## Hysterical Bodies

A socio-legal and feminist policy analysis of gender bias in the treatment of cardiovascular disease in the US, UK, and Canada

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"I understand now that who I have become is indelibly intertwined with my disease. This hidden disease has shaped my relationship to my body and, with it, the way I exist as a woman in the world. But as I have learned to live as an unwell woman, I have also realized that my history is a shared history. Written into the history of my disease are the histories of women whose suffering led to the formation of the medical knowledge that saved my life. The medical science that helped me heal would not exist without those women who, for centuries, struggled to have their pain recognized, valued, legitimized.
The history of medicine is the history of unwell women, of their bodies, minds, and lives.
I owe them everything."
Elinor Cleghorn ${ }^{1}$

[^0]
#### Abstract

This thesis is an exploration of gender bias in the treatment of chronic illnesses by analyzing the relationship between gender, feminism, and ableism in regard to power relations within a human rights healthcare-focused framework. Through a combination of feminist theory and critical disability theory, this thesis aims to answer how gendered cycles of inequality are perpetuated within healthcare systems specifically in the treatment of cardiovascular disease. Together with the theoretical framework, a socio-legal method and feminist policy analysis are utilized to answer the research questions and analyze healthcare laws and policies from the US, UK, and Canada. This thesis demonstrates how gendered cycles of inequality are perpetuated within healthcare systems by focusing on three intertwined and cyclical aspects: medical research, healthcare inequities, and healthcare accessibility. Additionally, this thesis determines that gender bias is a systemic and structural problem as gender bias is embedded in healthcare, as a result, women are more likely to be dismissed, ignored, misdiagnosed, and receive inappropriate, delayed medical care.


Keywords: Gender Bias, Cardiovascular Disease, Feminism, Ableism, Power, Hysteria, Human Rights, United States, United Kingdom, Canada

## List of Abbreviations

Afib - Atrial Fibrillation
AHA - American Heart Association
BHF - British Heart Foundation
CAD - Canadian Dollars
CEDAW - Convention on Elimination of All Forms of Discrimination Against Women
CESCR - Committee on Economic, Social, and Cultural Rights
CIHR - Canadian Institutes of Health Research
CRPD - Convention on the Rights of Persons with Disabilities
DES - Diethylstilbestrol
ECG - Electrocardiogram
ER - Emergency Room
FDA - US Food and Drug Administration
GP - General Practitioner
HHS - United States Department of Health and Human Services
ICD - Implantable Cardioverter Defibrillator
ICESCR - International Covenant on Economic, Social, and Cultural Rights
IOM - Institute of Medicine (US)
ME/CFS - Myalgic Encephalomyelitis/Chronic Fatigue Syndrome
MI - Myocardial Infarction (heart attack)
NCDs - Non-Communicable Diseases
NHS - National Health Service (UK)
NIH - National Institutes of Health (US)
NIHR - National Institute for Health and Care Research (UK)
OHCHR - Office of the United Nations High Commissioner for Human Rights
SABV - Sex as a Biological Variable
UK - United Kingdom
US - United States
WHO - World Health Organization

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## 1. Introduction

### 1.1 Background and Research Problem

Medicine is a reflection of society. It is as much influenced by science and scientific breakthroughs as it is by politics, economics, and culture. It does not exist in a vacuum, medicine is shaped by social conditions and as a result injustice, inequality, and inequity are ingrained in medicine and healthcare systems that maintain the status quo. Medicine carries with it "the burden of its own troubling history. The history of medicine, of illness, is every bit social and cultural as it is scientific. It is a history of people, of their bodies, and their lives... it has always reflected the realities of the changing world and the meanings of being human". ${ }^{2}$ Moreover, medicine and healthcare systems are irrevocably intertwined with power relations. Health is a form of power and illness is more than a disease; "it is the human condition to suffer at some stage. Illness always bleeds beyond the borders of doctors' appointments, hospital visits...Illness is stitched into our bodies and our lives in ways that simply cannot solely be measured in a laboratory". ${ }^{3}$ Our lives are constantly affected by medicine and healthcare systems and the social conditions that influence them.

Medicine has a long and complicated relationship with gender which can be seen in the history of hysteria, misogyny, sexism, and racism in healthcare systems. As influenced by social conditions, medicine has flourished in conditions of gender inequality. This history has resulted in pervasive gender bias that affects all aspects of healthcare from medical research and education to diagnosis and treatment. Healthcare is littered with examples of gender bias. For example, women continue to be underrepresented in medical trials and research and most trials do not account for sex or gender differences. ${ }^{4}$ Women are less likely to receive pain relief than men as their pain response is seen as too emotional and hysterical. ${ }^{5}$ Women are ten times more likely to develop autoimmune diseases yet men receive a quicker diagnosis for autoimmune

[^1]diseases. ${ }^{6}$ Standard drugs such as aspirin and beta-blockers are less effective in women ${ }^{7}$ and women are 50 to $75 \%$ more likely to have an adverse drug reaction ${ }^{8}$. Moreover, women are also more likely to suffer from general anesthesia side effects. ${ }^{9}$ Women often present with different symptoms while having a heart attack or a stroke than men and as a result, they are more likely to be sent home without receiving the life-saving medical treatment they need. ${ }^{10}$ These examples represent the tip of the iceberg of gender bias in healthcare.

A prevailing and common problem within medicine that is affected by the relationship between medicine and gender, is the diagnosis and treatment of chronic illnesses. The WHO estimates that chronic illnesses otherwise known as NCDs kill 41 million people every year and are responsible for $71 \%$ of global deaths each year. ${ }^{11}$ With chronic illnesses on the rise, the current disease spectrum within global health is shifting. This shift in the global disease burden towards chronic conditions has resulted in healthcare systems trailing behind in their evolving development to meet current health needs. ${ }^{12}$ As a result, healthcare systems are "fragmented, focused on acute and emergent symptoms, and often provided without the benefit of complete medical information". ${ }^{13}$ This raises the question as to the role of gender within this changing medical landscape as women have higher rates of chronic illness than men and are more likely to have multiple chronic illnesses. With this burden falling on women, "it is worth considering to what extent its relative neglect by the medical system is because it mostly affects women, whose complaints are so often heard not as a roar but as a whine". ${ }^{14}$

[^2]
### 1.2 Purpose and Research Questions

The purpose of this thesis is to analyze the relationship between gender, feminism, and ableism in relation to power relations within the treatment of chronic illnesses; health will be investigated in relation to gender. By situating these themes within a human rights healthcare-focused framework, it will allow for an in-depth examination of how gender and health are inextricably intertwined with politics and power. Moreover, this thesis will analyze how power relations are a central force in gender structures within healthcare.

Therefore, the research questions that will be examined are:
How are gendered cycles of inequality perpetuated within healthcare systems in the treatment of chronic illnesses, specifically cardiovascular disease?
a. How does gender bias impact women's diagnosis and treatment of cardiovascular disease in the US, UK, and Canada despite advancements in healthcare laws and policies targeting gender equality?
b. What role does gender play in healthcare accessibility?
c. How does gender interact with ableist mindsets and other forms of discrimination in healthcare systems in the treatment of cardiovascular disease?

### 1.3 Relevance to Human Rights

The WHO frames health as a complete state of physical, mental, and social well-being; it is more than the absence of disease. ${ }^{15}$ A complete state of health and well-being suggests that the right to health is an all-encompassing right that is dependent on both healthcare services and social determinants of health. The right to health is codified in multiple human rights treaties such as the ICESCR and CEDAW and is a fundamental right that is indispensable for the exercise and enjoyment of other rights. ${ }^{16}$ However, it is important to acknowledge that the right to health is not

[^3]synonymous with the right to be healthy. Instead, the right to health signifies an entitlement "to a system of health protection which provides equality of opportunity to enjoy the highest attainable level of health". ${ }^{17}$ The right to health is a complicated right that is dependent on the resources of a state; as a positive right, states are not responsible for ensuring good health nor can they protect against all causes of illness, however, they do have an obligation to ensure the availability, accessibility, acceptability, and quality of healthcare services. To ensure accessibility, four subcategories need to be taken into consideration: non-discrimination, physical accessibility, economic accessibility, and information accessibility. ${ }^{18}$ Simultaneously, the right to health is a negative right, as people have a say in their medical choices and have the right to be free from interference. ${ }^{19}$ The OHCHR further clarifies that the right to health is an inclusive right that extends to determinants of health including gender equality. Healthcare must be offered without discrimination and states have the responsibility to recognize and provide for the differences in the specific needs of groups that face health inequality. ${ }^{20}$

With this thesis focusing on chronic illnesses, it is also important to comment on the rights codified in the CRPD and their connection to chronic illnesses. Disability is dynamic and as chronic illnesses are long-term health conditions that require ongoing medical care and limit daily activities, many chronic illnesses are classified as disabilities. Within the CRPD, article 25 the right to health stipulates that all health services need to meet the specific needs of the disability, equal in quality as to those who are not disabled, as well as be gender-sensitive. ${ }^{21}$ The CESCR also emphasizes the importance of gender sensitivity as they insist that a gender perspective should be integrated into all healthcare services, research, programs, and policies. This perspective should recognize that biological and socio-cultural factors play a vital role in the health of men and women. Moreover, the CESCR emphasizes that "the disaggregation of health and socio-economic data according to sex is essential for

[^4]identifying and remedying inequalities in health". ${ }^{22}$ Furthermore, the CESCR also affirms that women's right to health should be promoted throughout their life span. ${ }^{23}$ This is important as women's health is often associated and considered synonymous with reproductive health and while reproductive health is a vital part of women's health it is not the sole factor; "the truth is, women's health deals with exactly what the words, removed from their vernacular context, imply: the overall health and well-being of women". ${ }^{24}$ The focus on reproductive health has resulted in the neglect of women's overall health to the detriment of women's lives. This poses a significant problem when one considers the continued rise and prevalence of chronic illnesses especially as women are more likely to become chronically ill. All aspects of women's health need to be prioritized and high-quality healthcare needs to be easily accessible without discrimination.

### 1.4 Ethical Considerations and Reflexivity

While this thesis does not deal with primary data such as personal health data, this thesis aims to ensure a degree of awareness and sensitivity fitting with the sensitive, private, and personal nature of healthcare and gender research. Additionally, it is also important to acknowledge that human rights research can cause both indirect and direct harm. ${ }^{25}$ One possible way indirect harm can occur is through the portrayal of vulnerable groups. As this thesis concerns people who identify as women and the plights they face within healthcare systems in the treatment of chronic illnesses, it is imperative that their portrayal depicts them with dignity and agency. Moreover, to prevent indirect harm, this thesis aims to be inclusive and intersectional both in the language used and while examining the plights women face. Particularly the struggles of all women will be acknowledged and not just white, heterosexual, cis-gendered women.

[^5]Feminist research has often been criticized as political, biased, and lacking a degree of objectivity, however, this criticism has often not been applied to research done by and for men. ${ }^{26}$ This critique of feminist research overlooks the fact that all research is political as research is shaped by the contexts in which it is produced. Feminist research acknowledges that complete objectivity is impossible as one always has a connection to their research. This connection should be seen as an asset as it allows for the development of new knowledge and insights. As one can never negate or erase their personal realities with the research, feminist research calls for feminist reflexivity where the researcher acknowledges how their experiences can influence the research. ${ }^{27}$ By demonstrating reflexivity, it helps prevent the possibility of confirmation bias as the subjectivity is made clear. Taking this into consideration, it is necessary to acknowledge that as someone who is chronically ill and has cardiovascular disease, there is a personal connection to this research. Chronic illness impacts every aspect and decision of one's life. It brings a new awareness of your body and the healthcare systems you have come to rely on as health is something you take for granted until you lose it. This connection not only influenced this thesis topic but the knowledge that this personal connection provides demonstrates a deep engagement and understanding of this topic. Moreover, this personal connection is an asset in the production of new knowledge as "paradoxically, by making the subjectivity clear, the research becomes more objective". ${ }^{28}$

### 1.5 Delimitations

Gender bias within healthcare and in the treatment of chronic illness is a very broad and extensive topic, however, due to spatial constraints, this thesis only provides a limited perspective. There are a lot of chronic illnesses one can focus on, such as endometriosis, autoimmune conditions, fibromyalgia, ME/CFS, chronic pain, etc, however, to narrow down the focus of this thesis, cardiovascular disease will be used as an empirical example to demonstrate gender bias. Cardiovascular disease was chosen

[^6]as it is the leading cause of mortality in women in the majority of Western countries claiming more lives than cancer. ${ }^{29}$ Estimates suggest that 1 in 3 women die from cardiovascular disease ${ }^{30}$ while 1 in 39 women die from breast cancer. ${ }^{31}$ Similar statistics are present for other types of cancer. Despite this and cardiovascular disease being one of the most researched chronic illnesses, cardiovascular disease is still considered a 'man's disease' and medical research, diagnostic tools, and treatments reflect this. Moreover, cardiovascular disease was chosen as instead of focusing on conditions that only affect women such as endometriosis, this thesis will focus on a condition that affects all genders/sexes. This will demonstrate the pervasiveness of gender bias in healthcare through the comparison of cardiovascular disease treatment differences between men and women in the US, UK, and Canada.

As this thesis will examine gender bias, it is crucial to comment on the difference between sex vs. gender. The relationship between sex and gender has always been complicated as the term gender is often considered synonymous to sex, especially within medical research. ${ }^{32}$ However, it is important to clarify that sex refers to innate biological and physiological characteristics such as reproductive organs, genetic markers, and chromosomes while gender is a societal construct that dictates social norms, roles, behaviors, and relationships. ${ }^{33}$ Sex differences have been recognized in the prevalence, symptoms, severity, and risk factors of multiple health conditions, as well as in responses to drugs. ${ }^{34}$ While this thesis will briefly touch upon the sex differences in medical research and healthcare, the main focus of this thesis will be on the role of gender within society. Additionally, it is important to touch upon the terminology in this thesis, when referring to women, this thesis refers to people who identify as women regardless of their assigned sex at birth. Due to spatial constraints,

[^7]this thesis will not examine the specific and unique difficulties transgender people face within healthcare, however, this thesis does recognize that these problems are intertwined with the issues that will be discussed. Moreover, one cannot examine gender bias within healthcare without also recognizing the systemic nature and role of racism within this problem. This thesis aims to be intersectional and will examine the relationship between racism and gender bias, however, due to constraints, the full role of racism cannot be examined and the analysis will be limited. Additionally, this thesis will not touch upon the link between medicine and the history of slavery, colonialism, and imperialism.

Human rights research often focuses on giving a voice to subordinated and marginalized groups rather than the production of knowledge. ${ }^{35}$ Through the examination of a problem within healthcare that is often dismissed, this thesis may indirectly give a voice to subordinated groups and incite a social commentary, however it is important to emphasize that the research purpose is to produce new insights and knowledge within this topic.

### 1.6 Thesis Outline

After the introduction, chapter 2 starts with a literature review of previous research as well as an examination of important aspects of gender bias brought forth by leading scholars that provide a foundational understanding of the topic. After discussing previous research, chapter 3 establishes the theoretical framework which is a combination of feminist theory and critical disability theory. This theoretical framework serves as a foundation for this thesis. Chapter 4 discusses the material and methodology. For an in-depth exploration of the research questions, this thesis employs a combination of a socio-legal method and a feminist policy analysis to analyze healthcare laws and policies. Chapter 5 is the analysis where healthcare laws and policies from the US, UK, and Canada are analyzed. This analysis is put into perspective and context through the use of cardiovascular disease as an empirical example. Finally, chapter 6 discusses the significance and implications of the research, presents a conclusion, and opportunities for further research.

[^8]
## 2. Literature Review

### 2.1 Previous Research

An examination of previous research within this thesis topic has revealed gaps within the knowledge that allows for this thesis to be situated within the field. Additionally, this examination assisted in clarifying this thesis's contribution. The research conducted within this field falls into two categories. The first category consists of medical and clinical studies. These studies do not analyze gender or aspects of gender such as gender roles, power dynamics, paternalistic sentiments, etc. Instead, these studies look at the statistics behind gender bias and mainly consist of cohort studies and quantitative statistical analyses. The majority of these medical studies conclude that gender bias does exist, however, it is also important to comment on the few studies that contradict this widely held belief. A study by Lennep et al. (2000) evaluated whether there was evidence of gender-related differences in 1894 patients with angiographically documented coronary artery diseases between 1981 to 1997. This study found that there were no gender differences, no substantial evidence for the under-referral of women for therapeutic management, and therefore concluded that there was no evidence of gender bias or the Yentl Syndrome. ${ }^{36}$ While this study contradicts the rest of the medical studies that support gender bias, it is important to recognize that out of the 1894 patients studied only 368 were women. Another study by Scott et al. evaluated women's participation in FDA cardiovascular disease drug trials from 2005 to 2015 and found that women were well represented in trials of drugs for hypertension and Afib while over-represented for pulmonary arterial hypertension. Overall, this study noted minimal gender differences in drug efficacy and safety profiles. ${ }^{37}$ However, the proportion of women enrolled in studies ranged from 22 to $81 \%$ with the mean only being $46 \%$. While these studies are important to keep in mind

[^9]throughout this thesis, these studies present a minority of medical research. The majority of medical and clinical studies have found that gender bias is present throughout healthcare systems. A study from Ezekowitz et al. found that women faced a $20 \%$ increased risk of developing heart failure or dying after their first MI compared to men. ${ }^{38}$ Similarly, a study by Wilkinson et al. found that women receive guideline-indicated care less frequently and have a higher mortality than men. ${ }^{39}$ These examples and more will be expanded on in the analysis, where the use of cardiovascular disease as an empirical example will illustrate that the studies from Lennep et al. and Scott et al. do not represent an accurate picture of gender bias.

The second category of research provides a more in-depth analysis of gender in healthcare and gender bias. This literature review will focus on important elements within this category of research, specifically gender blindness vs gender equity, the knowledge and trust gap, and hysteria. This research will be used to gain an understanding of gender bias and develop a necessary foundation that this thesis will build on to fill the gaps in knowledge. Within this category of research what is missing is an in-depth analysis of how these themes relate to power. Additionally, gender is often not analyzed within a wider social context that also takes into consideration gender in relation to feminism, ableism, sexism, and their relationship with power in social and legal contexts. Moreover, these categories of research do not provide an in-depth analysis of gender bias in relation to human rights. Therefore, this thesis aims to position itself within these gaps of previous research.

### 2.2 Gender Blindness vs. Gender Equity

It is important to clarify and comment on the different understandings of gender bias. In their article, A Theoretical Model for Analyzing Gender Bias in Medicine (2009), Risberg et al. clarify that there are two ways to understand gender bias. Gender bias can occur from gender blindness where gender is not taken into consideration as a social construct and social determinant of health. In this situation, doctors demonstrate a degree of unawareness of "gendered norms and 'doing' gender-processes, and/or of

[^10]differences between women and men regarding positions in society, life conditions, life experiences, and biology". ${ }^{40}$ The second form of gender bias occurs when doctors assume a degree of sameness and equity between men and women. This occurs as men are seen as the standard for medical knowledge; men are understood as "the normative standard of non-reproductive health and female differences, when recognized, become atypical variations". ${ }^{41}$ This form of bias demonstrates how a male perspective dominates medicine from clinical research including methodologies and theories to diagnosis and treatment of health conditions. ${ }^{42}$ In their article, From Gender Bias to Gender Awareness in Medical Education (2009), Verdonk et al, also comment on these forms of gender bias and highlight that gender bias shapes all aspects of medicine, and gender needs to be understood as an essential social determinant of health. Moreover, they highlight that health is not a purely biological phenomenon - it is inextricably intertwined with social factors and therefore it cannot be incisively distinguished as a biological phenomenon. ${ }^{43}$ Additionally, Verdonk et al. emphasize that the interdisciplinary relationship between gender and medicine results in the current biomedical reductionist paradigm which is an inadequate model to understand this relationship. ${ }^{44}$ This is also reiterated by Ruiz and Verbrugge in their article $A$ Two Way View of Gender Bias in Medicine (1997), where they reinforce that these two forms of gender bias "originate in a biomedical model that assumes equality for physical health problems and inequality for emotionally-toned ones and self-expressed health". ${ }^{45}$

### 2.3 The Knowledge and Trust Gap

The understanding of gender bias as gender blindness or gender equity provides an essential foundation for examining this topic, however, Maya Dusenbery in her book, Doing Harm: the truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick (2018), goes further to classify gender bias into two

[^11]gaps: the knowledge gap and the trust gap. Dusenbery argues that this classification accurately presents a comprehensive understanding of gender bias in healthcare. The knowledge and trust gap are two interlocking systems that reinforce the male-centric nature of medicine and affects the quality of care women receive. ${ }^{46}$ The knowledge gap represents the lack of knowledge regarding women's health throughout medicine from preclinical studies that only use male cells and male animals to clinical research where women are underrepresented to diagnosis and treatment. The preclinical studies and clinical studies that shape medical knowledge are based on the study of male cells, male animals, and male humans. An example of this is a 1986 NIH-supported pilot study from New York that studied the link between obesity and breast and uterine cancer, however, the study did not include any women. ${ }^{47}$ Women's ability to menstruate and get pregnant is often cited as a reason for the underrepresentation of women in preclinical and clinical studies. Menstruation is seen as an uncontrollable, confounding variable that will affect the reliability of medical studies. Ironically, while menstrual cycles do affect clinical studies such as those that investigate new drugs, it is precisely the reason why women should be included in these studies for women's health benefits as "sometimes drugs that are lifesaving for men can be life-destroying for women". ${ }^{48}$ While the rationale for stricter enrollment rules in medical studies is based on valid reasoning after the thalidomide and DES scandals that affected pregnant women, past abuses are not a justifiable excuse for the continued underrepresentation of women in medical studies. ${ }^{49}$ The physiology of men is inherently different and the extrapolation of their medical knowledge to women is dangerous for women's health. In her work, Invisible Women: Data Bias in a World Designed for Men, (2019), Caroline Criado-Perez also highlights this issue by arguing that there is a huge historical data gap when it comes to women's health and this gap continues to grow when women's health is not seen as a priority in medical research. ${ }^{50}$ This raises the question as "how many treatments have women missed out on because they had no effect on the male

[^12]cells on which they were exclusively tested? ${ }^{511}$ The lack of knowledge and the lack of sex-disaggregated data affects the knowledge doctors have regarding women's health as curriculums in medical schools reflect the knowledge gap in medical research. As a result, healthcare is unable to effectively diagnose and treat women.

The trust gap represents how women's symptoms are often not believed nor taken seriously. Women are often dismissed, minimized, and misdiagnosed as women's health issues are stereotyped as 'all in their heads' until proven otherwise. ${ }^{52}$ The trust gap is exemplified by the Yentl Syndrome. Originally based on the movie, Yentl (1983), Yentl Syndrome has become a common phrase within medicine where women are misdiagnosed and mistreated within healthcare until they can prove that they are as sick as men and/or their symptoms conform to the male standard. ${ }^{53}$ As pointed out by Criado-Perez, this is problematic as women's symptoms are often considered atypical as medical knowledge is based on men. Additionally, the Yentl Syndrome is reinforced by a lack of knowledge of exclusively female diseases or health conditions that are more common in women than men. ${ }^{54}$ Dusenbery emphasizes that the knowledge and trust gap are two sides of the same coin: "women's symptoms are not taken seriously because medicine does not know as much about their bodies and health problems. And medicine does not know as much about their bodies and health problems because it does not take their symptoms seriously". ${ }^{55}$

Both the knowledge and trust gap can be demonstrated in the treatment of women's pain. Chronic pain has become an epidemic as it is the most prevalent health problem and the leading cause of disability. ${ }^{56}$ The IOM estimates that chronic pain costs the US around $\$ 635$ billion in lost productivity and healthcare costs. ${ }^{57}$ On the other hand, the NIH only devotes around $1 \%$ of its annual budget ( $\$ 400$ million) to studying

[^13]chronic pain. ${ }^{58}$ The majority of chronic pain sufferers are women and they often face the challenge as to how one demonstrates they are in pain without being written off as hysterical, difficult, and/or hypochondriacal. In the US, it is estimated that $70 \%$ of those suffering from chronic pain are women but $80 \%$ of chronic pain research is solely conducted on men or male mice. ${ }^{59}$ Pain is subjective, however, it is important to emphasize that "pain is not just biological mechanisms but sociological and psychological factors can influence pain perception and behavior" ${ }^{60}$ Pain experiences are affected by both sex and gender and the treatment of pain is also influenced by a patient's gender. In their work, The girl who cried pain: a bias against women in the treatment of pain (2001), Diane Hoffman and Anita Tarzian demonstrate how the treatment of women's pain is influenced by hysterical discourses that reinforce the Yentl Syndrome. Women are more likely to have chronic pain, however, they are less likely to have their pain taken seriously as their pain is discounted as an overly emotional and hysterical overreaction. The tendency to view women's pain response as hysterical reinforces the Yentl Syndrome as women will be given less pain relief until they can prove they are as sick as male patients. ${ }^{61}$ As a result, women receive less aggressive pain management than men; "medicine's focus on objective factors and its cultural stereotypes of women combine insidiously, leaving women at greater risk for inadequate pain relief and continued suffering". ${ }^{62}$ Additionally, women are more likely to be given anti-anxiety medication and antidepressants rather than analgesics; women's pain is seen as an emotional response rather than actual acute pain. ${ }^{63}$ Giving women anti-anxiety medication instead of pain relief is another example of how the hysteria narrative is still present today in healthcare services; pain is blamed on women's psyche rather than an actual medical problem. When seeking healthcare, women are often labeled hysterical and difficult rather than receiving appropriate treatments. These researchers highlighted how the lack of pain relief women receive is

[^14]a clear example of how hysteria is reflected in current social conditions that impact the quality of healthcare women receive.

### 2.4 Hysteria

One cannot analyze gender bias in medicine without examining the intertwined relationship between hysteria and healthcare as the echoes of hysteria can be heard throughout medicine. Researchers such as Lippi et al. (2020), Anke Bueter (2017), and Maya Dusenbery (2018) have explored the history of hysteria in medicine. Hysteria has a tumultuous and pervasive history where all of women's ill health from headaches to seizures have been blamed on hysteria. The history of hysteria is the history of women's abuse at the hands of medicine. In the 5th century BC, Hippocrates who is often considered the father of modern medicine stated that a woman's womb is the origin of her ill health. ${ }^{64}$ Hysteria derives from hystera the Ancient Greek word for uterus. During the Hippocratic medicine period, it became a catch-all phrase for women's ill health - women's symptoms were caused by women's hysterical wandering uterus or women's over-porous bodies that resulted in blood accumulating in women's breasts driving women crazy. ${ }^{65}$ Over the centuries, the blame for women's health issues shifted from their wandering womb to witchcraft, demonic possession, women's moral inferiority, and their weakness of character. ${ }^{66}$ During the 19th century, hysteria became connected to women's nervous system and women's weaker constitution. ${ }^{67}$ As a result, women diagnosed with hysteria often underwent forced hysterectomies, oophorectomies, cervical cauterization, and electrotherapy. ${ }^{68}$ Dusenbery (2018) highlights how hysteria was seen as a physical ailment caused by physical symptoms, however, in the post-Freud era hysteria changed from a physical illness to a mental health condition. ${ }^{69}$ Women's physical symptoms no longer represented a physical ailment but represented a fault in women's psyche. The psychologization of hysteria

[^15]and blaming women's psyche as the source of their health issues meant women's symptoms, feelings, and thoughts were continually dismissed. This shift in hysterical discourse resulted in a society that obsessed over every aspect of women's ill health to ignoring women's health. ${ }^{70}$ Ironically while women's symptoms were dismissed and they were denied appropriate healthcare treatments, the diagnosis of hysteria resulted in women being designated as inherently sick because of their gender. Hysteria was considered innate to womanhood. ${ }^{71}$ Throughout history, hysteria was used to justify women's subordination and marginalization within society. Women were considered irrational and governed by uncontrollable emotions which made entry into aspects of society such as education, politics, and workplaces inaccessible. Women were diagnosed with hysteria to keep them out of power relations and prevent them from gaining positions of political power. ${ }^{72}$ Hysteria is steeped with misogynistic sentiments that viewed and treated women as inferior; "the most revelatory dimensions of hysteria remain its basis in gender and social class power and control". ${ }^{73}$ While women are no longer diagnosed with hysteria, the hysterization of women's bodies is still a systemic problem within healthcare. Current narratives within healthcare reflect the hysterical discourse from history. Hysteria transformed from a disease to an adjective that carries the same connotations. ${ }^{74}$ The history of hysteria contributed to the current knowledge gap in women's health issues as women's health was never prioritized or taken seriously. Not only do doctors lack knowledge when it comes to women but Alyson J. McGregor (2020) and Anushay Hossain (2021) highlight that healthcare systems and doctors still carry an unconscious belief that women are prone to illogical and hysterical outbursts. ${ }^{75}$ These discourses fuel distrust of women and their symptoms which in turn fuels the trust gap which reinforces the knowledge gap. This reinforces male-centric and male-dominated medicine. Hysteria did not disappear from history, it

[^16]prevailed by lurking in the shadows of medical discourse and ideals - it continually reinvents itself to reflect and imitate cultural and societal conditions. ${ }^{76}$

Women are no longer directly diagnosed with hysteria instead the terminology has transformed. Researchers such as Dusenbery (2018), Gabrielle Jackson (2019), and Elinor Cleghorn (2021) have explored how the rebranding of hysteria influences the medical terminology that doctors often use toward women. The terminology has shifted from hysteria to 'medically unexplained symptoms'; "it is convenient that 'medically unexplained symptoms' has become the latest label to be applied to allegedly hysterical symptoms since the term itself - and the way medicine uses it highlights the problems with the whole concept". ${ }^{77}$ The term medically unexplained symptoms has become a catch-all phrase for doctors' uncertainty for women's health problems such as ME/CFS and fibromyalgia - health conditions that are more common among women. ${ }^{78}$ The knowledge gap has highlighted how women often experience atypical symptoms compared to the typical symptoms of men which makes receiving an accurate diagnosis more difficult. This is especially the case as some chronic illnesses can be obscure and hard to diagnose. These clear collective knowledge gaps result in a self-fulfilling prophecy; doctors lack knowledge about women's health and as a result, women are diagnosed with medically unexplained symptoms reinforcing the lack of knowledge about women's health. ${ }^{79}$ These researchers have studied how doctors are more likely to 'give up' on women's health problems rather than running thorough tests, resulting in the diagnosis of medically unexplained symptoms often blamed on stress. ${ }^{80}$ By diagnosing women with 'medically unexplained symptoms', doctors dismiss and distrust women, their symptoms, and their experiences. As the knowledge gap has demonstrated, women's bodies seem to baffle medicine and as a result, women do not receive proper healthcare treatment. ${ }^{81}$ Instead, their health is blamed on 'medically

[^17]unexplained symptoms' that carry hysterical connotations; "what's one of the major risk factors for medically unexplained symptoms? Being a woman". ${ }^{82}$

## 3. Theory

### 3.1 Feminism: Injustice and Power

Feminism is an ideology and a social movement that is based on a belief in gender equality and strives for the elimination of sexism throughout society. ${ }^{83}$ As a social movement, feminism is often divided up into waves with each wave representing different social justice goals and different feminist epistemologies. There is no singular understanding of feminism; feminism is interminable and expansive. A theoretical foundation of feminism can focus on the different waves of feminism, individual theorists, and/or different feminist epistemologies. As the heart of feminism is an exploration of the persistence of gender inequality and oppression, this thesis will adopt this conceptualization as the theoretical perspective. It is important to note that while there is no singular understanding of feminism comprehensive enough to explain the complexity of feminism and gender equality, it is imperative to understand inequality, how it appears, and its effects. In her book, Justice and the Politics of Difference (1990), Iris Marion Young conceptualizes oppression as systemic and structural injustices that emerge from the everyday actions of regular people. Oppression such as gender inequality appears in the "unquestioned norms, habits, and symbols, in the assumptions underlying institutional rules and the collective consequences of following those rules" ${ }^{84}$ Young argues that as a result individuals become trapped within systems of inequality that continually constrain their choices, actions, and opportunities. This is reinforced as structural injustice exists within accepted background conditions that are seen as the norm. As a result, Young highlights that this form of structural injustice cannot be eliminated by passing new laws as "oppressions are systematically reproduced in major economic, political, and cultural institutions". ${ }^{85}$ This

[^18]conceptualization of gender inequality demonstrates how inequality often continues to persist despite social and legal advancements as structural inequality creates a challenge as to who is responsible. In her work, Feminism, Structural Injustice, and Responsibility (2017), Serena Parekh explores the idea of responsibility in relation to Young's conceptualization of structural inequality. Parekh highlights that the lack of direct causal agency is often why oppression is not understood as a structural and systemic force. ${ }^{86}$ Gender inequality as a form of structural injustice is often reproduced through unconscious and implicit norms throughout society that reproduce paternalistic patriarchal sentiments. Together with other forms of identity, gender is constructed through a hierarchy of privilege and subordination which creates a continuum and domain of hegemonic power. As a result, women are marginalized through a matrix of domination. ${ }^{87}$ Parekh further argues that Young's views highlight that social structures are not controllable by human nature; systemic relations and structural identity categories are grounded in inequality. ${ }^{88}$ Parekh, therefore, argues that it is imperative that social injustice such as gender inequality is understood as unjust and interlocking social structures. ${ }^{89}$ Moreover, this conceptualization of inequality illustrates that collective action to effectively address and eliminate gender inequality must reflect this understanding; "structural injustice, like all injustice, demands that we address it". ${ }^{90}$

Along with structural injustice, gender inequality also needs to be understood as a form of epistemic injustice. In her work, Miranda Fricker (2007) examines epistemic injustice which explores how injustice influences knowledge, specifically who has the capacity to be a subject of knowledge and who can contribute to knowledge. Fricker divides epistemic injustice into two interlocking categories: testimonial injustice and hermeneutical injustice. Testimonial injustice is the "injustice of receiving a degree of credibility that has been reduced by some kind of prejudice". ${ }^{91}$ Testimonial injustice can result in a credibility excess however often results in a credibility deficiency - an

[^19]individual is discriminated against in their capacity as a knower. ${ }^{92}$ Historical prejudicial stereotypes are woven into the fabric of society that influences how certain social groups are perceived. As a result, these groups are often dismissed as knowers; forms of knowledge and the voices of those in positions of power and privilege are considered more important and to a certain degree also considered more believable. Fricker argues that "to be wronged in one's capacity as a knower is to be wronged in a capacity essential to human value". ${ }^{93}$ This results in an intrinsic injustice as knowledge is an essential capacity to the human condition. Fricker states that by dismissing, undermining, and excluding one's capacity as a knower, it undermines their confidence, power, and their humanity. ${ }^{94}$ The second form of epistemic justice is hermeneutical injustice which are moments of unmet needs of understanding. ${ }^{95}$ In other words, individuals are wronged in their capacity as subjects of social understanding. While hard to detect as it is often structural, hermeneutical injustice results in a form of powerlessness as it "renders the collective hermeneutical resource structurally prejudiced". ${ }^{96}$ Those in hermeneutically powerful groups influence the social experience of others and obscure a collective understanding. Through analyzing epistemic injustice through testimonial and hermeneutical injustice, Fricker exemplifies how knowledge is inextricably intertwined with power, specifically how epistemic injustice stems from structural inequalities of power. ${ }^{97}$ Moreover, epistemic injustice demonstrates how "oppression can be explicitly repressive or it can be a silent by-product of residual prejudice in a liberal society". ${ }^{98}$

These conceptualizations of injustice highlight that at the heart of feminist theory is an analysis and examination of power and who has it. A feminist understanding of power demonstrates the complexity of gender and its intertwined relationship with other modes of identity. In her work, The Power of Feminist Theory: Domination, Resistance, Solidarity (2018), Amy Allen explores different conceptions

[^20]of power put forth by theorists such as Michel Foucault, Judith Butler, and Hannah Arendt. Allen argues that the conceptions of power put forth by these scholars are incomplete as current conceptions do not fully encapsulate the complexity and nuanced nature of power. ${ }^{99}$ Allen argues that an analysis of power within feminism aims at "critcizing, challenging, subverting, and ultimately overturning the multiple axes of stratification affecting women". ${ }^{100}$ Allen holds that it is important to understand that power is not a physical tangible object but power is a relation. ${ }^{101}$ As power influences inequality, it is imperative that any conceptualization of power reveals systemic power imbalances. In her work, Fricker also explores power and argues that power can operate actively and/or passively; "power is a capacity, and a capacity persists through periods when it is not being realized, power exists even while it is not being realized in action". ${ }^{102}$ Power does not require a particular agent, it can exist as a force structurally. Fricker further argues that power is a structural phenomenon as operations of power are dependent "upon the contexts of a functioning world - shared institutions, shared meanings, shared expectations". ${ }^{103}$ As a result, Fricker highlights that power such as social power is to effect social control. ${ }^{104}$ Allen also examines structural perspectives of power and argues that by analyzing power through this perspective it appeals "to an explanatory framework that can illuminate or explicate the observed patterns of power relations that emerge as surface structures". ${ }^{105}$ This exemplifies that power is present within background conditions from cultural meanings, social practices, institutions, and structures. These conceptualizations of power brought forth by Allen and Fricker within feminist thought highlight that "gender is a primary field within which or by means of which power is articulated". ${ }^{106}$

[^21]
### 3.1.1 Women as a Serial Collective and the Paradoxes of Rights

The adoption of feminist theory within this thesis raises questions as to how one can conceptualize women as a group without negating individual experiences and indirectly excluding groups of women. ${ }^{107}$ In her article, Gender as Seriality: Thinking about Women as a Social Collective (1994), Iris Marion Young argues that while searching for common characteristics among women leads to normalizations and exclusions, there is a pragmatic political reason for viewing women as a group. ${ }^{108}$ Young emphasizes that gender identity cannot be isolated from other identity categories such as race, ethnicity, or class - each identity category carries with it and expresses "relations of privilege and subordination". ${ }^{109}$ Gender is a complex and multifaceted set of structures that dictates people's position within society. ${ }^{110}$ Historically, viewing women as a social collective has often resulted in women of color being negated as feminism has focused on the plights of white, heterosexual, cis-gendered, middle-class women. ${ }^{111}$ However Young argues that not viewing women as a group results in women's experiences being denied which reinforces the privilege of those who benefit from keeping women separated. ${ }^{112}$ As a result, feminist policies then lose their meaning. ${ }^{113}$ Therefore, Young highlights that women should be seen as a serial collective that considers different identities and instead unites women through their shared experiences of "structural constraints and relations to practico-inert objects that condition action and its meanings". ${ }^{114}$

With the use of feminism as the theoretical foundation for this thesis, it is also important to comment on the paradoxes of human rights and women's rights. In her article, Suffering Rights as Paradoxes (2000), Wendy Brown explores the value of rights language for women. Brown reflects on human rights discourse in relation to women's rights and examines the creation of individual rights. According to Brown, the creation of CEDAW does not resolve the structural gender inequality that women

[^22]experience. Instead, Brown argues that individual rights such as CEDAW mitigate the effects of structural injustice but does not "vanquish the regime nor its mechanisms of reproduction". ${ }^{115}$ While there is nothing inherently wrong with the mitigation of these effects, it raises the question as to the value of these rights as it does not dismantle gender inequality. Brown stresses that this represents the paradox within rights; individual rights such as women's rights "entrench the regulation of women through the regulative norms of femininity" while universal human rights "entrench the subordinated status of women by augmenting the power of the already powerful". ${ }^{116}$ Additionally, intersectionality presents another paradox within human rights as gender, race, sexuality, etc. are created through different modes of power; they have different histories, mechanisms, and sites of power. Moreover, "we are not fabricated as subjects in discrete units by these various powers: they do not operate on and through us independently, or linearly, or cumulatively, and they cannot be radically extricated from one another in any particular historical formation". ${ }^{117}$ Brown emphasizes that this is more than intersectionality as we are produced through these discourses "through complex and often fragmented histories in which multiple social powers are regulated through and against one another". ${ }^{118}$ This reinforces the paradox between universal human rights vs. specific, individual human rights. Specific human rights such as women's rights are necessary to reveal women's subordination although they can reinforce women's subordination through narrowed specificity that often dismisses the traversing nature of a woman's identity. ${ }^{119}$ On the other hand, universal human rights do not take into account women's unique needs and the root cause of structural injustice and gender inequality. Thus through her examination of the paradoxical nature of human rights, Brown highlights that "to have a right as a woman is not to be free of being designated and subordinated by gender". ${ }^{120}$

[^23]
### 3.2 Critical Disability Theory: Ableism

Critical disability theory recognizes the dynamic and fluid nature of disability. It acknowledges that being disabled is an intersectional experience that should not be understood as "a stigmatizing embodiment of an individual but a social portal that leads to an investigation of exclusionary practices in society at large". ${ }^{121}$ Additionally, critical disability theory allows one to enhance their awareness of systemic inequality through developing a comprehensive understanding of disability. ${ }^{122}$ Disability is the starting perspective - it is the "space from which to think through a host of political, theoretical, and practical issues that are relevant to all" ${ }^{123}$ Critical disability theory is an expansive theory, however, this thesis will apply a theoretical perspective that focuses on ableism within critical disability theory. In her work on ableism, Fiona Kumari Campbell (2009) highlights the importance of examining ableism as disability continues to be understood and analyzed from the perspective of the other. Considering this, Campbell argues that "the challenge then is to reverse, to invert this traditional approach, to shift our gaze and concentrate on what the study of disability tells us about the production, operation, and maintenance of ableism". ${ }^{124}$ Ableism is a belief/attitude that values abled bodies as an ideal standard of being human - "disability is then cast as a diminished state of being". ${ }^{125}$ Being able-bodied secures certain privileges that are not afforded to disabled people who continue to be subordinated in society. ${ }^{126} \mathrm{As}$ ableism is located in the arena of genealogies of knowledge it has the power to dictate which bodies society considers worthy. ${ }^{127}$ By adopting critical disability theory that focuses on ableism it allows for a reexamination of what bodies are deemed valuable. The focus shifts "away from the perceived pathologies of disabled people and onto the deficiencies of a disabling society and an ableist culture". ${ }^{128}$

Ableism is embedded within all aspects of society from people's mindsets and beliefs to social structures and institutions such as healthcare, education, workplaces,

[^24]infrastructure, etc. Ableism is based on the notion that disabled people should be treated fairly on the basis of toleration rather than seeing equality as an entitlement regardless of one's ability. ${ }^{129}$ It dictates the meaning behind a healthy body while simultaneously viewing disabled people as a burden; "being abled-bodied is always relational to that which is considered its opposite, whereas disability involves assigning labels to bodies and mentalities outside the norm". ${ }^{130}$ As a theoretical subsection of critical disability theory, ableism also provides an understanding of subordination, marginality, and disadvantage in relation to other forms of identity, such as gender. ${ }^{131}$ Ableism and sexism have a complicated intertwined relationship as both disability and gender are related to social practices of the physical body. ${ }^{132}$ The historical and contextual dimensions of gendered social practices intersect with ableist beliefs and as a result, the subordination and marginalization of disabled women is exacerbated. ${ }^{133}$ Recognizing how "we all live and breathe ableist logic," is fundamental to understanding the pervasiveness of ableism which pushes disabled people to live in a vacuum, navigating an unaccommodating world that only entitles you to the bare minimum of equality. ${ }^{134}$

## 4. Material and Methodology

### 4.1 Comparative Case Study

To analyze the perpetuation of gendered cycles of inequality within healthcare systems in the treatment of cardiovascular disease this thesis will undertake a descriptive comparative case study analysis of three different countries: the US, UK, and Canada. The process of choosing which countries to analyze was determined through their constant variables. This allows for a comparative analysis that establishes relationships among one variable while other variables are controlled to the best of the

[^25]researcher's ability. ${ }^{135}$ Moreover, through restricting key variables it ensures that the comparative analysis does not lose the ability to examine relationships. ${ }^{136}$ Considering this, variables were kept as similar as possible when choosing the US, Canada, and the UK. All three of these countries are developed, high-income Western countries that have similar levels of healthcare quality and goals. Another reason that these countries were chosen is once you account for population differences, these countries have similar levels of funding for medical research. These countries also have comparable disease spectrums and thus have a similar focus on chronic illnesses such as cardiovascular disease within healthcare systems. These countries are considered to have high levels of healthcare quality which as a constant variable will provide an interesting analysis of the presence of gender bias within healthcare in relation to other constant variables such as medical funding, disease spectrums, and healthcare policy goals. It is important to note that healthcare quality is not synonymous with healthcare accessibility which will provide an interesting point of comparison as the US does not have universal healthcare coverage like the UK and Canada. It is also important to comment on all three countries being Western countries. This choice was deliberate as this thesis recognizes that Western medicine has dominated healthcare systems and the power they hold. Western medicine and "its history forms the basis of knowledge taught in medical schools, its discoveries inform the decisions made about our bodies and minds in clinics and offices, laboratories, and operating rooms...Western medicine is also a system of power, one that has always privileged male knowledge and professional expertise, and enforced and upheld sex and gender binaries over its long history". ${ }^{137}$ Moreover, these three countries have considerable influence in world politics and economics and as a result have a significant influence on healthcare worldwide. As this thesis analyzes power, the power differentials within Western medicine was a significant factor to consider when choosing which countries to analyze. These factors that were considered, contribute to the classification as extreme cases; these cases were chosen for their extreme empirical value. ${ }^{138}$ Their empirical

[^26]value as extreme cases will provide a clear and comprehensive image of gender bias in healthcare as a social phenomenon.

### 4.2 Discussion of Material

This thesis will analyze a variety of healthcare laws and policies from each country in relation to a wider social, cultural, historical, and political context. It is important to comment on the choice to analyze healthcare laws and policies as these forms of material shape healthcare systems. Healthcare laws and policies impact social determinants of health. Healthcare is continually affected by legal decisions and policies; they influence the quality of healthcare and the availability of medical services. ${ }^{139}$ Moreover, "any healthcare system is an outgrowth of the political culture, the social and moral values, and the economic imperatives of the society it services. One cannot make neat distinctions between the legal, ethical, clinical, political, and economic forces which all play a role in shaping a country's healthcare system". ${ }^{140}$ Therefore, it is imperative that healthcare laws and policies are analyzed to examine their role in the perpetuation of gendered cycles of inequality in the treatment of cardiovascular disease. However, it is also important to clarify that while these documents will be examined through a socio-legal and feminist policy analysis, it is not an analysis of the documents but an analysis of the three countries. When selecting the material, attention was given to the possibility of confirmation bias. Confirmation bias is common within human rights research that examines forms of injustice and discrimination as researchers end up focusing on confirming evidence. ${ }^{141}$ To avoid the possibility of confirmation bias, this thesis demonstrates a degree of awareness of other opinions within this research topic. Additionally, while reflecting on the chosen material, it is important to comment on possible limitations to comparative case study research. Case studies are often criticized as lacking representativeness and generalizability, as well as lacking objectivity and empirical leverage. ${ }^{142}$ However, case

[^27]studies are open and integrated systems that allow for correlations to be deduced. Moreover, there is more than one way to draw generalizations to formulate a research conclusion. ${ }^{143}$ Additionally, a comparative case study allows for an analysis of a particular phenomenon and generates a wider understanding of a universal phenomenon; case studies exist in both worlds: the particular and the general. ${ }^{144}$ Furthermore, a comparative case study contributes toward the production of knowledge through "an investigation of complex social phenomena to retain the holistic and meaningful characteristics of real-life events without being reductionist". ${ }^{145}$ It allows for an intricate exploration of the hidden complexities of social phenomena and the human condition.

### 4.3 Socio-Legal Method and Feminist Policy Analysis

This thesis utilizes a combination of socio-legal method and feminist policy analysis as these methods are situated within and take into account the nexus between medicine and law. Socio-legal method is based on sociology of law which is a multidisciplinary research approach based on the belief that sociology is intertwined with law. ${ }^{146}$ Within a socio-legal method, law is approached from a social context. ${ }^{147}$ Legal dogmatics views law as a collection of rules while sociology of law recognizes that law is more than rules - its power also lies in mindsets, behaviors, and cultural practices. ${ }^{148}$ Considering this, one of the chosen methods for this thesis is a socio-legal method. This method allows for a legal analysis of gender bias in healthcare within a broader political and social context. There are two different approaches one can take while conducting a socio-legal analysis: a top-down approach or a bottom-up approach. A top-down approach starts with an analysis of law and then an examination of society; law is analyzed in relation to society. While a bottom-up approach starts with an analysis of society and then an examination of law; society is analyzed in relation to law. ${ }^{149}$ This thesis will undertake a top-down approach as this is suited for an in-depth

[^28]analysis of gendered cycles of inequality within gender bias in healthcare as laws and policies will be analyzed in relation to a wider societal and political context. However, it is important to note that while this thesis may adopt a top-down approach, research that uses a socio-legal method often contains elements of both approaches which will be the case with this thesis. ${ }^{150}$

Feminist policy analysis was developed by Beverly McPhail to examine policy through a gendered lens. ${ }^{151}$ A policy analysis "involves identifying, examining, explaining, and understanding the content, causes, and consequences of public policies". ${ }^{152}$ However, McPhail recognizes that policies are traditionally male-biased and developed a feminist policy analysis framework that rectified this bias by exposing its presence in policies. ${ }^{153}$ McPhail highlights that "although often couched in gender-neutral terms, all policy is gendered if we just ask the questions that expose the gendered assumptions and implications". ${ }^{154}$ Therefore, McPhail developed a feminist policy analysis framework that recognizes gendered differences in policies, how sexism is embedded within policies, and how women's lives are regulated and constrained by policies. ${ }^{155}$ Taking this into consideration, this thesis also utilizes a feminist policy analysis as a research method as it allows for gendered issues such as gender bias to become visible. It will allow for an in-depth examination of how policies tackle gender bias in healthcare and how cycles of inequality are perpetuated within gender bias. Additionally, as an action-oriented model, it aims to recognize gender inequality and power differentials in society through an analysis of policy within economic, political, and social contexts. It acknowledges that power runs through policy and that gender is a system of power. ${ }^{156}$ Moreover, it recognizes that "there is no such thing as an objective and value-neutral policy approach". ${ }^{157}$ It does not introduce bias but it exposes where gender bias is present. To ensure intersectionality, McPhnail's feminist policy analysis framework will be utilized in tandem with Kanenberg et al's revised intersectional feminist policy analysis. This version proposed by Kanenberg et al. aims

[^29]at increasing inclusivity of the feminist policy analysis by "reflecting the most current understandings of social issues, lived experiences, social contexts and structures, and the certainty of multiple marginalizations in today's society" ${ }^{158}$ It recognizes the nuanced complexity and fluid nature of identity. By combining McPhail's framework with the revised version, this thesis can ensure that its analysis of gender bias in healthcare through a feminist policy analysis is intersectional and examines the plights of all women.

### 4.4 Methodological Reflections

For this thesis and its research problem, the combination of a socio-legal method with a feminist policy analysis is the most appropriate method, however, there are some methodological reflections that need to be taken into consideration. With a socio-legal method that adopts a top-down approach, there is a risk of negating law's authority and legitimacy as well as taking law's claims to universality and generality for granted. As a result, there is a risk of neglecting to examine dominant power relations present within law. ${ }^{159}$ As this thesis aims to analyze gender, feminism, ableism, and sexism in relation to power within the treatment of chronic illnesses, it is unlikely that dominant power relations will be neglected. However, this thesis will be mindful of this common problem when utilizing a top-down socio-legal method. It is also important to reflect on the subjective nature of conducting a policy analysis. Policies are inherently political and despite rational methods, scientific inquiry, and an objective standpoint, there remains a degree of subjectivity with any policy analysis. ${ }^{160}$ This thesis recognizes and takes into account the subjective nature of any policy analysis. Another important reflection on feminist policy analysis is that there is no singular feminist perspective instead there are multiple feminisms. ${ }^{161}$ Through the adoption of a feminist theoretical foundation and ensuring an intersectional point of view, this thesis operates within the presence of multiple feminisms.

[^30]
## 5. Analysis

Through a socio-legal and a feminist policy analysis, this analysis will start with an examination of the healthcare laws and policies in the US, UK, and Canada that target the relationship between medical research and gender. This relationship will be used as a starting point to examine how gendered cycles of inequality are perpetuated within healthcare systems in the treatment of chronic illnesses. Following this, healthcare laws and policies that target healthcare discrimination will be examined to analyze the development of medical research into healthcare inequities. Finally, the research questions will be further answered through an analysis of the relationship between gender and healthcare accessibility.

For a comprehensive analysis, a short overview is necessary to understand the healthcare context of each country. The US does not offer universal healthcare, as a result, citizens rely on private healthcare insurance and/or government-funded insurance programs. On the opposite end of the spectrum is the UK which, through the NHS, offers universal healthcare that covers the majority of healthcare services from GP visits to specialist treatments. Comparatively, Canada has a form of universal healthcare that is decentralized and publicly funded with each province and territory offering its own insurance plan. However, unlike the UK, not everything is included in the healthcare system, therefore two-thirds of Canadians also have private insurance to cover services not included by universal healthcare such as vision, dental care, outpatient prescriptions, and rehabilitation services. ${ }^{162}$

### 5.1 Medical Research, Gender, and Knowledge

Aiming to improve health by contributing to new biomedical knowledge, national research institutes invest billions in medical research and clinical trials. In 2021, Canada invested $\$ 4.3$ billion (CAD) and the UK invested $£ 14.8$ billion in the production of new biomedical knowledge. ${ }^{163}$ Comparatively, the NIH in the US is the

[^31]world's largest public funder of biomedical research and in 2021, invested $\$ 41.7$ billion in medical research. ${ }^{164}$ Over the years the US NIH has published multiple healthcare policies that attempt to oversee and standardize medical research in relation to gender. These policies include the NIH Revitalization Act of 1993, the NIH $21^{\text {st }}$ Century Cures Act, and the NIH SABV Policy. The NIH Revitalization Act of 1993 regulates the inclusion of women and racial minorities in medical research while the $N I H 21^{s t}$ Century Cures Act is a lifespan policy that expands the mandate to ensure that medical research includes people of all ages. ${ }^{165}$ On the other hand, the NIH SABV Policy oversees the recognition of SABV and calls for SABV to be acknowledged in research design, analysis, and reporting of all medical research studies including animal studies. ${ }^{166}$ In this 2016 policy, the NIH recognizes the physiological differences between male (XY) and female (XX) cells and how the over-reliance on male cells has influenced medical research to the detriment of women's health. These policies attempt to address gender bias and gender inequality by targeting the notion of gender blindness and gender equity where gender nor sex are not taken into consideration resulting in women's biology being treated as an exception to a male-defined norm. By addressing gender blindness and equity, these policies not only acknowledge the influential role of gender and sex in medical research outcomes but also as determinants of health. The CIHR has published similar guidelines as the NIH that expect the integration of sex and gender perspectives in research design and practice 'when appropriate' ${ }^{167}$ However, these guidelines are only research frameworks and they do not stipulate any legal requirements. The NIHR in the UK has no gender or sex-specific policies that regulate the inclusion of sex or gender perspectives in medical research or clinical trials.

Examining these policies through a feminist policy lens reveals that while these policies may attempt to regulate the inclusion of gender and ensure research on women's health is being funded, there remains a gap between policy aims and reality.

[^32]These policies lack a comprehensive and multidisciplinary approach that recognizes the complexity of gender bias as a historically created and politically maintained problem. One can argue that as a result, these policies are more symbolic than influential in impacting the standardization of gender in medical research. While these policies do have some provisions regarding enforcement and evaluation, these policies lack a degree of legal enforcement and capability to enact meaningful change, which reinforces the symbolic nature of these policies. Additionally, these policies do not take into account the historical, legal, social, cultural, and political contexts of gender bias and gender inequality in healthcare; these policies are too narrow-focused. This lack of depth results in the creation of one-dimensional, ambiguous, and ineffective policies. Moreover, these policies, while recognizing different identity factors, do not acknowledge the intersectionality of a woman's identity nor the multiple oppressions a woman can face. This lack of a comprehensive understanding of the depth of intersectionality serves as a form of policy silence that devalues and dilutes the impact of these policies. The NIH has revealed that while women make up half of their enrolled participants, the majority of preclinical research studies still utilize male animals such as mice and/or omit reporting on the sex of their animal subjects. ${ }^{168}$ Additionally, research has shown that while female enrollment in clinical trials has increased over time, there still remains a large gap compared to male enrollment, especially in relation to the global disease spectrum and the number of women suffering from cardiovascular disease. ${ }^{169}$ Other studies found similar results that men still predominantly encompass the majority of research study participants although female enrollment has increased the most in studies concerning cardiovascular disease and strokes. ${ }^{170}$ A similar picture is seen in Canada as the Canadian Heart \& Stroke Organization reports that two out of three clinical research studies on heart disease still focus solely on men. ${ }^{171}$ Despite Health Canada adopting similar guidelines as the US, and Heart \& Stroke being the leading funder of medical research on cardiovascular disease in Canada, women remain under-researched.

[^33]While these policies may regulate gender inclusion in research, they do not apply to the number of women in positions of power within these research institutes. Within the NIH, only 1 in 16 Directors are women, there is 1 female Deputy-Director, and only 8 out of 27 IC Directors are women. ${ }^{172}$ Although the NIH workforce is split into $40.9 \%$ male and $51.9 \%$ female, less than $40 \%$ of women hold tenure-track research positions. ${ }^{173}$ Additionally, only $30 \%$ of researchers receiving funding from the NIH are women. ${ }^{174}$ Similar statistics are also present in Canada and the UK where women continue to be underrepresented in leadership positions from medical school deans, to editors, department chairs, professors, medical corporation CEOs, and research positions. ${ }^{175}$ Putting these policies into perspective within current social contexts in relation to gender diversity is vital as research positions carry with them relations of power, specifically agenda-setting power within funding decisions in medical research. ${ }^{176}$ The production of new knowledge is not solely based on health needs, it is driven by economic and political factors, as 'you fund what you fear'. Considering this, one can draw a correlation between the predominance of men within research positions and the lack of sex and gender perspectives, the lack of women being enrolled, and the shortage of research that focuses on women's health issues. With the majority of research positions being held by men, it can be argued that health needs are often seen from a male-centric point of view that encourages the production of new knowledge in medical research that majoritively benefits men. Medical research institutes supply funding based on the grants they receive, however, if the majority of the research board and researchers are men, it can be argued that it is less likely that research concerning women's health needs will be funded. Research from Canada suggests that increasing the number of women within research positions can lead to the improvement of the understanding of women's health such as cardiovascular disease in women. ${ }^{177}$ Yet the CIHR, NIH, and NIHR do not have any policies that regulate gender or race diversity

[^34]among research positions nor research projects that receive funding. The lack of focus in policies on how knowledge is produced and who produces it reinforces the construction of healthcare as an androcentric system that "assumes male bodies to be the standard and holds male-dominated knowledge in the highest esteem". ${ }^{178}$ Moreover, a male-centric approach to medical research does not recognize nor address the subtleties of women's health issues. ${ }^{179}$ For example, while also having the traditional risk factors for cardiovascular disease as men, women have additional cardiovascular disease risk factors that are specific to their gender and sex. Sex-specific factors include menopause, PCOS, hormonal birth control, and pregnancy-specific risks such as pre-eclampsia, gestational diabetes, preterm delivery, multiple pregnancies, and miscarriages. ${ }^{180}$ While gender-specific risk factors include the burden of high levels of unpaid care work that often falls on women and traditional gender roles that confine women's social mobility. ${ }^{181}$ When the subtleties of women's health issues such as risk factors are not researched or acknowledged, this lack of knowledge is perpetuated and reflected within the lack of knowledge concerning cardiovascular disease symptoms, diagnostic equipment, and treatments.

An example of this is the standard test to diagnose whether a patient is having a heart attack. When a patient comes into the ER with symptoms of a heart attack, a blood test is done to measure levels of troponin which is a protein released by the heart into the blood when the heart is damaged. The current troponin benchmark is based on the male norm and research has shown that women with a heart attack have a lower troponin level than men having a heart attack. For years women have been sent home while having heart attacks as their troponin levels did not meet the benchmark criteria set by men - some studies suggest that around one in five heart attacks in women were missed as a result. ${ }^{182}$ BHF-funded new research has resulted in a high-sensitivity troponin test that detects the lower levels of troponin in women. As this test can better identify women having a heart attack, the BHF estimates that the number of women

[^35]diagnosed with a heart attack will be doubled. ${ }^{183}$ Similarly, other diagnostic tests like angiograms, echocardiograms, stress tests, and ECGs were designed based on androcentric knowledge about a man's heart resulting in negative or inclusive results for women. ${ }^{184}$ This highlights how the effects of a male-centric approach in medical research are carried throughout healthcare systems. Moreover. this actively illustrates the knowledge gap as there is a systematic lack of knowledge concerning women's health; medical research is insufficient if sex and gender are treated as an afterthought.

The knowledge gap is not just present within medical research and healthcare but there is also a knowledge gap among women. While women can experience similar symptoms as the stereotypical heart attack symptoms men frequently display, women often experience different symptoms. These include nausea, stomach pain, digestive issues, unusual fatigue, shoulder pain, jaw pain, dizziness, and different forms of pain such as pressure or tightness. ${ }^{185}$ The symptoms of heart attacks are not just missed by doctors but often women do not recognize the symptoms as there is a lack of awareness among women about the prevalence of cardiovascular disease and heart attacks. Data from the US, UK, and Canada highlights that women often underestimate their risk of developing heart disease. ${ }^{186}$ In the UK, women are twice as likely to die from coronary heart disease than breast cancer, and in Canada, women are five times more likely to die from heart disease than breast cancer. ${ }^{187}$ However, despite these concerning statistics, there is a common perception among women that cardiovascular disease is less of a health threat than other diseases such as cancer. ${ }^{188}$ A survey done in Canada found that only $28 \%$ of women belonging to a minority group knew that cardiovascular disease was the leading cause of death among women worldwide. Similarly, only $37 \%$ of women aged 19-29 knew that cardiovascular disease can present itself differently

[^36]among women than in men. ${ }^{189}$ Health illiteracy is also associated with an increased risk of developing cardiovascular disease and in the US, it is estimated that a third of the population has low levels of health literacy with women experiencing $12 \%$ more health illiteracy than men. ${ }^{190}$ Despite research from all three countries recognizing that women can experience higher levels of health illiteracy, there is no connection made between gender and health illiteracy. In 2010, the HHS released the National Action Plan to Improve Health Literacy which is a 7 step plan to address health illiteracy. This policy recognizes that everyone has the right to health information and simultaneously, healthcare services must be delivered in an understandable way; the onus is placed on healthcare professionals. ${ }^{191}$ Additionally, this policy acknowledges the struggles of health literacy in a shifting global disease spectrum that is adapting to the increase in chronic illnesses. ${ }^{192}$ Similarly, in 2015 Public Health England published a report Improving Health Literacy to Reduce Health Inequalities that calls for a targeted approach in local actions to address health literacy rates. This policy includes example initiatives and acknowledges there is no one-size-fits-all approach that will increase health literacy rates. ${ }^{193}$ However, both these policies do not recognize gender as a contributing factor to health literacy nor do they recognize women as a group that faces high levels of health illiteracy due to health disparities. Similar reports from healthcare foundations in Canada also do not recognize the role of gender in the social construction of health illiteracy.

The lack of health knowledge among women also needs to be examined from the perspective of epistemic injustice, specifically hermeneutical injustice. A correlation can be drawn between the low levels of health knowledge and health literacy among women regarding cardiovascular disease and hermeneutical injustice. Hermeneutical injustice is often hard to detect and discern, however, the lack of collective knowledge among women concerning their heart health needs to be commented on. Hermeneutical injustice is a form of powerlessness that stems from a

[^37]gap in one's social understanding - there is a collective lack of knowledge. Women are wronged in their capacity as knowers on their own health and bodies. Healthcare and medical research are systems of power; health is dictated and politically driven through the endorsement of particular kinds of knowledge. Moreover, health and knowledge about your health is a form of power, and women who lack a collective understanding of health knowledge are kept out of relations of power. While it is important to raise levels of health knowledge and women's collective understanding of their health, this does not imply that women should be more knowledgeable about their health than medical professionals. The onus should not be on women, instead, it is the responsibility of medical professionals to have the knowledge about women's health issues to treat them properly while also ensuring that women have an in-depth understanding of their health. Moreover, it is the responsibility of healthcare systems to increase women's health literacy. The current low levels of health knowledge among women are not the result of an accidental incident but are reflective of a "medical system which, from root to tip, is systematically discriminating against women, leaving them chronically misunderstood, mistreated, and misdiagnosed". ${ }^{194}$ The provision of healthcare services is continually shaped and influenced by the production of new knowledge within medical research and clinical trials; science informs medicine. Medical research provides evidence-based knowledge about disease trends, risk factors, epidemiology, diagnostic tools, medication, treatments, etc. ${ }^{195}$ Moreover, medical research influences health inequities.

### 5.2 Healthcare Inequities

To reduce healthcare inequities and combat discrimination, the UK passed the Equality Act in 2010 which replaced the 1995 Disability Discrimination Act and the 1975 Sex Discrimination Act. The Equality Act dictates that public institutions such as the NHS have a legal requirement to eliminate all forms of discrimination and advance equality for people who belong to a protected group. ${ }^{196}$ Within its constitution, the NHS

[^38]clarifies its commitments including those stipulated through the Equality Act. Renewed every 10 years, the NHS constitution is a declaratory document that clarifies the NHS' pledges and requirements, as well as the legal rights of patients. The constitution emphasizes that the 'NHS belongs to the people' by ensuring seven key principles. Regarding this analysis, the most important principle is the first one which stipulates that the NHS provides a comprehensive service, available to all. ${ }^{197}$ This consists of ensuring equality, non-discrimination, and respecting everyone's human rights. These principles are reflected in the rights of patients which govern that patients have a right to free, appropriate healthcare services that meet their needs. Moreover, it dictates that patients have a right to non-discrimination, are protected from inappropriate care, need to be treated with respect and dignity in accordance with their human rights, and need to receive a high-quality and professional standard of care. These patient rights are aligned with how the right to health is positioned in the ICESCR, CEDAW, and CRPD. These treaties emphasize the importance of non-discrimination in relation to the right to health; healthcare services need to be high-quality, accessible, and must be available for all regardless of their gender, race, or any other status. The principle of non-discrimination is crucial to the enjoyment of the right to health and these two rights are inextricably intertwined. CEDAW expands on this codependency and stipulates that all forms of discrimination against women must be eliminated and that women and men must have access to equal levels of quality healthcare. ${ }^{198}$ As the UK has ratified the ICESCR, CEDAW, and CRPD, they are legally bound to promote, protect, and implement the rights in these treaties in their legislation. The patients' rights stipulated in the NHS constitution are recognized as legal entitlements derived from legal obligations healthcare providers have. However, this represents a legal contradiction as although patients have a right to high-quality, accessible, appropriate healthcare based on the principle of non-discrimination, there is no translation and stipulation of this right as a legal requirement of the NHS. The pledges established in this constitution are not legally binding and do not impose any legal obligations on the NHS to ensure their services meet the needs of patients' rights. The NHS states that its pledges represent a

[^39]continual commitment to improvement that goes above and beyond legal rights. ${ }^{199}$ It can be argued that the NHS claiming their requirements go above and beyond the law comes across as a pretext. Further clarification of the legal duties of the NHS pertaining to health inequities is given in the policy document, Guidance for NHS Commissioners on Equality and Health Inequalities Legal Duties. This guidance document affirms that promoting equality and addressing health inequalities is at the heart of the NHS' values. This means that the NHS has a legal obligation to eliminate discrimination and advance equality if an individual's identity falls into a protected category such as gender, race, ability, etc. ${ }^{200}$ However, a legal contradiction is also present here as this policy states that only "avoidable" health inequalities are unjust and should be rectified. This statement raises a question as to which health inequalities can be classified as avoidable as no clarification is provided. It is also important to comment on the legal contradictions present within the Equality Act. While the Equality Act recognizes a variety of identity categories as protected characteristics, it does not recognize the intersectionality of one's identity nor can more than two protected characteristics be combined. Another legal contradiction concerns the conditions relating to the penalization and legal consequences. This act does not have the legal capability nor any provisions to ensure equality and prevent discrimination across institutions in the UK. An analysis of this act reveals this act is more of a symbolic law and lacks substance the emphasis is on promoting equality rather than reducing inequality. This approach highlights how gender inequality can endure despite laws endorsing principles of gender equality as they do not target the root of the problem; gender inequality is not seen as a systemic problem. This concern is also present in the UK's Health and Social Care Act 2012. This act regulated the restructuring of the NHS and stipulated the responsibility of the Secretary of State to "reduce inequalities between people in England with respect to the benefits that they can obtain from health services". ${ }^{201}$ However, despite this stipulation, this act does not recognize protected identity characteristics such as gender, race, and disability nor does it actively work toward

[^40]reducing health inequities within healthcare services. Analyzing these laws and policies brings forth the question as to who is actually impacted by the development of these laws and policies. While the adoption and recognition of the principle of non-discrimination in healthcare services is essential to the prevention of health inequities, there remains a gap in the development of actions; no actionable steps are suggested to tackle health inequities. Although these laws and policies to a certain degree recognize the magnitude of the problem, there is no detectable progress in addressing the pervasiveness of gender bias, gender inequality, and health inequities.

During the 116th Congress (2019-2020), H.R. 8436 was introduced which prohibits discrimination in healthcare based on gender, race, ethnicity, and other identity categories. This bill otherwise known as the Equal Healthcare for All Act revised reporting requirements, called for the addition of equity-related measures to Medicare programs, and changes to assist in the reduction of health disparities. This bill argued that no healthcare provider can on the basis of any identity category/protected class provide inequitable healthcare that is discriminatory in intent or effect and/or results in a disparate outcome. ${ }^{202}$ Additionally, this bill recognized that health inequality has complex causes that are intertwined with each other and one's identity within multiple oppressions. ${ }^{203}$ Compared to other healthcare laws in the US, this bill is quite progressive as it has components from multiple human rights treaties such as the ICESCR, CEDAW, and CRPD. The US is a signatory to CEDAW, however, they have not ratified it, nor have they ratified the ICESCR and CRPD. As such, they are not legally bound to promote, protect, and ensure the rights stipulated in these treaties including the right to health and non-discrimination. Although this bill was sponsored by members from the Democrat party, this bill did not receive a vote in congress and as a result, this bill was not enacted into law. Despite this bill not passing into law, it is still important to analyze as it demonstrates legal and political conflicts in relation to healthcare. This law demonstrates how a correlation can be drawn between politics, specifically one's political affiliation and the focus on the progression of health equality. Additionally, with the majority of healthcare laws within the US focusing on the privatization of healthcare rather than health inequities, it can be argued that the focus of healthcare in the US lies not in the prioritization of patients' health but in the

[^41]economic and capitalistic value of keeping healthcare privatized, inaccessible, and inequitable.

The introduction of the Biden administration resulted in a political shift that brought attention to gender equality throughout institutions in the US such as healthcare, education, and immigration. This shift resulted in the establishment of a National Strategy on Gender Equity and Equality, which was the first-ever US governmental strategy targeting this issue. ${ }^{204}$ This progressive strategy recognized the history of inequality that has influenced the development of the US and how women continually face structural barriers to equality. ${ }^{205}$ While this strategy cannot be considered a traditional policy, it can be classified as a sort of pre-policy roadmap for a united governmental effort to tackle gender inequality. To a certain degree, this strategy is undergirded by feminist values as it adopts an intersectional approach that acknowledges the role of intersecting identities in one's subordination. Additionally, it recognizes the historical, political, and cultural contexts of oppression. In regard to healthcare, this strategy acknowledges that healthcare is a right, not a privilege and that everyone deserves access to high-quality, affordable, and accessible healthcare. This stance contrasts with the US usual approach to the right to health and its enactment. In this strategy, the Biden administration promises it will ensure equitable access to high-quality and comprehensive healthcare by focusing on four aims: affordable healthcare, protecting Roe v. Wade, reducing maternal mortality, and ensuring the provision of mental healthcare services. Moreover, this strategy does acknowledge the need for the reduction in health disparities in medical research and that cardiovascular disease in women is often overlooked. While this strategy is progressive in its recognition of intersectionality and its attempt to target gender equality in healthcare, its focus on institutions across the US results in a strategy with a limited capacity for change. Furthermore, this strategy is limited in its capacity by its symbolic nature. Canada adopted a similar strategy for women's health in 1999. The Health Canada: Women's Health Strategy was developed in response to the 1995 World Conference on Women in Beijing and represents a framework to help guide Health Canada in its work. This strategy has four main objectives: ensure that Health Canada's policies and programs are responsive to sex and gender differences, increase knowledge about

[^42]women's health, provide effective health services to women, and promote women's good health through preventive measures. ${ }^{206}$ This strategy also recognizes that women's health is not solely synonymous with reproductive health and acknowledges gender biases in Canada's healthcare system including gender bias stemming from gender blindness and gender equity. Similar to the gender equality strategy from the US, this strategy acknowledges the importance of intersectionality and that women are not a homogenous group, and that one's identity can have varying influences on one's health and their interactions with healthcare systems. However, this strategy was also a symbolic strategy that did not come with provisions to ensure their goals. Canada's main policy approach to women's health and gender inequality is adopting a gender-based analysis framework. This policy is also not a typical traditional policy and can be classified as more of a pre-policy and analytical process. The policy aims to strengthen the integration and application of a gender-based analysis framework in all of Health Canada's programs, policies, and services. ${ }^{207}$ According to Health Canada, this framework requires that all Health Canada endeavors recognize that health inequities stem from discrimination and power imbalances, medical research integrates diversity including the addition of Indigenous knowledge, and an understanding of the relationship between health determinants and inequality. Similar to the US and Canada, the Department of Health and Social Care in the UK, last year released a policy paper that outlined its strategy and vision for women's health. This strategy policy is also not a traditional policy but a pre-policy for an upcoming women's health policy paper that is expected to come out later this year. This pre-policy acknowledges that gender bias has a long and pervasive history within healthcare and thus addressing gender bias is a complicated process that will take years. ${ }^{208}$ Additionally, this pre-policy recognizes that women face higher levels of ill-health and disability compared to men, women's health issues are not being researched, women face more barriers to healthcare accessibility,

[^43]and women face more health inequities. ${ }^{209}$ However, this policy does recognize the depth of intersectionality and how one's identity is intricate and multidimensional with each identity factor carrying with it relations of privilege and subordination. Additionally, this pre-policy did not factor in the impact of social, cultural, political, and historical contexts in systems of power in healthcare services. Furthermore, this pre-policy raises the question as to its purpose as this policy serves as a symbolic placeholder for the UK government and the NHS to create an actual policy and strategy to target an issue that has existed for centuries. All three of these strategies on women's health do not outline any actional steps to reduce health inequities - instead, these policies often make commitments but offer no explanation as to how they will achieve these goals. Many of these commitments include increasing research on women's health and health inequities, consulting with NGOs, increasing investments in women's health, and consulting with stakeholders. While these are important, many of these commitments offer no timeline or detailed outline on how they will actually be achieved to reduce health inequities.

It is important to put these laws, policies, and strategies on women's health into perspective with actual health inequities in the treatment of cardiovascular disease as the social reality of the treatment of cardiovascular disease in women contrasts with the context of these laws, policies, and strategies. WHO defines health inequalities as "differences in health status or in the distribution of health determinants between different population groups" ${ }^{210}$ while health inequities are defined as "differences in health status or in the distribution of health resources between different population groups arising from social conditions...health inequities are unfair and could be reduced by the right mix of government policies". ${ }^{211}$ This is an important clarification as while health inequalities can lead to health inequities, it is vital to differentiate that health inequities are socially produced. As a multidimensional social construct that is based on power relations, gender plays a significant role in health inequities. Healthcare practitioners and doctors are in a position of power as healthcare is a form

[^44]of unwritten contract; patients place their trust and the power of their health in doctors and healthcare systems. Moreover, doctors and other healthcare professionals bring with them "a lifetime of internalized beliefs, social constructs, and cognitive biases". ${ }^{212}$ These include gender biases regarding how sick women are supposed to act and how their symptoms exhibit compared to the male standard. This demonstrates the trust gap and Yentl Syndrome. Women's symptoms are not believed either because they do not match the male-standard norm or the hysterization of women's bodies has resulted in a degree of distrust towards women. The persistent distrust towards women and their health advances health inequities. Combined with the lack of knowledge about women's health and how diagnostic tools and treatments may differ in women than in men, the impact on women's health can be deadly. For example, women face more complications and less favorable outcomes after ICD and pacemaker implantation. ${ }^{213}$ Moreover, women's heart symptoms such as angina are seen as anxiety and stress while men's chest pain is treated as a serious symptom of cardiovascular disease; "doctors think that men have heart attacks and women have stress". ${ }^{214}$ Studies have shown that there is an overlap between cardiovascular disease and anxiety diagnoses in women as women are often dismissed as being anxious or stressed while actually having a serious heart condition. ${ }^{215}$ Additionally, when women react in distress and anger after continually having their health issues dismissed and ignored, they are often diagnosed with mental health issues such as anxiety. ${ }^{216}$ To a certain degree, women's psyches are still blamed for their ill-health. One can argue that the overlap between women's cardiovascular disease and anxiety diagnoses is connected to epistemic injustice, specifically testimonial injustice. Women are in a credibility deficit - women are dismissed as knowers of their own bodies and their symptoms are not seen as credible, unlike men's symptoms. Within testimonial injustice, historical beliefs are woven into societal mindsets that influence how social groups are perceived and treated. The

[^45]echoes of hysteria are still present as women's symptoms are dismissed and attributed to psychological causes and women are seen as hysterical anxious hypochondriacs because they are women.

In the US, one woman dies from cardiovascular disease every 80 seconds. ${ }^{217}$ Cardiovascular disease mortality is also increasing in younger women with some studies suggesting that younger women are seven times more likely to be sent home in the middle of a heart attack than men. ${ }^{218}$ Additionally, a study by Ezekowitz et al. examined patients with MIs between 2002 and 2016 and found that after discharge women faced a $20 \%$ increased risk of developing heart failure or dying after their first MI compared to men. ${ }^{219}$ Other research has found that women are three times more likely to die from a serious heart attack than men. ${ }^{220}$ Similar findings are present in Canada and the UK. The Canadian Heart \& Stroke Organization reports that early heart attack signs are missed in up to $78 \%$ of women while only $22 \%$ of primary care physicians and $42 \%$ of cardiologists feel well-prepared and knowledgeable to assess cardiovascular disease in women. ${ }^{221}$ Canadian women are also more likely to die or suffer a second heart attack than Canadian men. ${ }^{222}$ Additionally, less than one-third of women receive standard care within guideline time benchmarks. ${ }^{223}$ In the UK, women having a heart attack are $50 \%$ more likely than men to receive a wrong diagnosis which can increase the risk of death by $70 \%$ within 30 days of the initial heart attack. ${ }^{224} \mathrm{~A}$ nationwide cohort study by Wilkinson et al. looked at hospitalizations from myocardial ischemia in England and Wales between 2003 and 2013 found that women are less likely to receive guideline-indicated care resulting in a higher mortality than men. This study also found that during the study period an estimated 8243 deaths among women

[^46]could have been prevented if women had received the same quality of care as men. ${ }^{225}$ Research has shown that these statistics are not isolated events but demonstrate differences in health status between women and men - it illustrates the knowledge and trust gap, as well as testimonial injustice. Moreover, it highlights that "women are seen and treated as an afterthought in healthcare". ${ }^{226}$ How cardiovascular disease is diagnosed and treated differs tremendously whether you are a man or a woman - and your gender plays a role in your survival rates. Gender bias is socially produced, politically maintained, and historically created. It is based on male-centric knowledge that perceives men as the standard and women as a variation of the standard. This knowledge is translated into how doctors perceive women's health. Moreover, "at every stage in its long history, medicine has absorbed and enforced socially constructed gender divisions". ${ }^{227}$

### 5.3 Gender and Healthcare Accessibility

An essential aspect of the right to health is also healthcare accessibility. Within the right to health, accessibility refers to more than physical access to hospitals or medical facilities, it also refers to access to medicine, equal and timely access to basic health needs, access to health knowledge, financial and socioeconomic accessibility, etc. ${ }^{228}$ Barriers to healthcare accessibility play a large role in perpetuating healthcare inequality and inequity as it dictates who has access to the right to health which is essential and indispensable to the enjoyment of other human rights. While gender is often recognized as a barrier to healthcare accessibility, there is a lack of understanding of how gender presents as a barrier to healthcare accessibility and how it interacts with other forms of discrimination. Gender is a multidimensional construct that affects all aspects of healthcare; gender norms and gender inequality are reflected in healthcare services. Moreover, the history of gender inequality is intertwined with the history and development of medicine. A part of these two histories is the formation of the knowledge and trust gap. The continual lack of sex-disaggregated data, lack of

[^47]knowledge on women's health issues, and lack of knowledge about gender as a social determinant of health has resulted in the perpetuation of the male body being seen and treated as the norm. The knowledge gap in turn reinforces the trust gap which is influenced by the echoes of hysteria still present within healthcare. The hysterization of women's bodies results in the dismissal, misdiagnosis, and mistreatment of women's health issues. Moreover, the social production of gender norms and the history of hysteria result in the mutual reinforcement of the knowledge and trust gap which advances gender inequities and gender inequalities. As a result, gender bias continues to persist which perpetuates gender as a barrier to healthcare accessibility.

It is important to analyze the role of race together with gender in health inequities. Just as gender presents a barrier to healthcare accessibility, race also presents as a barrier to healthcare accessibility and the quality of treatment. Gender cannot be isolated from other identity categories such as race and this is seen in the treatment of cardiovascular disease; women of color "sit squarely at the confluence of multiple systems of oppression". ${ }^{229}$ The AHA reported that women of color experience significantly lower rates of high-quality cardiovascular disease treatment than white women. One study showed that postmenopausal African-American women were 50\% less likely and Hispanic women were $16 \%$ less likely to be treated at a hospital when having a heart attack than white women. ${ }^{230}$ Moreover, while cardiovascular disease is the leading cause of death in women, the majority of those deaths are African-American women - more than $60 \%$ of African-American women have a form of cardiovascular disease. ${ }^{231}$ Similar statistics are present in Canada where Heart \& Stroke reported that women of color are at a higher risk of developing cardiovascular disease compared to white women. ${ }^{232}$ Indigenous women are up to two times more likely to develop heart disease and the mortality rate for heart disease is $53 \%$ higher among Indigenous women than white women. ${ }^{233}$ Additionally, women of color, especially black women, are more likely to die from cardiovascular disease and at a younger age than white women. ${ }^{234}$ Comparatively, in the UK, women of color have a

[^48]higher chance of developing cardiovascular disease and are less likely to receive the same benefit from cardiac rehabilitation than white women and men. ${ }^{235}$

The majority of Canada's healthcare laws focus on targeting healthcare barriers, specifically financial barriers. Similarly, as the US does not have universal healthcare, its healthcare laws also target financial barriers. Canada's Health Act's primary objective is to protect, promote, and restore the physical and mental well-being of its citizens by facilitating access to healthcare services through five main principles: universality, portability, accessibility, comprehensiveness, and public administration. ${ }^{236}$ This includes regulating barriers to healthcare access such as financial barriers. This law emphasizes that along with Canada's commitment to ensuring there are no financial barriers, it is also the responsibility of Canadians to improve their health through fitness and healthy living. ${ }^{237}$ However, this law does not recognize other barriers by name nor does it adopt a gender-specific focus or other identity categories such as race or ability. The main focus of this law is healthcare insurance plans. Healthcare laws such as Medicare, Medicaid, and the Affordable Care Act in the US have a similar focus. These laws offer a very simplistic view of financial barriers that mainly focus on insurance programs that do not take into account the depth of socioeconomic factors especially when one considers the context of chronic illness. A report from Canada revealed that individuals who are chronically ill face more challenges in affording healthcare despite many healthcare laws in Canada focusing on financial barriers. The report found that $23 \%$ of those who responded could not fill their prescription and/or skipped doses of their medication due to an inability to afford their medication. ${ }^{238}$ While universal healthcare is vital, it is important to comment that current healthcare systems were designed to address acute illnesses and not chronic illnesses. ${ }^{239}$

[^49]Chronic illnesses require long-term, proactive, patient-centered, community-based, sustainable care. ${ }^{240}$ Healthcare policies and laws play a vital role in promoting health and addressing chronic illness, however policies that focus on individual behaviors such as a healthy diet in preventing chronic illnesses do not understand the scope of chronic illness nor do they take into account health inequities, healthcare barriers, and social determinants of health. While individual behaviors such as fitness, quitting smoking, and limiting alcohol intake do contribute to a healthy lifestyle, policies and laws that suggest this adopt a very narrow view of the causes of chronic illness. Additionally, one can argue that to a certain degree, these suggestions perpetuate ableist logic. Current mindsets within healthcare systems and laws and policies maintain a belief that health comes with control. However, while there are certain things about your health you can control, it is an illusion of control; chronic illness is uncontrollable - you can be healthy one day and become chronically ill the next day. Moreover, there are multiple aspects of health that are out of your control such as the role of gender as a determinant of health. Chronic illness cannot be prevented through individual actions proposed in healthcare laws and policies. Ableist mindsets dictate who is healthy within the current biomedical reductionist paradigm and who deserves access to healthcare services.

In 1970 the UK adopted the Chronically Sick and Disabled Persons Act, to further welfare services for chronically ill and disabled people such as home assistance, housing provision, disability parking, access to public services and recreational activities, etc. ${ }^{241}$ While quite a progressive law for recognizing the debilitating impact of chronic illness as well as paving a way for more disability laws, it does not recognize the role of ableism as a barrier to accessibility. Additionally, this law is silent on gender or other identity categories and how one's identity can intersect with their disability to create multiple oppressions. Comparatively, Canada adopted the Accessible Canada Act in 2009 which focuses on removing barriers of access and preventing the creation of new barriers. This law specifically focuses on barriers in information and communication technologies, design and delivery of programs/services, employment, and transportation. Both this law and the UK law hold values that are protected in the

[^50]CRPD such as the right to be treated with dignity, equal and accessible participation in society, and equal opportunity. Unlike the UK Chronically Sick and Disabled Persons Act, the Accessible Canada Act does recognize how disabled people face multiple and intersecting forms of marginalization and discrimination. ${ }^{242}$ However, this law does not go into detail regarding different intersecting identities nor does it recognize the role of ableism. Additionally, both laws have no provisions regarding healthcare accessibility. Neither laws and policies nor healthcare systems have fully evolved to meet the needs of chronic illnesses because of ableist mindsets that stigmatize disability. Societal norms value 'healthy' bodies that fit into a biomedical reductionist paradigm and that reinforce the notion that health solely is the absence of disease. Gender constraints and sexist attitudes are intertwined with ableism. Women are more likely to become chronically ill and experience higher levels of morbidity, yet because of the knowledge and trust gap, their gender combined with ableist mindsets becomes a barrier to healthcare accessibility. Simultaneously, gender is a social determinant of health; gender inequality is transformed into health risks, at every single level of society gender discrimination detrimentally affects health. ${ }^{243}$ Considering this, it can be argued that healthcare laws do not account for the complexities of chronic illness, the depth of socioeconomic factors, the prevalence of ableist mindsets and how this interacts with gender, nor the true price of being sick.

Socioeconomic factors as a barrier to healthcare are also intertwined with gender and race. While women may live longer, women experience poorer health outcomes including higher rates of disability and morbidity - "this disparity has been attributed to, at least in part, societal gender inequalities such as employment and pay gap, making women more likely to have a lower socioeconomic status than men". ${ }^{244}$ Just as traditional gender roles that confine women's social mobility and unpaid care work are risk factors for developing chronic illness such as cardiovascular disease, it is also a barrier to healthcare access. Socioeconomic factors serve as a mutually reinforcing cycle that contributes to poor health outcomes while simultaneously preventing access to healthcare services. Studies have shown that women are more

[^51]likely than men to be impacted by health disparities that arise from sociocultural, socioeconomic, and political factors; "gender discrimination, socioeconomic burden and constraints on physical mobility often limit women's access to optimal healthcare in gender, and to cardiovascular disease in particular". ${ }^{245}$ Socioeconomic factors not only present a barrier to healthcare access but also contribute to the global burden of cardiovascular disease in women. ${ }^{246}$ Women are disproportionately affected by socioeconomic deprivation and the distribution of wealth with women, especially women of color are more likely to be living in poverty than men. ${ }^{247}$ One's race and ethnicity needs to be taken into consideration when targeting socioeconomic factors and financial barriers to healthcare accessibility. Women experiencing socioeconomic deprivation experience suboptimal healthcare which is further exacerbated by one's race and ethnicity. ${ }^{248}$ The Affordable Care Act extends healthcare coverage for individuals who live below the poverty line, however, Republican efforts to repeal the act have put women of color at risk of losing healthcare coverage. ${ }^{249}$ As a result, the impact of socioeconomic factors together with one's gender and race presents a barrier to healthcare accessibility. This highlights that "because of the historical legacy of gender injustice, the health-related consequences of gender inequality fall most heavily on women" ${ }^{250}$

## 6. Discussion and Conclusion

### 6.1 Discussion

### 6.1.1 Gendered Cycles of Inequality

The three focuses of the analysis: medical research, health inequities, and healthcare accessibility represent key aspects of gendered cycles of inequality. Due to the multiple interrelated and confounding variables/aspects within the perpetuation of gendered cycles of inequality, it can be difficult to clarify how this cycle is perpetuated.

[^52]As healthcare services are influenced by new biomedical developments in medical research and clinical trials, medical research constitutes the starting point within this cycle. The knowledge produced in medical research shapes the provision of healthcare. For decades, medical knowledge was solely conducted on men, men's health issues, male cells, and from a male perspective. The production of androcentric knowledge led to medicine adopting a male-centric approach. Knowledge carries with it power relations and the full spectrum of women's health has not been the focus of medical research. The focus on androcentric research has resulted in a knowledge gap about women's health issues which in turn has shaped health inequities. These health inequities result in the dismissal, misdiagnosis, and mistreatment of women's health issues and are not due to a few discriminatory doctors but are representative of a system that has gender bias embedded within it. The history of hysteria while also playing a role in the knowledge gap is present within health inequities as there is a degree of distrust towards women. Women continually face testimonial injustice in healthcare as the trust gap and the Yentl Syndrome trap women in a credibility deficit. Moreover, the lack of knowledge on women and their health has resulted in men, their symptoms, and illnesses being understood as the norm. Each aspect of this cycle is mutually reinforcing, just as the knowledge gap in medical research results in a knowledge and trust gap among doctors that perpetuate health inequities, health inequities also perpetuates the knowledge gap and gender as a barrier to healthcare accessibility. Simultaneously, the continual existence of gender as both a social determinant of health and a barrier to healthcare accessibility reinforces health inequities and the knowledge gap in medical research. Additionally, gender interacts with other forms of discrimination such as ableism and racism which also perpetuates cycles of inequality. All these aspects are part of a systemic cycle that reinforces structural injustice. Gender oppression in healthcare arises from a cycle that does not challenge accepted norms, habits, and institutional knowledge. This allows gender bias to persist as it remains unquestioned and is systematically reproduced which perpetuates interlocking cycles of inequality. Moreover, healthcare systems have not completely evolved from their past history nor have they actively evolved to meet the current shifting medical needs. Furthermore, healthcare systems were "designed to perpetuate broader societal values
and biases, including racism, sexism, and heteronormativity". ${ }^{251}$ As a result, healthcare just like other unjust systems in society value certain bodies over others, specifically white, straight, cis-gender, able-bodied, wealthy, neurotypical men are valued. ${ }^{252}$ This cycle highlights that gender bias was historically created, is socially produced, and politically maintained, which raises the question as to the implications and significance of this cycle of structural inequality in regard to power relations.

### 6.1.2 Power Relations: an Interplay of Different Forms of Discrimination

Healthcare is a system of power that reflects societal conditions and values. As a system that holds social power, the interplay of different forms of discrimination within an interlocking gendered cycle of inequality results in structural and systemic power imbalances. As a result, women are oppressed, subordinated, and kept out of power relations. As a pervasive and structural force, sexism has shaped how healthcare has evolved; sexism has become institutionalized within healthcare practices. An example of this is the history of hysteria that is still present within healthcare, its echoes continue to silence women. Doctors refusing to believe women's symptoms because they do not fit the male standard or because women's response is deemed too hysterical results in delayed and/or inappropriate treatment. Hysterical silence has not only continually resulted in the dismissal of women and their health issues but has also hindered the production of new medical knowledge that focuses on women. Moreover "medicine has inherited a gender problem. Medical myths about gender roles and behaviors constructed as facts before medicine became an evidence-based science have resonated perniciously. And these myths about female bodies and illnesses have enormous cultural sticking power. Today, gender myths are ingrained as biases that negatively impact the care, treatment, and diagnosis of all people who identify as women" ${ }^{253}$ The dismissal, misdiagnosis, and mistreatment of women's health issues is representative of a society that is inherently sexist and misogynistic. Healthcare and the continued existence of gender bias is sexist. Healthcare does not value women nor their rights and women's health is treated as an afterthought; women are kept sick and chronically ill, as a result, women are kept out of power relations. Sexism interacts with

[^53]other forms of discrimination in healthcare that results in women being oppressed through a matrix of domination and hegemonic power. Sexism cannot be isolated from racism and ableism. Just as sexism has shaped the development of healthcare, racism has also influenced healthcare practices. The roots of medicine are linked to the history of racism, slavery, colonialism, and imperialism. Women of color are situated within these interlocking cycles of inequality where sexism and racism perpetuate gender and racial biases. As a consequence, women of color experience inferior medical care. Along with sexism and racism, ableism also plays a substantial role in reinforcing power imbalances within healthcare systems. Despite chronic illnesses becoming more prevalent, medicine has not evolved to meet the needs of disabled people. Within the current biomedical paradigm, disability is either ignored and dismissed or understood from the point of view of the other. Healthcare systems produce a narrow understanding of what a healthy body is which is then reflected throughout society. Ableist mindsets are inextricably intertwined with sexism and racism which exacerbates the structural oppression of disabled women.

### 6.1.3 Healthcare Policies and Laws vs. the Reality of Cardiovascular Disease

Through analyzing the healthcare laws and policies from the US, UK, and Canada, it has become clear that these policies and laws do not understand nor target the systemic and structural nature of gender inequality in healthcare systems. As this thesis has shown, healthcare has a long and pervasive history of gender inequality; the problems in healthcare are not the result of a few individuals "but rather a whole system that has historically marginalized women". ${ }^{254}$ Governments and healthcare institutions that do not recognize the magnitude and systemic nature of gender bias in healthcare develop redundant and ineffective policies and laws. Addressing and targeting gender bias through laws and policies is a complicated and arduous process. As a form of structural injustice, gender bias requires systematic change that addresses the multiple different factors that contribute to gender inequality and gender inequity. These changes cannot happen overnight and any laws and policies that target gender bias must realize that change is a long process. However, it is also important to realize

[^54]that gender bias is not a recent problem in healthcare. It has always existed because healthcare systems were built for and by white powerful men at the expense of those who were deemed less valuable. As Iris Marion Young highlighted, structural injustice systematically reproduces oppression in institutions, so laws and policies are limited in their ability to eliminate structural injustice. However, there is a nexus between laws, policies, and medicine; laws and policies have considerable influence in shaping healthcare systems as they can influence all aspects of medicine from medical research, healthcare quality, and healthcare accessibility. Considering this, it is unacceptable that healthcare laws and policies continue to reflect societal power imbalances that perpetuate gendered cycles of inequality because they do not understand the complexities, contexts, and structural nature of gender bias. Ineffective healthcare laws and policies maintain the status quo; men remain the standard and the norm in medicine from medical research to healthcare services while women are seen as a hysterical, unknowable, and untreatable variation. While some advancements have been made in targeting gender inequality, progress has been slow and limited. As a result, gender inequality and gender inequity remain the norm in medicine.

Using cardiovascular disease as an empirical example highlighted this as it put into the perspective the reality of how women experience healthcare and how chronic illnesses are treated. Cardiovascular disease is the leading cause of death in women worldwide. Despite advancements in healthcare laws and policies that target gender equality and despite extensive research into cardiovascular disease and gender, cardiovascular disease continues to be affected by rampant gender bias. The cardiovascular disease statistics presented from the US, UK, and Canada throughout this thesis not only demonstrate how healthcare does not see nor treat women as valuable but also how gender bias as a form of structural injustice systemically oppresses and subordinates women. Moreover, the reality of cardiovascular disease in women highlights that "the evidence that women are being let down by the medical establishment is overwhelming. The bodies, symptoms, and diseases that affect half the world's population are being dismissed, disbelieved, and ignored" ${ }^{255}$ This raises the question as to what the significance and implications are for women's rights and their right to health. The healthcare laws and policies adopted by the US, UK, and Canada

[^55]varied in their approach. Some laws and policies addressed health inequality and inequity through a generalized approach while others adopted an individualized and specific approach that focused on gender. A generalized approach was inappropriate as it did not take into account women's unique needs; it assumed gender equity and a degree of sameness while also adopting a gender-blindness approach. On the other hand, individualized and specific approaches are also ineffective as they did not understand the traversing nature of women's identity. Both these approaches did not understand the root causes and contexts of gender bias. Comparing these healthcare laws and policies with the reality of cardiovascular disease in women and the impact of gender bias it has become clear that there is no singular approach that is suitable. Gender bias needs to be addressed through a comprehensive, multifaceted, and multidimensional approach that recognizes the complexities of a systemic and structural problem. Furthermore, this comparative analysis has highlighted that despite women's rights and healthcare laws/policies "to have a right as a woman is not to be free of being designated and subordinated by gender". ${ }^{256}$

### 6.2 Conclusion

This thesis aimed to examine gender bias in healthcare by analyzing the relationship between gender, feminism, ableism, and sexism in relation to power relations within the treatment of chronic illnesses. By situating these themes within a human rights healthcare-focused framework, it allowed for an in-depth analysis of how gender and health are inextricably intertwined. This thesis employed a combination of feminist theory and critical disability theory which provided and ensured a comprehensive theoretical foundation. Together with the theoretical framework, a socio-legal method and feminist policy analysis were utilized to compare the healthcare laws and policies of the US, UK, and Canada to analyze gender bias and how gendered cycles of inequality are perpetuated within healthcare systems. To provide perspective and context, cardiovascular disease was used as an empirical example.

This thesis contributed to the production of new knowledge by demonstrating how gendered cycles of inequality are perpetuated within healthcare systems in the treatment of chronic illnesses. Gender bias is a systemic problem that impacts all

[^56]aspects of women's diagnosis and treatment of cardiovascular disease. As a result, women are more likely to be dismissed, ignored, misdiagnosed, and receive inappropriate, delayed medical treatment. While healthcare laws and policies may target gender equality, progress in addressing gender bias has been slow and ineffective because governments do not recognize the magnitude and complexities of gender bias. Moreover, healthcare laws and policies do not recognize nor address gender bias as a systemic and structural form of inequality. The analysis also demonstrated how gender bias along with the social production of gender norms reinforces the knowledge and trust gap. These gaps reinforce epistemic injustice and gender as a barrier to healthcare accessibility. Additionally, gender interacts with other forms of discrimination such as racism and ableism which reinforces gender bias as a form of structural injustice and establishes power imbalances that perpetuate gendered cycles of inequality within healthcare systems.

Through this analysis and answering the research questions, this thesis has illustrated how gender bias is embedded throughout healthcare systems. Healthcare is rooted in sexism, racism, and ableism and carries with it the history of hysteria. Healthcare systems hold androcentric ideals as men continue to be seen and treated as the normative standard to the detriment of women's lives; "women are dying and the medical world is complicit". ${ }^{257}$ Women are systematically being treated as an afterthought in medicine. This is a systemic and structural issue and the power imbalances that it establishes keep women sick and chronically ill which keeps women out of power relations and the cycle continues. Women's rights are human rights and healthcare systems need to evolve to not only meet the shifting disease spectrum but also to meet the overlooked medical needs of women. After all, "women are entitled to healthcare that is fundamentally based on them as whole persons rather than reproductive bodies with hysterical minds". ${ }^{258}$

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### 6.3 Further Research

There are multiple different directions this topic can be taken to expand on the knowledge produced in this thesis. While this thesis touches upon it, further research is needed into the role of socioeconomic factors and poverty as a form of oppression in relation to chronic illnesses and gender bias. Due to spatial constraints, this thesis does offer a comprehensive and in-depth analysis of racism, therefore, further research should be conducted on the full role of racism in relation to gender bias. Additionally, the history of colonialism and imperialism in healthcare systems should be examined in greater detail. Another possibility for further research is a deeper analysis of the current biomedical paradigm and how it perpetuates ableist mindsets throughout society and the impact this has on those with disabilities. This research also can be advanced through an examination of other chronic illnesses such as those that predominantly affect women, for example, endometriosis, PCOS, ME, autoimmune conditions, etc. A deeper examination of this topic can also be examined through conducting primary data such as interviewing doctors and patients and analyzing this data in relation to healthcare laws/policies. Furthermore, future research should be done by examining this topic in non-Western countries to provide a comprehensive understanding of gender bias in healthcare systems worldwide.

## References

## Primary Sources: healthcare laws and policies

Accessible Canada Act 2019, SC 2019, c10

Affordable Care Act 2010, Public Law 111-148

Canada Health Act 1985, RSC, 1985, c C-6

Chronically Sick and Disabled Persons Act 1970, c70

Equal Health Care for All Act 2020, H.R. 8436

Equality Act 2010, c15

Executive Office of the President, 'National Strategy on Gender Equity and Equality', 2021

Health and Social Care Act 2012, c7

Health Canada, 'Health Portfolio Sex and Gender-Based Analysis Policy’ Government of Canada, 2009
https://www.canada.ca/en/health-canada/corporate/transparency/corporate-management -reporting/heath-portfolio-sex-gender-based-analysis-policy.html

Health Canada, 'Women's Health Strategy' Government of Canada, 1999
https://www.canada.ca/en/health-canada/corporate/about-health-canada/reports-publicat ions/women-health-strategy.html

HHS, 'National Action Plan to Improve Health Literacy', US Department of Health and Human Services - Office of Disease Prevention and Health Promotion, 2010.

NHS Equality and Health Inequalities Unit, ‘Guidance for NHS Commissioners on Equality and Health Inequalities Legal Duties’, National Health Service, 2015

NHS, ‘The NHS Constitution for England’ GOV.UK, 2012
https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-england accessed 24 May 2022

NIH 21st Century Cures Act 2016 (PL 114-255)

NIH Revitalization Act of 1993, PL 103-43

NIH Sex as a Biological Variable 2015, NOT-OD-15-102

Public Health England and UCL Institute of Health Equity, 'Improving Health Literacy to Reduce Health Inequalities', Public Health England, 2015.
'Our Vision for the Women's Health Strategy for England' Department of Health \& Social Care, 2021.

## Literature

ACS, 'Breast Cancer Statistics | How Common Is Breast Cancer?' American Cancer Society, 2022
https://www.cancer.org/cancer/breast-cancer/about/how-common-is-breast-cancer.html accessed 23 May 2022

Allen A, The Power of Feminist Theory: Domination, Resistance, Solidarity, Routledge, 2018.

American Heart Association, 'Racial Disparities Continue for Black Women Seeking Heart Health Care' American Heart Association, 2019.

Banakar R, ‘On Socio-Legal Design’, Lund University, 2019.

British Heart Foundation, 'Bias and Biology: How the Gender Gap in Heart Disease Is Costing Women's Lives', British Heart Foundation, 2019.

Brown W, ‘Suffering Rights as Paradoxes', Constellations, vol.7, No.2, 2000, pp.230-241.

Bueter A, 'Androcentrism, Feminism, and Pluralism in Medicine'Topoi, vol.36, 2017. pp.521-530.

Campbell FK, Contours of Ableism: The Production of Disability and Abledness, Palgrave, 2009.

Campbell FK, 'Stalking Ableism: Using Disability to Expose "abled" Narcissism', in Goodley et al (eds), Disability and Social Theory: New Developments and Directions, Palgrave, 2012.

Canadian Academy of Health Sciences, 'Transforming Care for Canadians with Chronic Health Conditions', Canadian Academy of Health Sciences, 2010.

CIHR, 'Sex and Gender in Health Research' Canadian Institutes of Health Research, 2018, https://cihr-irsc.gc.ca/e/50833.htmlaccessed 23 May 2022

Cleghorn E, Unwell Women: Misdiagnosis and Myth in a Man Made World, Dutton, 2021.

CMA, 'Addressing Gender Equity and Diversity in Canada’s Medical Profession: A Review', Canadian Medical Association \& Federation of Medical Women of Canada, 2018.

Constitution of the World Health Organization, 1948.
Convention on the Elimination of All Forms of Discrimination Against Women, 1979, CEDAW/C/GC/30.

Convention on the Rights of Persons with Disabilities, 2006, A/RES/61/106.

Criado-Perez C, Invisible Women: Exposing Data Bias in a World Designed for Men, Abrams Press, 2019.

Dusenbery M, Doing Harm: The Truth about How Bad Medicine and Lazy Science Leave Women Dismissed, Misdiagnosed, and Sick, HarperOne, 2018.

Ervasti K, 'Sociology of Law as a Multidisciplinary Field of Research' Scandinavian Studies in Law, vol.53, 2008, pp.137-150

Ezekowitz et al, 'Is There a Sex Gap in Surviving an Acute Coronary Syndrome or Subsequent Development of Heart Failure?' Circulation, vol.142, 2020, pp.2231-2239

Forrest-Lawrence P, ‘Case Study Research', in P. Liamputtong (ed) Handbook of Research Methods in Health Social Sciences, Springer, 2019.

Fricker M, Epistemic Injustice: Power and the Ethics of Knowing, Oxford University Press, 2007.

Fricker M and Jenkins K, 'Epistemic Injustice, Ignorance, and Trans Experiences’, in Garry et al (eds), The Routledge Companion to Feminist Philosophy, Routledge, 2017.

Frohader C and Meekosha, 'Recognition, Respect, and Rights: Women with Disabilities in a Globalized World', in Goodley et al (eds), Disability and Social Theory: New Developments and Directions, Palgrave, 2012.

General Comment No. 14: The Right to the Highest Attainable Standard of Health, 2000, E/C12/2000/4.

Gerring J, Case Study Research: Principles and Practices, Cambridge University Press, 2007.

Goodley et al, 'Introducing Disability and Social Theory', in Goodley et al (eds), Disability and Social Theory: New Developments and Directions, Palgrave, 2012.

Hamberg K, 'Gender Bias in Medicine’ Women's Health, vol.4, no.3, 2008, pp.237-243.

Health Canada, 'Certain Circumstances: Issues in Equity and Responsiveness in Access to Healthcare in Canada', Health Canada, 2001.

Health Council of Canada, 'How Do Sicker Canadians with Chronic Disease Rate the Healthcare System?', Health Council of Canada, 2011.

Health Development Agency and Barnes R, 'Glossary of Terms Used for Health Impact Assessment', World Health Organization, 2010.

Heart \& Stroke, 'Ms. Understood - 2018 Heart Report', Canadian Heart \& Stroke, 2018.

Heise et al, ‘Gender Inequality and Restrictive Gender Norms: Framing the Challenges to Health' The Lancet Commissions, vol.393, 2019, pp.2440-2454.

Hoffman DE and Tarzian AJ, ‘The Girl Who Cried Pain: A Bias Against Women in the Treatment of Pain' Journal of Law, Medicine \& Ethics, vol.29, no.1, 2001, pp.13-27.

Hossain A, The Pain Gap: How Sexism and Racism in Healthcare Kill Women Tiller Press, 2021.

Institute of Medicine, 'Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research - Report Brief' Institute of Medicine, 2011.

Jackson G, Pain and Prejudice: A Call to Arms for Women and Their Bodies Allen \& Unwin, 2019.

Jin et al, 'Women's Participation in Cardiovascular Clinical Trials from 2010 to 2017’ Circulation, vol.141, 2020, pp.540-548.

Kanenberg et al, ‘Revising McPhail’s Feminist Policy Analysis Framework: Updates for USe in Contemporary Social Policy Research' Advances in Social Work, vol.19, no.1, 2019.

Lehman et al, 'Rethinking the Biopsychosocial Model of Health: Understanding Health as a Dynamic System' Social and Personality Psychology Compass, vol.11, no.8, 2017, pp.1-17.

Lennep et al, 'Gender Differences in Diagnosis and Treatment of Coronary Artery Disease from 1981 to 1997: No Evidence for the Yentl Syndrome’ European Heart Journal, vol.21, 2000, pp.911-918.

Lijphart A, 'Comparative Politics and The Comparative Method' American Political Science Association, vol.65, no.3, 1971.

Lippi et al, ‘Gender Medicine: Its Historical Roots’ Postgrad Med J, vol.96, 2020, pp.480-486.

Lorber J, Gender Inequality: Feminist Theory and Politics, Oxford University Press, 2010.

McGregor AJ, Sex Matters: How Male-Centric Medicine Endangers Women's Health and What We Can Do about It, Hachette Go, 2020.

McHugh MC, 'Feminist Qualitative Research: Toward Transformation of Science and Society', in P. Leavy (ed), The Oxford Handbook of Qualitative Research, Oxford University Press, 2014.

McPhail BA, 'A Feminist Policy Analysis Framework'The Social Policy Journal, vol.2, no.2-3, 2003, pp.39-61.

Melloni et al, 'Representation of Women in Randomized Clinical Trials of Cardiovascular Disease Prevention' Circulation Cardiovascular Qualitative Outcomes, vol.3, no.2, 2010, pp.135-142.

Merone et al, 'Sex and Gender Gaps in Medicine and the Androcentric History of Medical Research' (2021) 45 Australian and New Zealand Journal of Public Health, vol.45, no.5, 2021, pp.424-426.

Ministry of Health and Long-Term Care, 'Preventing and Managing Chronic Disease:
Ontario's Framework', Ministry of Health and Long-Term Care, 2007.
Nass et al, Beyond the HIPAA Privacy Rule: Enhancing Privacy, Improving Health through Research, National Academic Press, 2009.

NIH, ‘Considertation of Sex as a Biological Variable in NIH-Funded Research Guidance' National Institutes of Health, 2015.

NIH, 'Addressing Gender Inequality in the NIH Intramural Research Program Action Task Force Report and Recommendations' National Institutes of Health, 2016.

NIH, 'NIH Budget' National Institutes of Health, 2020
https://www.nih.gov/about-nih/what-we-do/budget accessed 23 May 2022

Nowak et al, 'Do Gender Differences Exist in Pacemaker Implantation? - Results of an Obligatory External Quality Control Program' European Society of Cardiology, vol.12, 2010, pp.210-215.

OHCHR, 'The Right to Health' Office of the United Nations High Commissioner for Human Rights \& World Health Organization, Fact Sheet No.31, 2008.

Parekh S, 'Feminism, Structural Injustice, and Responsibility’, in Garry et al (eds), The Routledge Companion to Feminist Philosophy, Routledge, 2017.

Petrova D, 'Researching Discrimination', in Andreassen et al (eds), Research Methods in Human Rights: A Handbook, Edward Elgar Publishing, 2017.

Risberg et al, 'A Theoretical Model for Analyzing Gender Bias in Medicine' (2009) 8 International Journal for Equity in Health, vol.8, no.28, 2009.

Ruiz MT and Verbrugge LM, 'A Two Way View of Gender Bias in Medicine’ Journal Epidemiology \& Community Health, vol.51,1997, pp.106-109.

Scott et al, 'Participation of Women in Clinical Trials Supporting FDA Approval of Cardiovascular Drugs' Journal of the American College of Cardiology, vol.71, no.18, 2018, pp.1960-1969.

Shannon et al, ‘Gender Equality in Science, Medicine, and Global Health: Where Are We at and Why Does It Matter?' The Lancet Commissions, vol.393, 2019, pp.560-569.

Tikkanen et al, 'International Profiles of Health Care Systems' The Commonwealth Fund, 2020
https://www.commonwealthfund.org/international-health-policy-center/countries/canad a accessed 23 May 2022

Tisdell EJ, ‘Feminist Epistemology', in L. Given (ed), The SAGE Encyclopedia of Qualitative Research Methods, SAGE Publications, 2008.
'Total Health Research Expenditure in Canada from 1975 to 2021' Statista, 2021 https://www.statista.com/statistics/436571/total-health-research-spending-canada accessed 24 May 2022

Traianou A, 'The Centrality of Ethics in Qualitative Research', in P. Leavy (ed), The Oxford Handbook of Qualitative Research, Oxford University Press, 2014.

Ulrich G, 'Research Ethics for Human Rights Researchers', in Andreassen et al (eds), Research Methods in Human Rights: A Handbook, Edward Elgar Publishing, 2017.

Verdonk et al, 'From Gender Bias to Gender Awareness in Medical Education' Springer, vol.14, 2009, pp.135-152.

Vogel et al, 'The Lancet Women and Cardiovascular Disease Commission: Reducing the Global Burden by 2030' The Lancet Commission, vol.397, 2021, pp.2385-2438.

Wenger N, ‘Cardiovascular Disease: The Female Heart Is Vulnerable’ Clinical Cardiology, vol.35, no.3, 2021, pp.134-135.
'What Does the Spending Review Mean for Biomedical Research? | The Academy of Medical Sciences' The Academy of Medical Sciences, 2021 https://acmedsci.ac.uk/more/news/what-does-the-spending-review-really-mean-for-the-future-of-biomedical-research accessed 24 May 2022

WHO, 'Innovative Care for Chronic Conditions: Building Blocks for Action' World Health Organization, 2002, WHO/MNC/CCH/02.01

WHO, 'Health Inequities and Their Causes’ World Health Organization, 2018 https://www.who.int/news-room/facts-in-pictures/detail/health-inequities-and-their-caus es accessed 22 May 2022

WHO, 'Health System Capacity for Non-Communicable Disease Management' World Health Organization, 2020.

WHO, 'Noncommunicable Diseases' World Health Organization
https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases accessed 22 May 2022

Wilkinson et al, 'Sex Differences in Quality Indicator Attainment for Myocardial Infarction: A Nationwide Cohort Study' Heart, vol.105, 2019, pp.516-523.

Young et al, ""Do Mad People Get Endo or Does Endo Make You Mad?" Clinicans' Discursive Constructions of Medicine and Women with Endometriosis' Feminism \& Psychology, vol.29, no.3, 2018, pp.337-356.

Young IM, Justice and the Politics of Difference Princeton University Press, 1990.

Young IM, ‘Gender as Seriality: Thinking about Women as a Social Collective’ Signs, vol.19, no.3, 1994, pp.713-738.


[^0]:    ${ }^{1}$ E. Cleghorn, Unwell Women: Misdiagnosis and Myth in a Man Made World, Dutton, 2021, p. 155.

[^1]:    ${ }^{2}$ E. Cleghorn, Unwell Women: Misdiagnosis and Myth in a Man Made World, Dutton, 2021, p.7.
    ${ }^{3}$ E. Cleghorn, Unwell Women, p. 156.
    ${ }^{4}$ A.J McGregor, Sex Matters: How male-centric medicine endangers women's health and what we can do about it, Hachette Go, 2020, p. 54.
    ${ }^{5}$ D. Hoffman and A. Tarzian, 'The Girl Who Cried Pain: A Bias Against Women in the Treatment of Pain', Journal of Law, Medicine \& Ethics, Vol. 29, no. 1, 2001, p.13.

[^2]:    ${ }^{6}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p.29.
    ${ }^{7}$ A. Bueter, 'Androcentrism, Feminism, and Pluralism in Medicine', Topoi, Vol. 36, 2017, p. 525.
    ${ }^{8}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 30.
    ${ }^{9}$ M. Dusenbery, Doing Harm, p. 29.
    ${ }^{10}$ G. Jackson, Pain and Prejudice: A call to arms for women and their bodies, Allen \& Unwin, 2019, p. 13 .
    ${ }^{11}$ WHO, ‘Noncommunicable diseases', World Health Organization, 2021, [website] https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases.
    ${ }^{12}$ World Health Organization, Innovative Care for Chronic Conditions: Building Blocks for Action, World Health Organization, 2002, p. 32
    ${ }^{13}$ Canadian Academy of Health Sciences, Transforming Care for Canadians with Chronic Health Conditions, Canadian Academy of Health Sciences, 2010, p.11.
    ${ }^{14}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 98.

[^3]:    ${ }^{15}$ WHO, Constitution of the World Health Organization, 1948, p.1.
    ${ }^{16}$ CESCR, General Comment No. 14: The Right to the Highest Attainable Standard of Health, E/C.12/2000/4, 2000, p.1.

[^4]:    ${ }^{17}$ CESCR, General Comment No. 14: The Right to the Highest Attainable Standard of Health, E/C.12/2000/4, 2000, p.3.
    ${ }^{18}$ CESCR, General Comment No. 14: The Right to the Highest Attainable Standard of Health, E/C.12/2000/4, 2000, p.4.
    ${ }^{19}$ CESCR, General Comment No. 14: The Right to the Highest Attainable Standard of Health, E/C.12/2000/4, 2000, p..
    ${ }^{20}$ OHCHR, The Right to Health, Office of the United Nations High Commissioner for Human Rights \& World Health Organization, 2008, p.7.
    ${ }^{21}$ UNGA, Convention on the Rights of Persons with Disabilities, A/RES/61/106, 2006, p. 18.

[^5]:    ${ }^{22}$ CESCR, General Comment No. 14: The Right to the Highest Attainable Standard of Health, E/C.12/2000/4, 2000, p. 8 .
    ${ }^{23}$ CESCR, General Comment No. 14: The Right to the Highest Attainable Standard of Health, E/C.12/2000/4, 2000, p.8.
    ${ }^{24}$ A.J McGregor, Sex Matters: How male-centric medicine endangers women's health and what we can do about it, Hachette Go, 2020, p. 29.
    ${ }^{25}$ G. Ulrich, 'Research Ethics for Human Rights Researchers', in Research Methods in Human Rights: A Handbook, Cheltenham, Edward Elgar Publishing, 2017, p. 198.

[^6]:    ${ }^{26}$ M. C. McHugh, 'Feminist Qualitative Research: Toward Transformation of Science and Society', in The Oxford Handbook of Qualitative Research, Oxford, Oxford University Press, 2014, p. 142.
    ${ }^{27}$ M. C. McHugh, 'Feminist Qualitative Research', p. 145.
    ${ }^{28}$ E. J. Tisdell, 'Feminist Epistemology’, in The SAGE Encylopedia of Qualitative Research Methods, SAGE Publications, 2008, p. 367.

[^7]:    ${ }^{29}$ A. Bueter, 'Androcentrism, Feminism, and Pluralism in Medicine', Topoi, Vol. 36, 2017, p. 525.
    N. Wenger, 'Cardiovascular Disease: the female heart is vulnerable', Clinical Cardiology, Vol. 35, no. 3, 2012, p. 134.
    ${ }^{30}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p.68.
    ${ }^{31}$ ACS, ‘Breast Cancer Statistics | How Common Is Breast Cancer?', American Cancer Society, 2022 [website] https://www.cancer.org/cancer/breast-cancer/about/how-common-is-breast-cancer.html.
    ${ }^{32}$ Risberg et al, 'A Theoretical Model for Analyzing Gender Bias in Medicine’, International Journal for Equity in Health, Vol. 8, no. 28, 2009, p.2.
    ${ }^{33}$ Merone et al, 'Sex and Gender Gaps in Medicine and the Androcentric History of Medical Research', Australian and New Zealand Journal of Public Health, Vol. 45, no. 5, 2021, p. 424.
    ${ }^{34}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 29.

[^8]:    ${ }^{35}$ A. Traianou, 'The Centrality of Ethics in Qualitative Research', in The Oxford Handbook of Qualitative Research, Oxford, Oxford University Press, 2014, p. 70.

[^9]:    ${ }^{36}$ Lennep et al, 'Gender differences in diagnosis and treatment of coronary artery disease from 1981 to 1997: no evidence for the Yentl Syndrome,' European Heart Journal, Vol.21, 2000, p. 911.

    The Yentl Syndrome will be discussed in 2.3
    ${ }^{37}$ Scott et al, 'Participation of women in clinical trials supporting FDA approval of cardiovascular drugs,' Journal of the American College of Cardiology, Vol.71, No.18, 2018, p. 1960.

[^10]:    ${ }^{38}$ Ezekowitz et al, 'Is there a sex gap in surviving an acute coronary syndrome or subsequent development of heart failure?', Circulation, Vol. 142, 2020, pp. 2231.
    ${ }^{39}$ Wilkinson et al, 'Sex differences in quality indicator attainment for myocardial infarction: a nationwide cohort study,' Heart, Vol.105, 2019, p.516.

[^11]:    ${ }^{40}$ Risberg et al, 'A Theoretical Model for Analyzing Gender Bias in Medicine’, International Journal for Equity in Health, Vol. 8, no. 28, 2009, p. 5.
    ${ }^{41}$ A. Bueter, 'Androcentrism, Feminism, and Pluralism in Medicine', Topoi, Vol. 36, 2017, p. 527.
    ${ }^{42}$ Verdonk et al, 'From Gender Bias to Gender Awareness in Medical Education', Springer, Vol. 14, 2009, p. 139.
    ${ }^{43}$ Verdonk et al, 'From Gender Bias to Gender Awareness in Medical Education', p.138.
    ${ }^{44}$ Verdonk et al, ‘From Gender Bias to Gender Awareness in Medical Education', p.137.
    ${ }^{45}$ M.T Ruiz and L.M Verbrugge, 'A two way view of gender bias in medicine', Journal Epidemiology \& Community Health, Vol. 51, 1997, p. 107.

[^12]:    ${ }^{46}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 10.
    ${ }^{47}$ M. Dusenbery, Doing Harm, p. 19.
    ${ }^{48}$ A.J McGregor, Sex Matters: How male-centric medicine endangers women's health and what we can do about it, Hachette Go, 2020, p. 105.
    ${ }^{49}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p.17.
    ${ }^{50}$ C. Criado-Perez, Invisible Women: exposing data bias in a world designed for men, Abrams Press, 2019, p. 199.

[^13]:    ${ }^{51}$ C. Criado-Perez, Invisible Women, p. 191
    ${ }^{52}$ M. Dusenbery, Doing Harm, p. 39
    ${ }^{53}$ C. Criado-Perez, Invisible Women: exposing data bias in a world designed for men, Abrams Press, 2019, p. 200.
    ${ }^{54}$ C. Criado-Perez, Invisible Women, p. 209
    ${ }^{55}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p.11.
    ${ }^{56}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 104
    ${ }^{57}$ Institute of Medicine, Relieving Pain in America: a blueprint for transforming prevention, care, education, and research - report brief, Institute of Medicine, 2011, p.1.

[^14]:    ${ }^{58}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 104.
    ${ }^{59}$ G. Jackson, Pain and Prejudice: A call to arms for women and their bodies, Allen \& Unwin, 2019, p.13.
    ${ }^{60}$ D. Hoffman and A. Tarzian, 'The Girl Who Cried Pain: A Bias Against Women in the Treatment of Pain', Journal of Law, Medicine \& Ethics, Vol. 29, no. 1, 2001, p.16.
    ${ }^{61}$ D. Hoffman and A. Tarzian, 'The Girl Who Cried Pain', p.17.
    ${ }^{62}$ D. Hoffman and A. Tarzian, 'The Girl Who Cried Pain', p. $21 \& 23$.
    ${ }^{63}$ D. Hoffman and A. Tarzian, 'The Girl Who Cried Pain', p. 17

[^15]:    ${ }^{64}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 37.
    ${ }^{65}$ Lippi et al ‘Gender Medicine: its historical roots’, Postgrad Med J, Vol.96, 2020, p. 481.
    ${ }^{66}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 37.
    ${ }^{67}$ A. Bueter, 'Androcentrism, Feminism, and Pluralism in Medicine', Topoi, Vol. 36, 2017, p. 522.
    ${ }^{68}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 38.
    ${ }^{69}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 45

[^16]:    ${ }^{70}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 39.
    ${ }^{71}$ M. Dusenbery, Doing Harm, p. 126.
    ${ }^{72}$ Lippi et al ‘Gender Medicine: its historical roots’, Postgrad Med J, Vol.96, 2020, p. 482.
    ${ }^{73}$ G. Jackson, Pain and Prejudice: A call to arms for women and their bodies, Allen \& Unwin, 2019, p.59.
    ${ }^{74}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 41.
    ${ }^{75}$ A.J McGregor, Sex Matters: How male-centric medicine endangers women's health and what we can do about it, Hachette Go, 2020, p. 58.
    A. Hossain, The Pain Gap: how sexism and racism in healthcare kill women, Tiller Press, 2021, p.xvii.

[^17]:    ${ }^{76}$ G. Jackson, Pain and Prejudice: A call to arms for women and their bodies, Allen \& Unwin, 2019, p.51.
    ${ }^{77}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 50.
    ${ }^{78}$ E. Cleghorn, Unwell Women: Misdiagnosis and Myth in a Man Made World, Dutton, 2021, p.9.
    ${ }^{79}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 58
    ${ }^{80}$ M. Dusenbery, Doing Harm, p. 58
    ${ }^{81}$ E. Cleghorn, Unwell Women: Misdiagnosis and Myth in a Man Made World, Dutton, 2021, p.9.

[^18]:    ${ }^{82}$ G. Jackson, Pain and Prejudice: A call to arms for women and their bodies, Allen \& Unwin, 2019, p. 12 .
    ${ }^{83}$ J. Lorber, Gender Inequality: Feminist Theory and Politics, Oxford, Oxford University Press, 2010, p.1.
    ${ }^{84}$ I. Young, Justice and the politics of difference, Princeton University Press, 1990, p.41.
    ${ }^{85}$ I. Young, Justice and the politics of difference, p.41.

[^19]:    ${ }^{86}$ S. Parekh, 'Feminism, Structural Injustice, and Responsibility', in 'Feminism, Structural Injustice, and Responsibility', The Routledge Companion to Feminist Philosophy, Routledge, 2017, p.622.
    ${ }^{87}$ J. Lorber, Gender Inequality: Feminist Theory and Politics, Oxford, Oxford University Press, 2010, p. 193.
    ${ }^{88}$ S. Parekh, 'Feminism, Structural Injustice, and Responsibility', in 'Feminism, Structural Injustice, and Responsibility', The Routledge Companion to Feminist Philosophy, Routledge, 2017, p.623.
    ${ }^{89}$ S. Parekh, 'Feminism, Structural Injustice, and Responsibility', p.623.
    ${ }^{90}$ S. Parekh, 'Feminism, Structural Injustice, and Responsibility', p.629.
    ${ }^{91}$ M. Fricker and K. Jenkins, 'Epistemic Injustice, Ignorance, and Trans Experiences', in The Routledge Companion to Feminist Philosophy, Routledge, 2017, p. 268.

[^20]:    ${ }^{92}$ M. Fricker, Epistemic Injustice: Power and the Ethics of Knowing, Oxford, Oxford University Press, 2007, p. 21
    ${ }^{93}$ M. Fricker, Epistemic Injustice, p. 45 .
    ${ }^{94}$ M. Fricker, Epistemic Injustice: Power and the Ethics of Knowing, Oxford, Oxford University Press, 2007, p. 49
    ${ }^{95}$ M. Fricker and K. Jenkins, 'Epistemic Injustice, Ignorance, and Trans Experiences', in The Routledge Companion to Feminist Philosophy, Routledge, 2017, p. 269.
    ${ }^{96}$ M. Fricker, Epistemic Injustice: Power and the Ethics of Knowing, Oxford, Oxford University Press, 2007, p. 156.
    ${ }^{97}$ M. Fricker, Epistemic Injustice, p. 157.
    ${ }^{98}$ M. Fricker, Epistemic Injustice, p. 59.

[^21]:    ${ }^{99}$ M. Fricker, Epistemic Injustice, p. 24.
    ${ }^{100}$ A. Allen, The Power of Feminist Theory: Domination, Resistance, Solidarity, Routledge, 2018, p. 2
    ${ }^{101}$ A. Allen, The Power of Feminist Theory, p. 10
    ${ }^{102}$ M. Fricker, Epistemic Injustice: Power and the Ethics of Knowing, Oxford, Oxford University Press, 2007, p.11.
    ${ }^{103}$ M. Fricker, Epistemic Injustice, p.12-13
    ${ }^{104}$ M. Fricker, Epistemic Injustice, p. 14
    ${ }^{105}$ A. Allen, The Power of Feminist Theory: Domination, Resistance, Solidarity, Routledge, 2018, p.135.
    ${ }^{106}$ A. Allen, The Power of Feminist Theory, p. 1

[^22]:    ${ }^{107}$ I. Young, 'Gender as Seriality: Thinking about Women as a Social Collective', Signs, Vol. 19, no. 3, 1994, p. 713.
    ${ }^{108}$ I. Young, 'Gender as Seriality', p. 714.
    ${ }^{109}$ I. Young, 'Gender as Seriality', p. 715.
    ${ }^{110}$ I. Young, 'Gender as Seriality', p. 728.
    ${ }^{111}$ I. Young, 'Gender as Seriality', p. 715.
    ${ }^{112}$ I. Young, 'Gender as Seriality', p. 719.
    ${ }^{113}$ I. Young, 'Gender as Seriality', p. 719.
    ${ }^{114}$ I. Young, 'Gender as Seriality', p. 737.

[^23]:    ${ }^{115}$ W. Brown, ‘Suffering Rights as Paradoxes’, Constellations, Vol. 7, no. 2, 2000, p. 231.
    ${ }^{116}$ W. Brown, 'Suffering Rights as Paradoxes', p.232.
    ${ }^{117}$ W. Brown, 'Suffering Rights as Paradoxes', p.235-236.
    ${ }^{118}$ W. Brown, 'Suffering Rights as Paradoxes', p.236.
    ${ }^{119}$ W. Brown, 'Suffering Rights as Paradoxes', p. 238.
    ${ }^{120}$ W. Brown, 'Suffering Rights as Paradoxes', p. 232.

[^24]:    ${ }^{121}$ Goodley et al, 'Introducing Disability and Social Theory', in Disability and Social Theory: New Developments and Directions, Palgrave, 2012, p.4.
    ${ }^{122}$ Goodley et al, 'Introducing Disability and Social Theory', p. 4
    ${ }^{123}$ Goodley et al, 'Introducing Disability and Social Theory', p. 3
    ${ }^{124}$ F. K. Campbell, Contours of Ableism: the production of disability and abledness, Palgrave, 2009, p.4.
    ${ }^{125}$ F. K. Campbell, Contours of Ableism, p. 5.
    ${ }^{126}$ F. K. Campbell, Contours of Ableism, p. 16.
    ${ }^{127}$ F. K. Campbell, Contours of Ableism, p. 5.
    ${ }^{128}$ Goodley et al, 'Introducing Disability and Social Theory', in Disability and Social Theory: New Developments and Directions, Palgrave, 2012, p.4.

[^25]:    ${ }^{129}$ F. K. Campbell, 'Stalking Ableism: Using disability to expose "abled" narcissism', in Disability and Social Theory: New Developments and Directions, Palgrave, 2012, p. 213.
    ${ }^{130}$ F. K. Campbell, 'Stalking Ableism', p. 215
    ${ }^{131}$ F. K. Campbell, 'Stalking Ableism', p. 214
    ${ }^{132}$ C.Frohader \& Meekosha, 'Recognition, Respect, and Rights: women with disabilities in a globalized world', in Disability and Social Theory: New Developments and Directions, Palgrave, 2012, p. 288.
    ${ }^{133}$ C.Frohader \& Meekosha, 'Recognition, Respect, and Rights', p. 289
    ${ }^{134}$ F. K. Campbell, 'Stalking Ableism: Using disability to expose "abled" narcissism', in Disability and Social Theory: New Developments and Directions, Palgrave, 2012, p. 212.

[^26]:    ${ }^{135}$ A. Lijphart, 'Comparative Politics and The Comparative Method', American Political Science Association, Vol. 65, no. 3, September 1971, p. 687.
    ${ }^{136}$ A. Lijphart, 'Comparative Politics and The Comparative Method', p. 690
    ${ }^{137}$ E. Cleghorn, Unwell Women: Misdiagnosis and Myth in a Man Made World, Dutton, 2021, p.21.
    ${ }^{138}$ J. Gerring, Case Study Research: Principles and Practices, Cambridge University Press, 2007, p.89.

[^27]:    ${ }^{139}$ Lehman et al, 'Rethinking the biopsychosocial model of health: understanding health as a dynamic system', Social and Personality Psychology Compass, Vol. 11, no. 8, 2017, p.5.
    ${ }^{140}$ Health Canada, Certain Circumstances: issues in equity and responsiveness in access to healthcare in Canada, Health Canada, 2001, p. 13.
    ${ }^{141}$ D. Petrova, 'Researching Discrimination', in Research Methods in Human Rights: A Handbook, Cheltenham, Edward Elgar Publishing, 2017, p. 405.
    ${ }^{142}$ P. Forrest-Lawrence, 'Case Study Research', in Handbook of Research Methods in Health Social Sciences, Singapore, Springer, 2019, p.321-322.

[^28]:    ${ }^{143}$ P. Forrest-Lawrence, 'Case Study Research', p. 322.
    ${ }^{144}$ P. Forrest-Lawrence, 'Case Study Research', p. 323.
    ${ }^{145}$ P. Forrest-Lawrence, 'Case Study Research', p. 323.
    ${ }^{146}$ K. Ervasti, 'Sociology of Law as a Multidisciplinary Field of Research', Scandinavian Studies in Law, no. 53, 2008, p. 138.
    ${ }^{147}$ K. Ervasti, 'Sociology of Law as a Multidisciplinary Field of Research', p. 142.
    ${ }^{148}$ K. Ervasti, 'Sociology of Law as a Multidisciplinary Field of Research', p.142-143.
    ${ }^{149}$ R. Banakar, ‘On Socio-Legal Design', Lund University, 2019, p.4.

[^29]:    ${ }^{150}$ R. Banakar, 'On Socio-Legal Design', p.6.
    ${ }^{151}$ B. A. McPhail, ‘A Feminist Policy Analysis Framework', The Social Policy Journal, Vol. 2, no. 2-3, 2003, p. 42.
    ${ }^{152}$ B. A. McPhail, 'A Feminist Policy Analysis Framework', p.40.
    ${ }^{153}$ B. A. McPhail, 'A Feminist Policy Analysis Framework', p. 42.
    ${ }^{154}$ B. A. McPhail, 'A Feminist Policy Analysis Framework', p.44.
    ${ }^{155}$ B. A. McPhail, 'A Feminist Policy Analysis Framework', p.44.
    ${ }^{156}$ B. A. McPhail, 'A Feminist Policy Analysis Framework', p. 54.
    ${ }^{157}$ B. A. McPhail, 'A Feminist Policy Analysis Framework', p.45.

[^30]:    ${ }^{158}$ Kanenberg et al, 'Revising McPhail's Feminist Policy Analysis Framework: Updates for Use in Contemporary Social Policy Research', Advances in Social Work, Vol. 19, no. 1, p. 2019, p.9.
    ${ }^{159}$ R. Banakar, 'On Socio-Legal Design', Lund University, 2019, p.4-5
    ${ }^{160}$ B. A. McPhail, ‘A Feminist Policy Analysis Framework’, The Social Policy Journal, Vol. 2, no. 2-3, 2003, p.40-41.
    ${ }^{161}$ B. A. McPhail, 'A Feminist Policy Analysis Framework', p. 42.

[^31]:    ${ }^{162}$ Tikkanen et al, International Profiles of Health Care Systems, The Commonwealth Fund, 2020, p.28.
    ${ }^{163}$ Total health research expenditure in Canada from 1975 to 2021', Statista, 2021, [website] https://www.statista.com/statistics/436571/total-health-research-spending-canada/\#:~:text=In $\% 202021 \%$ 2C\%20health $\% 20$ research $\% 20$ expenditures.Canada $\% 20$ from $\% 201975 \% 20$ to $\% 202021$.

[^32]:    What does the Spending Review mean for biomedical research?, The Academy of Medical Sciences, 2021, [website]
    https://acmedsci.ac.uk/more/news/what-does-the-spending-review-really-mean-for-the-future-of-biomedi cal-research.
    ${ }^{164}$ NIH, 'NIH Budget', National Institutes of Health, 2020, [website]
    https://www.nih.gov/about-nih/what-we-do/budget.
    ${ }^{165}$ NIH Revitalization Act of 1993, PL 103-43, 1993.
    NIH 21st Century Cures Act, PL 114-255, 2016.
    ${ }^{166}$ NIH Sex as a Biological Variable, NOT-OD-15-102, 2015.
    ${ }^{167}$ CIHR, 'Sex and Gender in Health Research', Canadian Institutes of Health Research, 2018 [website] https://cihr-irsc.gc.ca/e/50833.html.

[^33]:    ${ }^{168}$ NIH, Consideration of Sex as a Biological Variable in NIH-funded Research Guidance, National Institutes of Health, 2015, p.1.
    ${ }^{169}$ Melloni et al, 'Representation of women in randomized clinical trials of cardiovascular disease prevention', Circulation Cardiovascular Qualitative Outcomes, Vol. 3, no. 2, 2010, p. 140.
    ${ }^{170}$ Jin et al, 'Women's participation in cardiovascular clinical trials from 2010 to 2017', Circulation, Vol. 141, 2020, p. 540.
    ${ }^{171}$ Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p.4.

[^34]:    ${ }^{172}$ NIH, Addressing Gender Inequality in the NIH Intramural Research Program Action Task Force Report and Recommendations, National Institutes of Health, 2016, p. 22
    ${ }^{173}$ NIH, Addressing Gender Inequality in the NIH Intramural Research Program Action Task Force Report and Recommendations, National Institutes of Health, 2016, p. 26.
    ${ }^{174}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p.9.
    ${ }^{175}$ CMA, Addressing gender equity and diversity in Canada's Medical Profession: A review, Canadian Medical Association \& Federation of Medical Women of Canada, 2018, p. 5
    ${ }^{176}$ A. Bueter, 'Androcentrism, Feminism, and Pluralism in Medicine', Topoi, Vol. 36, 2017, p. 526.
    ${ }^{177}$ Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p.5.

[^35]:    ${ }^{178}$ E. Cleghorn, Unwell Women: Misdiagnosis and Myth in a Man Made World, Dutton, 2021, p.10.
    ${ }^{179}$ A.J McGregor, Sex Matters: How male-centric medicine endangers women's health and what we can do about it, Hachette Go, 2020, p. 45.
    ${ }^{180}$ British Heart Foundation, Bias and Biology: how the gender gap in heart disease is costing women's lives, British Heart Foundation, 2019, p. 22.
    ${ }^{181}$ Vogel et al, 'The Lancet Women and Cardiovascular Disease Commission: reducing the global burden by 2030', The Lancet Commissions, 2021, Vol.397, p. 2397.
    182 M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 73.

[^36]:    ${ }^{183}$ British Heart Foundation, Bias and Biology: how the gender gap in heart disease is costing women's lives, British Heart Foundation, 2019, p.16.
    ${ }^{184}$ A.J McGregor, Sex Matters: How male-centric medicine endangers women's health and what we can do about it, Hachette Go, 2020, p. 60.
    ${ }^{185}$ Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p. 6.
    ${ }^{186}$ British Heart Foundation, Bias and Biology: how the gender gap in heart disease is costing women's lives, British Heart Foundation, 2019, p.8.
    ${ }^{187}$ British Heart Foundation, Bias and Biology: how the gender gap in heart disease is costing women's lives, British Heart Foundation, 2019, p.7.
    Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p. 12.
    ${ }^{188}$ British Heart Foundation, Bias and Biology: how the gender gap in heart disease is costing women's lives, British Heart Foundation, 2019, p.8.

[^37]:    ${ }^{189}$ Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p. 12.
    ${ }^{190}$ Vogel et al, 'The Lancet Women and Cardiovascular Disease Commission: reducing the global burden by 2030', The Lancet Commissions, 2021, Vol.397, p.2395-2396.
    ${ }^{191}$ HHS, National Action Plan to Improve Health Literacy, US Department of Health and Human Services - Office of Disease Prevention and Health Promotion, 2010, p.16.
    192 HHS, National Action Plan to Improve Health Literacy, US Department of Health and Human Services - Office of Disease Prevention and Health Promotion, 2010, p.3.
    ${ }^{193}$ Public Health England and UCL Institute of Health Equity, Improving Health Literacy to Reduce Health Inequalities, Public Health England, 2015, p. 9

[^38]:    ${ }^{194}$ C. Criado-Perez, Invisible Women: exposing data bias in a world designed for men, Abrams Press, 2019, p. 182.
    ${ }^{195}$ Nass et al, Beyond the HIPAA Privacy Rule: Enhancing Privacy, Improving Health through Research, National Academic Press, 2009, p.112.
    ${ }^{196}$ Equality Act, c.15, 2010, p. 96

[^39]:    ${ }^{197}$ NHS, ‘The NHS Constitution for England’, GOV.UK, 2012. [website]
    https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-e ngland
    ${ }^{198} \mathrm{UNGA}$, Convention on the Elimination of All Forms of Discrimination Against Women, CEDAW/C/GC/30, 1979, p.5.

[^40]:    ${ }^{199}$ NHS, ‘The NHS Constitution for England', GOV.UK, 2012. [website] https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-e ngland
    ${ }^{200}$ NHS Equality and Health Inequalities Unit, Guidance for NHS commissioners on equality and health inequalities legal duties, National Health Service, 2015, p. 7
    ${ }^{201}$ Health and Social Care Act 2012, c.7, 2012, p.3.

[^41]:    ${ }^{202}$ Equal Health Care for All Act, H.R.8436, 2020, p.7.
    ${ }^{203}$ Equal Health Care for All Act, H.R.8436, 2020, p.2.

[^42]:    ${ }^{204}$ Executive Office of the President, National Strategy on Gender Equity and Equality, 2021, p.3.
    ${ }^{205}$ Executive Office of the President, National Strategy on Gender Equity and Equality, 2021, p.7.

[^43]:    ${ }^{206}$ Health Canada, 'Women's Health Strategy', Government of Canada, 1999, [website] https://www.canada.ca/en/health-canada/corporate/about-health-canada/reports-publications/women-heal th-strategy.html
    ${ }^{207}$ Health Canada, 'Health Portfolio Sex and Gender-Based Analysis Policy', Government of Canada, 2009 [website]
    https://www.canada.ca/en/health-canada/corporate/transparency/corporate-management-reporting/heath-portfolio-sex-gender-based-analysis-policy.html
    ${ }^{208}$ Our Vision for the Women's Health Strategy for England, Department of Health \& Social Care, 2021, p.1.

[^44]:    ${ }^{209}$ Our Vision for the Women's Health Strategy for England, Department of Health \& Social Care, 2021, p.10, 11, \& 16.
    ${ }^{210}$ Health Development Agency \& R. Barnes, Glossary of Terms used for Health Impact Assessment, World Health Organization, 2010, p.3.
    211 WHO, 'Health inequities and their causes', World Health Organization, 2018 [website] https://www.who.int/news-room/facts-in-pictures/detail/health-inequities-and-their-causes.

[^45]:    ${ }^{212}$ A.J McGregor, Sex Matters: How male-centric medicine endangers women's health and what we can do about it, Hachette Go, 2020, p. 121.
    ${ }^{213}$ Nowak et al, 'Do gender differences exist in pacemaker implantation? - results of an obligatory external quality control program', European Society of Cardiology, Vol. 12, 2010, p. 210.
    ${ }^{214}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p. 74.
    ${ }^{215}$ A.J McGregor, Sex Matters: How male-centric medicine endangers women's health and what we can do about it, Hachette Go, 2020, p. 58.
    ${ }^{216}$ G. Jackson, Pain and Prejudice: A call to arms for women and their bodies, Allen \& Unwin, 2019, p.13.

[^46]:    ${ }^{217}$ American Heart Association, Racial disparities continue for black women seeking heart health care, American Heart Association, 2019, p.1.
    ${ }^{218}$ M. Dusenbery, Doing Harm: The truth about how bad medicine and lazy science leave women dismissed, misdiagnosed, and sick, HarperOne, 2018, p.7.
    ${ }^{219}$ Ezekowitz et al, 'Is there a sex gap in surviving an acute coronary syndrome or subsequent development of heart failure?', Circulation, Vol. 142, 2020, pp. 2231.
    ${ }^{220}$ A.J McGregor, Sex Matters: How male-centric medicine endangers women's health and what we can do about it, Hachette Go, 2020, p. 59.
    ${ }^{221}$ Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p. 6.
    ${ }^{222}$ Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p.2.
    ${ }^{223}$ Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p. 6.
    ${ }^{224}$ British Heart Foundation, Bias and Biology: how the gender gap in heart disease is costing women's lives, British Heart Foundation, 2019, p.14.

[^47]:    ${ }^{225}$ Wilkinson et al, 'Sex differences in quality indicator attainment for myocardial infarction: a nationwide cohort study,' Heart, Vol.105, 2019, p.516.
    ${ }^{226}$ A. Hossain, The Pain Gap: how sexism and racism in healthcare kill women, Tiller Press, 2021, p.62.
    ${ }^{227}$ E. Cleghorn, Unwell Women: Misdiagnosis and Myth in a Man Made World, Dutton, 2021, p.7.
    ${ }^{228}$ OHCHR, The Right to Health, Office of the United Nations High Commissioner for Human Rights \& World Health Organization, 2008, p.3-4.

[^48]:    ${ }^{229}$ A. Hossain, The Pain Gap: how sexism and racism in healthcare kill women, Tiller Press, 2021, p.85.
    ${ }^{230}$ American Heart Association, Racial disparities continue for black women seeking heart health care, American Heart Association, 2019, p.1.
    ${ }^{231}$ A. Hossain, The Pain Gap: how sexism and racism in healthcare kill women, Tiller Press, 2021, p.xvii.
    ${ }^{232}$ Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p. 15.
    ${ }^{233}$ Heart \& Stroke, Ms. Understood - 2018 Heart Report, Canadian Heart \& Stroke, 2018, p. 14.
    ${ }^{234}$ A. Hossain, The Pain Gap: how sexism and racism in healthcare kill women, Tiller Press, 2021, p.59.

[^49]:    ${ }^{235}$ British Heart Foundation, Bias and Biology: how the gender gap in heart disease is costing women's lives, British Heart Foundation, 2019, p.23-24.
    ${ }^{236}$ Canada Health Act, R.S.C., 1985, c. C-6, 1985, p. 5
    ${ }^{237}$ Canada Health Act, R.S.C., 1985, c. C-6, 1985, p. 1
    ${ }^{238}$ Health Council of Canada, How do sicker Canadians with chronic disease rate the healthcare system?, Health Council of Canada, 2011, p.7.
    ${ }^{239}$ Ministry of Health and Long-Term Care, Preventing and Managing Chronic Disease: Ontario's Framework, Ministry of Health and Long-Term Care, 2007, p.6.

[^50]:    240 WHO, Health System Capacity for Non-Communicable Disease Management, World Health Organization, 2020, p.1.
    ${ }^{241}$ Chronically Sick and Disabled Persons Act 1970, c.70, 1970, p.2-3.

[^51]:    ${ }^{242}$ Accessible Canada Act 2019, S.C. 2019, c.10, p.4-5.
    ${ }^{243}$ Shannon et al, 'Gender equality in science, medicine, and global health: where are we at and why does it matter?', The Lancet Commissions, Vol. 393, 2019, p. 560.
    ${ }^{244}$ Merone et al, 'Sex and Gender Gaps in Medicine and the Androcentric History of Medical Research', Australian and New Zealand Journal of Public Health, Vol. 45, no. 5, 2021, p. 424.

[^52]:    ${ }^{245}$ Vogel et al, 'The Lancet Women and Cardiovascular Disease Commission: reducing the global burden by 2030', The Lancet Commissions, 2021, Vol.397, p. 2385.
    ${ }^{246}$ Vogel et al, ‘The Lancet Women and Cardiovascular Disease Commission, p.2386.
    ${ }^{247}$ Vogel et al, ‘The Lancet Women and Cardiovascular Disease Commission, p.2396.
    ${ }^{248}$ Vogel et al, ‘The Lancet Women and Cardiovascular Disease Commission, p.2396.
    ${ }^{249}$ Affordable Care Act, Public Law 111-148, 2010.
    ${ }^{250}$ Heise et al, 'Gender inequality and restrictive gender norms: framing the challenges to health', The Lancet Commissions, Vol. 393, 2019, p. 2440.

[^53]:    ${ }^{251}$ A. Hossain, The Pain Gap: how sexism and racism in healthcare kill women, Tiller Press, 2021, p. 55.
    ${ }^{252}$ A. Hossain, The Pain Gap, p. 56.
    ${ }^{253}$ E. Cleghorn, Unwell Women: Misdiagnosis and Myth in a Man Made World, Dutton, 2021, p.7.

[^54]:    ${ }^{254}$ A. Hossain, The Pain Gap: how sexism and racism in healthcare kill women, Tiller Press, 2021, p.47.

[^55]:    ${ }^{255}$ C. Criado-Perez, Invisible Women: exposing data bias in a world designed for men, Abrams Press, 2019, p. 215.

[^56]:    ${ }^{256}$ W. Brown, ‘Suffering Rights as Paradoxes’, Constellations, Vol. 7, no. 2, 2000, p.232.

[^57]:    ${ }^{257}$ C. Criado-Perez, Invisible Women: exposing data bias in a world designed for men, Abrams Press, 2019, p. 199.
    ${ }^{258}$ Young et al, 'Do mad people get endo or does endo make you mad? Clinicians' discursive constructions of medicine and women with endometriosis', Feminism \& Psychology, Vol.29, No.3, 2018, p. 352 .

