideline-directed therapy, a pattern shaped by gendered assumptions about symptom credibility.

Instructor note: This is Krieger Case #10 from the pre-reading: both sex and gender operate, independently and synergistically.

EXAMPLE 2 – ENDOMETRIOSIS

When Pain is Normalized – Not Investigated

7 – 10 years average diagnostic delay from symptom onset.

Affects approximately 1 in 10 people assigned female at birth during reproductive years.

Research Gap

Underfunded because it was classified as a "women's issue".
Endometriosis was historically framed as a reproductive condition rather than a systemic disease, limiting research investment, diagnostic tools, and provider training.

Gender Norm

Cultural normalization of women's pain.
Providers routinely dismiss pelvic pain as normal menstrual discomfort or attribute it to psychological causes, a pattern rooted in gendered assumptions about pain credibility and help-seeking behavior.

Instructor note: Intersectionality note: women of color, particularly Black women, face compounded dismissal. Maya's vignette explores this directly.

CONCEPTUAL FRAMEWORK: SEX ≠ GENDER

Krieger (2003), International Journal of Epidemiology.

SEX	GENDER
Biological Classification	**Social and Institutional Construct**
• Chromosomes, gonads, hormones • Secondary sex characteristics • Reproductive physiology • Shapes cardiovascular disease (CVD) risk profiles and hormonal pain pathways	• Roles, norms, power relations • Institutional practices and expectations • Variable across time, culture, and context • Shapes how symptoms are reported and interpreted

For any health outcome, whether sex, gender, both, or neither matter is an empirical question, not a philosophical assumption (Krieger, 2003).

IN-CLASS ACTIVITY: MEET ROSA AND MAYA

Each group receives one vignette. Full case text provided in the student handout.

Rosa	Maya
54 years old, Mexican-American, Home health aide. Presents with fatigue, jaw pain, and shortness of breath. Symptoms attribtued to anxiety. Discharged without cardiac workup. **Outcome:** myocardial infarction 6 weeks later. Symptoms had been consistent with atypical myocardial infarction (MI) presentation for over two months.	**26 years old, Black, Graduate student.** Debilitating pelvic pain since her teens. Seen by 4 providers over several years. Told pain was normal, prescribed birth control, or referred to watchful waiting. **Outcome:** stage III endometriosis diagnosed after 10 years. Lost a job due to unmanaged symptoms. No follow-up on long-term management.

Instructor note: Distribute student handout now. Groups work for 15 minutes, then reconvene for full-class debrief.

**Discussion should also consider how these dynamics may operate differently for transgender and non-binary individuals.*

BREAKOUT GROUP #1 : "IT'S PROBABLY JUST STRESS"

Rosa is a 54-year-old Mexican American woman who works as a home health aide. For the past three months, she has been experiencing unusual fatigue, shortness of breath when climbing the stairs, and occasional jaw and neck pain. She initially dismissed these symptoms as stress from work and caring for her elderly mother.

When Rosa finally visits her primary care physician, she describes her fatigue and mentions the jaw pain briefly. Her physician asks about her anxiety levels and recent stressors, orders routine blood work, and suggests she try stress reduction techniques. A cardiac workup is not ordered.

Six weeks later, Rosa is admitted to the emergency room with a myocardial infarction. A subsequent review of her chart notes that her symptoms had been consistent with atypical myocardial infarction presentation for over two months before her cardiac event.

BREAKOUT GROUP #2: "IT'S JUST PART OF BEING A WOMAN"

Maya is a 26-year-old Black graduate student who has experienced debilitating pelvic pain since she was a teenager. Every month, her pain is severe enough to cause her to miss class or work. She has seen four different providers over the past several years to ask about her pain. The first told her that painful periods were normal and recommended ibuprofen or a heating pad. The second prescribed hormonal birth control without further investigation. The third, after Maya pushed for imaging, noted a "possible finding" but recommended watchful waiting. The fourth finally referred her for diagnostic laparoscopy.

Following the laparoscopy, Maya is diagnosed with stage III endometriosis. Her primary care provider later notes that some of her longstanding gastrointestinal symptoms, which she had reported to multiple providers, were also consistent with endometriosis.

Maya is told by a nurse during her post-operative visit: "At least now you finally have an answer." She has been living with undertreated symptoms for almost 10 years. The provider does not follow up with her to discuss long-term management for endometriosis.

SMALL GROUP DISCUSSION (15 MINUTES)

- In your vignette, where does biological sex play a role in the causal story? Where does social gender play a role? Can you identify moments where both were operating at the same time?
- What research gaps, in clinical knowledge, in diagnostic criteria, or in provider training, may have contributed to what happened to this patient?
- How do race/ethnicity, socioeconomic status, or other aspects of this patient's identity appear to compound the patterns you see? What might be different if the patient's social position were different?
- How would the causal story change if the patient in your vignette were a transgender man or non-binary individual with the same anatomy? What additional barriers, in research, clinical systems, or policy, would they face? What does this tell us about the limits of framing these as "women's health" conditions?
- Using Kingdon's Multiple Streams Model, what would it take for conditions like this one to reach the policy agenda? What would need to be true in the problem stream, the political stream, and the policy stream?
- If you were drafting a policy recommendation, what is one concrete change, in research policy, clinical guidelines, or insurance coverage, that could reduce the harm seen in your vignette?

FULL GROUP DEBRIEF (10 MINUTES)

- Key observations? Patterns?
- What additional barriers exist when comparing cisgender vs transgender or non-binary experiences in these vignettes?
- Connections to Kingdon's Multiple Streams Model

Instructor note: Use the following slide to close out the discussion

POLICY CONNECTION
FROM HEALTH SYSTEMS TO POLICY AGENDAS

Policy agendas are not neutral; they reflect systems of visibility, legitimacy, and power.

Problem Stream	Policy Stream	Political Stream
Whose suffering gets counted as a public health problem? Women's non-reproductive conditions have historically lacked the data and visibility to enter the problem stream.	Clinical guidelines, research funding criteria, and coverage policies have been built on evidence that excluded women, making reform technically complex.	Who has the agency and power to advocate? Gender shapes not just health outcomes, but political voice and representation in policy spaces.

Discussion prompt: "how does a health concern get onto the policy agenda, and whose concerns get left out?"