Epistemic Injustice in Healthcare:
Reevaluating Routine Pregnancy Testing

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ABSTRACT

The role of testimonial exchange in the patient-physician relationship is fundamental to the health care experience. It is based on principles of trust, and ultimately serves to determine the ensuing treatment of a patient's health care needs. For many patients in acute clinical care, this treatment will begin with a routine pregnancy test.

Leaning on theory from Fricker's 2007 book *Epistemic Injustice*, this thesis explores both the ethical harms implicit in existing pregnancy testing practices, as well as the harms to the effective operation of acute care settings. Routine pregnancy testing is found to be defended in large part through culturally prevalent sex stereotypes and inordinate concern for teratogenicity from anaesthetics. Moreover, according to data gathered in a cross-sectional online research survey, such testing appears to be highly associated with a negative health care experience and impact on patient trust, revealing trends in non-consensual testing and poor protection of patient privacy. This thesis further explores several direct consequences of routine testing on the operational efficiency of acute clinical care spaces, including prolonged wait times in acute clinical care, implications for patient privacy, excessive financial costs to the healthcare institution, and a negative impact on patient trust.

Ultimately, this thesis finds that routine pregnancy testing is not compatible with the best interests of patients and makes several recommendations aimed at promoting patient wellbeing in areas such as autonomy, informed consent, privacy, and trust.

RÉSUMÉ

Le rôle de l'échange de témoignages dans la relation patient-médecin est fondamental en recevant des soins de santé. Il est basé sur la confiance et sert à déterminer le traitement ultérieur des besoins d'un.e patient.e. Pour de nombreuses patientes en soins d'urgence, ce traitement commencera par un test de grossesse de routine.

En utilisant la théorie du livre Epistemic Injustice (2007) de Fricker , cette thèse explore à la fois les méfaits éthiques des pratiques existantes en matière de tests de grossesse, ainsi que les méfaits pour le fonctionnement efficace des établissements de soins d'urgence. Le test de grossesse de routine se trouve être défendu en grande partie par des stéréotypes sexuels culturellement répandus et une préoccupation excessive pour la tératogénicité des anesthésiques. De plus, selon les données recueillies dans le cadre d'une enquête de recherche transversale en ligne, de tels tests semblent être fortement associés à une expérience négative de soins de santé et à un impact sur la confiance des patients, révélant une tendance aux tests non consensuels et une mauvaise protection de la vie privée des patients. Cette thèse explore en outre plusieurs conséquences directes des tests de routine sur l'efficacité opérationnelle des espaces de soins cliniques aigus, y compris les temps d'attente prolongés dans les soins cliniques aigus, les implications pour la vie privée des patients, les coûts financiers frivoles pour l'établissement de santé et un impact négatif sur la confiance des patients.

En fin de compte, cette thèse conclut que les tests de grossesse de routine ne sont pas compatibles avec l'intérêt supérieur des patientes et formule plusieurs recommandations visant à promouvoir le bien-être des patientes dans des domaines tels que l'autonomie, le consentement éclairé, la confidentialité et la confiance.

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INTRODUCTION

A patient presents to emergency care pale and weak following two days of excessive vaginal bleeding. The health care provider asks the patient whether or not she has menstruated recently, is sexually active, or using contraception. The patient, a lesbian, explains that she has never engaged in sexual activity carrying a risk of pregnancy. The health care provider orders a routine pregnancy test, nevertheless. The patient protests, but quickly acquiesces in the face of urgent need for medical care. The patient waits an hour until she can produce a sample, but bleeds considerably into the sample cup. Over the course of nearly an additional three hours, the patient attempts twice more to produce a sample with minimal blood. Once the sample is gathered and tested, the patient is told that the pregnancy test was negative, but that there is no longer anyone available to perform the additional tests she needs. She is instructed to come back to the hospital the next morning, where she is diagnosed with a burst ovarian cyst.[1]

Pregnancy tests are routinely ordered in many acute clinical care settings either in accordance with departmental policy or due to standard practices adopted by health care providers (Kempen, 1997, p. 547; Strote & Chen, 2006, p. 555). Anecdotal evidence suggests that, despite often being ordered during diagnostic evaluation, patients' self-reported risk factors and sexual history often do not affect the decision to order a pregnancy test, and in some cases, the testing is mandatory (AITAthrowawayqueer, 2020; AmazingSatisfaction5, 2021; Beccaroni7, 2019; Godhelpthisoldman, 2019; *How Does Everyone Feel about Mandatory Pregnancy Tests?*, 2020; shades_of_black, 2014; throwawayquestions2x, 2015). Indeed, problematic pregnancy testing is so common that it is the target of online jokes. In April 2022, Charis Hill tweeted:

[1] This case study was recounted to the author in real time by a friend who accompanied the patient to a hospital in Ontario, Canada (details redacted to ensure patient confidentiality).

“[Hysterectomy] When people ask why I removed my uterus, I plan on sarcastically saying, “Because I'm still waiting on results of the mandatory pregnancy test they did during my last ER visit before they'd do anything to treat me”” (Hill, 2022). Crucially, patients claim that self-reports are quickly dismissed, and that routine pregnancy testing interferes with their urgent care needs and overall health care experience. Health care providers claim that patient-reported pregnancy risk is unreliable and that the potential harms of missing a pregnancy are sufficient to justify routine testing despite patient self-reports (Kempen, 1997, p. 547; Larcher, 2012, p. 857; Laubach & Wilchins, 1975, p. 691; Lippmann et al., 1988, p. 135; Powell-Bowns et al., 2015, p. 285; Wrenn & Slovis, 1991, p. 137).

This thesis will critically examine the practice of routine pregnancy testing in acute clinical care and offer an analysis of existing practices in Canada and the United States. In order to explore existing routine pregnancy testing practices and their effects on the patient experience, an original research study was conducted to gather patient testimonies. The study confirmed that pregnancy tests are commonly performed when risk could be ruled out through patient testimony and that such tests are linked to a negative health care experience for patients. In particular, testing for pregnancy against the wishes or testimony of the patient appears to be associated with a negative impact on both trust and satisfaction. Significantly, the study also reveals several cases in which informed consent was not obtained before testing.

This thesis argues that routine pregnancy testing is epistemically unjust—a form of injustice that targets knowledge production and communication. In particular, the failure to accord patient testimony on pregnancy risk the same credibility as other risk reports in acute care represents a form of “testimonial injustice” (Fricker, 2007). That is, the credibility of the speaker is undermined based on stereotypes about the group to which the speaker belongs; in this case,

"women" and "patients". The thesis also explores the ways in which the handling of pregnancy risk may raise issues of "hermeneutical injustice" in diagnostic evaluation (Fricker, 2007). These injustices in turn damage the trust necessary for an effective patient-physician relationship. Further, an excess of frivolous tests in acute clinical care negatively impacts the quality of health care by resulting in delayed treatment, implications for patient privacy, damage to patient trust, and potentially excessive operational costs to the healthcare system.

For the purposes of this thesis, patients' self-reported pregnancy risk is understood to be based on patients' accounts of their sexual and medical history, with particular emphasis placed on cases where patients report celibacy, sexual activity that does not carry a risk of pregnancy, or a medical history which excludes the risk of pregnancy (e.g. hysterectomy). Any patient with a functioning uterus who reports having engaged in sexual activity with a risk of pregnancy in the past several months should be administered a pregnancy test, even if they do not believe they could be pregnant. This thesis focuses on the consequences of frivolous pregnancy testing in the context of acute clinical care, as the urgent nature of patient needs when they present for acute care often exacerbates many of the consequences associated with existing practices in pregnancy testing. Nevertheless, many key elements of this research can be applied to non-acute healthcare settings in which routine, mandatory, or coercive pregnancy testing is commonly practiced.

Finally, this thesis acknowledges the prevalence of the gender binary in medicine and the resulting marginalization of transgender and nonbinary patients. Among patients who undergo routine or mandatory pregnancy testing, those who are transgender or nonbinary are at risk of being misgendered or otherwise uniquely marginalized in the process, potentially resulting in medical alienation and gender dysphoria. These harms occur in conjunction with harms discussed in this thesis, such as epistemic injustice, damaged patient-physician trust, and

treatment differences. I elect to use gender-neutral terminology where possible and relevant in an effort to most accurately describe the patient population who experiences routine or mandatory pregnancy testing. It should be noted, however, that some sections of this thesis refer specifically to *sex stereotypes* and the ways in which historically prevalent sex stereotypes targeting women as an identifiable group overlap with justifications for routine pregnancy testing policies. Indeed, in the context of a medical institution which continues to adopt and adhere to a gender binary, pregnancy and womanhood are often treated as necessarily linked in research and in practice. Accordingly, some sections refer to "female patients" specifically where this is contextually appropriate to delineate the group wherein "female" as a gender identity and certain forms of reproductive discrimination overlap and target "femaleness" in the process. Moreover, when discussing stereotypes which target "womanhood" or "femaleness" as an identity, the word "woman" or "women" is employed to reflect the identity of the target in these cases of discrimination.

The thesis is comprised of four chapters. Chapter I provides an overview of current research on epistemic injustice and the epistemic position of patients as applied to pregnancy testing. I also explain the operation of the culturally prevalent sex stereotypes that generate epistemic injustices in medical contexts. Chapter II then offers an exposition and analysis of my research study on patient experiences with pregnancy testing in acute clinical care. It explores the methodology, emergent data, and limitations of the study. The results suggest that routine pregnancy testing is strongly associated with a negative health care experience and points to several troubling issues with the management of such testing, including coercion, failure to obtain informed consent, and poor establishment of patient privacy during diagnostic evaluation.

Chapter III analyses from a bioethical perspective the practice of routine pregnancy testing in light of the data from Chapter II and existing research. Beginning with an exploration of the prevalence of sex stereotypes in medicine, Chapter III finds that sex stereotypes—including those of emotionality, unreliability, pronatalism, and intuition—may play a role in the execution of diagnostic evaluation, thereby triggering epistemic injustices, both testimonial and hermeneutical. Moreover, Chapter III examines the impact that this may have on the already-vulnerable state of trust in the patient-physician relationship. Based on findings in Chapter II, I conclude that mandatory and/or coercive pregnancy testing can have a negative long-term impact on patient trust, sometimes extending beyond the specific institution where testing occurred to generate distrust in the broader institution of medicine. Chapter III then asks whether routine pregnancy testing could nevertheless be morally justified. I provide a practical cost-benefit analysis of routine pregnancy testing addressing considerations such as the time cost, risk to patients, financial cost, and the social costs of such testing. I argue that the assumed practical benefits of routine pregnancy testing are questionable and do not outweigh the costs, including those of epistemic injustice and damage to trust.

Chapter IV proposes five policy recommendations in an effort to remediate the discussed harms resulting from routine pregnancy testing. These recommendations include (1) eliminiating routine pregnancy testing, (2) securing informed consent, (3) establishing conditions of privacy, (4) utilizing clear and specific questions in diagnostic evaluation, and (5) supporting the role of healthcare practitioners in acting as responsible hearers.

I

EPISTEMIC INJUSTICE IN HEALTHCARE: ROUTINE PREGNANCY TESTING

This chapter provides an overview of the philosophical framework that will be applied to analyze my empirical research and an introduction to the practice of routine pregnancy testing in acute clinical care. In section 1.1, the chapter begins with an exposition of the literature on epistemic injustice, with a particular focus on the work of Miranda Fricker. Fricker's concepts of testimonial injustice and hermeneutical injustice will become a central feature of my analysis to be developed in Chapter III. Section 1.2 situates epistemic injustice within the context of healthcare settings. Specifically, it looks at the epistemic structure and the power dynamic which exists between patients and healthcare professionals within the institution of medicine. Section 1.3 then provides some historical context for the sex stereotypes which will later be used in Chapter III to explore the identity prejudicial elements of epistemic injustice in healthcare settings. Finally, section 1.4 focuses on routine pregnancy testing, including early arguments in the literature justifying the practice. This section also looks at contemporary data on the relationship between self-reported pregnancy risk and test results.

1.1: Epistemic Injustice

The term "epistemic injustice" denotes any kind of injustice experienced by a person having to do with their capacity for knowledge; that is, the production, reception, and/or communication of knowledge. Among many texts treating the topic, there is perhaps none more widely-known than Miranda Fricker's 2007 book *Epistemic Injustice*, in which the term was coined. In this book, Fricker identifies two forms of epistemic injustice: "testimonial" and "hermeneutical", both of which constitute unjust treatment of individuals *qua* knowers. To

provide a brief introduction to these concepts: testimonial injustice occurs where a hearer's prejudice causes them to allocate less credibility to a speaker's testimony than is warranted. Instead, the hearer's allocation of credibility is based on socially prevalent stereotypes which make it less likely (or impossible) for the speaker's testimony to be received and accepted. Hermeneutical injustice has to do with access to shared "hermeneutical resources", which correspond to the social meanings and interpretive tools available between a hearer and a speaker who intends to communicate their experiences. Groups with historically limited access to spaces of knowledge production are less likely to have had opportunities to contribute to common shared hermeneutical resources, and therefore, have fewer tools with which to navigate and communicate their experiences.

It should be noted that Fricker was not the first author to identify and characterize the elements underpinning epistemic injustice, and she was certainly not the last. Some of the earliest written ideas about epistemic injustice were published by Anna Cooper in 1892, who wrote of the ongoing silencing of Black women in the American South (Cooper, 1892, p. 1). Nearly 100 years later, Gayatri Chakravorty Spivak conceptualized a form of epistemic injustice when she coined the term "epistemic violence" in her 1988 article "Can the Subaltern Speak?" (Spivak, 1988, p. 76). In this article, Spivak develops her concept of the subaltern: a member of a marginalized class silenced by colonialist and imperialist practices of epistemic violence which destroy vessels of knowledge such as language and culture (Spivak, 1988, pp. 82–83). Boaventura de Sousa Santos further developed the concept of epistemic violence in 1995 with his characterization of the "epistemicide" and "linguacide" committed against the South by the imperial North (Santos, 1995, p. 580).

In the aftermath of Fricker's *Epistemic Injustice*, many authors have added to and further developed conceptions of epistemic injustice. As will be discussed at greater length near the end of this section, these include José Medina's (2013) account of epistemic friction, Gaile Pohlhaus's (2017) concepts of self-trust and warranted distrust, Kristie Dotson's (2011) account of testimonial smothering and quieting, and Quill Rebecca Kukla's (2014) concept of discursive injustice.

Returning to *Epistemic Injustice* (2007), a thorough understanding of Fricker's account requires first an understanding of both testimonial and hermeneutical injustice. To begin, testimonial injustice occurs when a speaker suffers a credibility deficit on account of a negative identity prejudice held by the hearer (also referred to as "the audience"). Testimonial injustice leans heavily on Fricker's notion of identity prejudice, which corresponds to a prejudice against a person based on their social identity. Fricker employs the example of Tom Robinson from Harper Lee's famous book, *To Kill a Mockingbird.* In this example, Robinson must defend himself to an all-White jury against the claim that he assaulted a White girl, Mayella Ewell. Robinson is clearly innocent, as the injuries to Ewell were caused by a left-handed individual, while Robinson's left arm is permanently disabled. Robinson cannot tell the court that Ewell kissed him, as Robinson had neither the option to accept her advances, nor the option to push her away, both of which would have been interpreted by the jury as assaultive by virtue of his position as a Black man relative to that of Ewell as a White woman. Instead, Robinson runs away, and is able to explain this to the jury only by saying that he was scared. This prompts the prosecution to ask: 'If you had a clear conscience, why were you scared?' (Fricker, 2007, p. 23), which effectively corners Robinson and makes a guilty verdict seem justified to the jury. In the courtroom exchange, Robinson's obvious innocence is overpowered by the force of the jury's

racial prejudice, which stereotypes Black men as violent, licentious, and dishonest, rendering Robinson's testimony ineffective. Fricker labels the epistemic injustice suffered by Robinson in this context "testimonial" because the racial prejudice of the jury produces a perceived credibility deficit which causes them to fail in either receiving or accepting Robinson's testimony.

This concept can be applied in a contemporary and quotidian context as well. Many racialized groups are falsely stereotyped as criminal or morally bankrupt: members of a given group may be thought to be more likely to steal, possess illicit substances, and engage in violence. Suppose someone with a racialized identity is walking their dog and is approached by police officers because the officers had received a call that someone was wandering the neighbourhood, smoking a suspicious substance. In this interaction, the individual may deny seeing anyone matching the description, only to be questioned more intensely by the police than other pedestrians who do not share this racialized identity. Normally credible claims, such as being a non-smoker, appearing sober, or leaving the house to walk the dog, are met with suspicion. This would be an example of identity prejudice that generates an unjustified credibility deficit, producing a case of testimonial injustice.

Hermeneutical injustice, rather than being an injustice perpetuated directly by hearers during instances of testimonial exchange, instead denotes a structural form of epistemic injustice. Hermeneutical injustice occurs where the collective tools of social understanding are insufficient or distorted in a way that puts less powerful social groups at a disadvantage. Their ability to render their experiences communicable or understood to the dominant group is systematically undermined. This is because shared social meanings, which are used to interpret the social environment and experiences within it, are developed and exercised predominantly by groups

with social power—say, those most represented in positions of professional leadership, political power, and institutions of higher education. Take, for example, the concept of sexual harassment. Prior to the coining of the term by Lin Farley in the 1970s, women quietly shared countless experiences of mistreatment, coercion, and alienation of a sexual nature, particularly at work (Farley, 1978, p. 33). Farley points to the many resulting harms of this practice: verbal attacks, poor job evaluations or recommendations, demotions, reassignment of hours, and termination of employment, among others (Farley, 1978, p. 33). Yet, there was no category or label to describe the experience of sexual harassment because the powerful group—in this case, men—did not consider it to be a genuine phenomenon. Without the concept of sexual harassment, the behaviours causing women's discomfort—such as comments, sexual propositions, small touches on the shoulder or waist, and uncomfortable stares—were overlooked or judged insignificant (Farley, 1978, p. 35). The term "sexual harassment" and connected concepts filled a gap in shared hermeneutical resources, thereby allowing both the victims themselves and broader society to articulate the relationship between the behaviours and the resulting harms.

Fricker's conceptions of testimonial and hermeneutical injustice can be more fully understood against the background of her concept of social power, which attempts to make sense of how power influences social interactions. There are two sets of variables critical to the operation of social power: first, social power can be wielded either actively or passively (Fricker, 2007, p. 9). To demonstrate, Fricker employs the example of the traffic warden. The traffic warden utilizes her power *actively* when she uses her power to impose a fine in the interest of influencing a person's compliance with traffic laws (Fricker, 2007, p. 10). However, the traffic warden's power also operates *passively* when drivers self-regulate; they act in compliance with

traffic laws because they are aware of the possibility of receiving a fine from the traffic warden if they fail to do so (Fricker, 2007, p. 10).

The second set of variables concerns agential versus structural exercises of power. The example of the traffic warden is an instance of agential power, wherein a particular agent uses their power to exert influence over another person or persons (Fricker, 2007, p. 10). Structural power, on the other hand, is wielded by a broader social system (Fricker, 2007, p. 11). Fricker takes the example of a social group whose members are unlikely to vote due to a sense of disenfranchisement within their political system (Fricker, 2007, p. 11). Structural power thus does not require an agent, although some agents may act as vehicles of power within the structure (Fricker, 2007, p. 11). Through this example of structural power, it is easy to see how agential power is partially constituted by social coordination or alignment, which socially situates agential power (Fricker, 2007, p. 12). For example, a professor wields power over students in her capacity to grade them, but this power is contingent upon alignment with a broader network of social others, including the university which grants her grading authority and employers or admissions committees who will judge the student based on those grades (Fricker, 2007, p. 12).

One form of social power, among many, is wielded by and against different groups based on shared conceptions of social identity within the social imagination (Fricker, 2007, p. 14). There is a common understanding of what it is to be a member of a social group: for example, young or old, male or female, wealthy or poor. This form of social power we can call "identity power". Fricker takes an example from *The Talented Mr. Ripley* where Herbert Greenleaf says, "Marge, there's female intuition, and there are facts," effectively using social power to silence Marge as a member of the social group 'female', whether intentionally or not (Fricker, 2007, p.

14). Greenleaf uses identity power actively as an agent by leaning on broader social stereotypes of women as irrational and emotional; however, this same power can also exist in a passive structural capacity (Fricker, 2007, p. 15). For instance, Fricker has the reader imagine a world in which the social understanding of gender is such that it is considered socially inappropriate for a woman to speak over or against the word of a man (Fricker, 2007, p. 15). In this context, Greenleaf could passively exercise identity power over Marge in virtue of the fact that there exists a shared social imagination in which what it means to be a man or a woman involves powerful stereotypes about authority (Fricker, 2007, p. 15). Whether the stereotypes are accurate or not, and irrespective of whether they are believed by the subjects, they can still wield structural power sufficient to affect behaviour (Fricker, 2007, p. 15).

Stereotypes are a critical factor in the development of prejudice (Fricker, 2007, p. 30). This is especially problematic because, as Fricker argues, the use of stereotypes as heuristics is a necessary and routine element of quotidian testimonial exchange (Fricker, 2007, p. 32). For instances of testimonial exchange where the hearer does not have much personal knowledge of the speaker, the hearer must rely on some relevant generalizations about the speaker in order to spontaneously calculate the credibility owed to them (Fricker, 2007, p. 32). What a hearer must do is ensure that the credibility she attributes to the speaker is commensurate with the evidence that the speaker is knowledgeable and being truthful (Fricker, 2007, p. 19). For instance, it is epistemically responsible to lend greater credibility to a family physician on matters of disease treatment, or to an elementary school teacher on matters of a child's educational progress, as these are reliable generalizations: those who are educated in medicine and childhood education, respectively, can be expected to have dependable knowledge in these areas. However, historically disadvantaged groups are especially vulnerable to a wealth of socially prevalent *false*

stereotypes which negatively affect hearers' perceptions of them *qua* knowers, and thus, of their credibility when acting as speakers (Fricker, 2007, p. 32). Insofar as these stereotypes are false, it is epistemically irresponsible to rely on them in practice.

When speakers suffer deflated credibility due to identity prejudice on the part of the hearer(s), there is a further dimension of epistemic harm: truth and collective knowledge on the whole suffer. Hearers who allocate deflated credibility on the basis of identity prejudice may lose out on important knowledge and may act as a barrier to this knowledge entering broader society by preventing a process that Medina calls "beneficial epistemic friction" (Medina, 2013, p. 50). Beneficial epistemic friction occurs when resistance to one's expressed views forces the speaker to engage in critical reflection, justify their beliefs, and seek out gaps in their arguments, among other things. Indeed, when deflated credibility prevents someone from fully engaging with others as a knower, the stereotypes which fuel testimonial injustice may have the effect of being self-fulfilling (Fricker, 2007, p. 57). Moreover, inhibiting members of certain groups from fully engaging as knowers further inhibits the ability of those groups to contribute to knowledge-producing spaces and shared hermeneutical resources, thus producing a cycle of knowledge marginalization.

Crucially, Fricker distinguishes between primary epistemic harms and secondary epistemic harms. Primary epistemic harms are the harms or injustices which target individuals *qua* knowers. Fricker writes that "[t]o be wronged in one's capacity as a knower is to be wronged in a capacity essential to human value", and thus, the speaker suffers an intrinsic injustice (Fricker, 2007, p. 44). In the social landscape, this amounts to a form of symbolic degradation of the speaker (Fricker, 2007, p. 44). Secondary harms, on the other hand, are caused by the primary harms of epistemic injustice and may be either practical or epistemic in nature (Fricker,

2007, p. 47). For instance, a *practical* secondary harm may occur when someone is subject to racially motivated epistemic injustice during a traffic stop; for instance, when officers do not believe that the driver is the true owner of the car. The driver may have to furnish additional proofs of ownership, thereby incurring a time cost, which may cause them to be late to an important commitment. This practical harm could also produce a secondary harm that is *epistemic* in nature. For instance, the experience of not being believed in this way may cause the driver to develop distrust or anxiety around police in future interactions. These emotions may negatively impact their future ability to express themselves confidently and provide testimony in their interactions with police. These secondary epistemic harms might even add to the problem of self-fulfilling stereotypes, as mentioned above, if the emotional reaction to interacting with police has the effect of making them appear suspicious or otherwise unreliable.

Many epistemological accounts take self-confidence and self-trust to be requisite components of coming to form beliefs and therefore having knowledge, meaning that lost confidence resulting from the persistent intellectual undermining involved in testimonial injustice can cause subjects to lose knowledge and knowledge-gaining skills (Fricker, 2007, p. 49). This loss may occur in the form of impeding the development of intellectual virtues which require epistemic confidence, such as intellectual courage. Someone who experiences repeated instances of testimonial injustice may gradually lose the confidence and self-trust necessary to defend ideas in the face of challenge or even the possibility of challenge. Abandoning belief prematurely or failing to explore challenges more fully each result in a knowledge loss on the part of the speaker.

Kristie Dotson describes two forms of testimonial oppression relevant to the present discussion. The first is that of *testimonial quieting*, wherein the audience fails to recognize the

speaker as a knower, thereby preventing uptake of her testimony (Dotson, 2011, p. 242). Members of marginalized groups may be especially vulnerable to this form of testimonial oppression, as socially prevalent stereotypes may have the effect of influencing audiences' perceptions of their reliability (Dotson, 2011, p. 243). In many critical ways, testimonial quieting is similar to accounts of epistemic injustice provided by Fricker. The second form of testimonial oppression described by Dotson is that of *testimonial smothering*. In cases of testimonial smothering, it is the speaker's perception of her audience which influences the testimonial exchange (Dotson, 2011, p. 244). This is to say that the speaker perceives her audience in the immediate testimonial exchange as being unable or unwilling to accept her speech as valid testimony. Accordingly, in cases of testimonial smothering, the speaker limits her testimony in response to the perceived receptivity of her audience. Over time, speakers who suffer repeated credibility deflation may begin to self-silence (Dotson, 2011, p. 242). The speaker may thus fail to further develop their capacity to report knowledge (Dotson, 2011, p. 242; Hawley, 2017, p. 73). Kukla describes a similar phenomenon, which they call "discursive injustice", wherein a speaker's intention to convey truthful testimony receives distorted reception and is taken as, say, a joke, conjecture, or opinion (Hawley, 2017, p. 73; Kukla, 2014, p. 443).

The allocating of appropriate or deflated credibility can also be understood as the extending or withholding of trust in interpersonal interactions, according to Hawley (Hawley, 2017, p. 72). On Hawley's account, trustworthiness is constituted by interactions with and the perceptions of others, thereby imbuing trustworthiness with a communitarian dimension (Hawley, 2017, p. 74). In instances of epistemic injustice, there is a breakdown of trust between the speaker and the hearer, wherein the speaker regards the hearer as untrustworthy, while the hearer reacts to their loss of trust in both the hearer and the space of hermeneutical resources

from which they might draw. Persistent testimonial injustice can therefore result in damage to the trust-building mechanisms of human psychology. As Pohlhaus writes, "when women are systematically taught to distrust their own instincts and to defer to the cognitive authority of men, it can be difficult not only to develop appropriate self-trust, but also proper trust in others" (Pohlhaus, 2017, p. 18). Within epistemic institutions which have historically failed marginalized groups, epistemic injustice may result in *warranted* distrust, such as distrust among women and racialized groups towards predominantly male and White medical institutions (Pohlhaus, 2017, p. 19).

The dimensions of epistemic injustice explored in this section have included testimonial injustice, hermeneutical injustice, testimonial smothering, discursive injustice, and the related damage to trust and self-trust in testimonial exchange. This section has also reviewed how social power operates passively, actively, structurally, and through individual agents to produce epistemic harms, both primary and secondary. These elements of epistemic injustice will be employed in Chapter III to analyze the results of my study on patient experiences with pregnancy testing in acute clinical care.

1.2: Epistemic Injustice in Healthcare

The issues of epistemic injustice and trust just described focus our attention on the epistemic features of testimonial exchange. In this section, I describe the epistemic aspects of testimonial exchange that are of concern in this thesis: the patient-physician relationship in clinical settings. Epistemic aspects of this relationship include both agential and structural forms of testimonial injustice, the gap in shared hermeneutical resources vis-à-vis the phenomenology of illness, and the role of social power in the testimonial exchange.

First, Carel and Kidd assert that the position of healthcare professionals is one of considerable epistemic privilege, owing to substantial medical training and authority—a privilege which may or may not be warranted in all circumstances (Carel & Kidd, 2014, p. 530). Many healthcare practitioners will enjoy an epistemically privileged position by virtue of their authority which enables them to establish and enforce epistemic norms in testimonial exchanges with patients (Carel & Kidd, 2014, p. 535). Healthcare practitioners often act as the bridge between patient and treatment, deciding which aspects of testimony can serve as evidence and at which point a concern has been resolved (Carel & Kidd, 2014, p. 536). In cases of extreme medical paternalism, patients may be epistemically excluded from contributing to the narrative which establishes their health care needs, due to either the epistemic privilege of healthcare practitioners or elements within the structure of healthcare practice which promote epistemic injustice (Carel & Kidd, 2014, p. 530). Carel and Kidd explain that patients are not presumed incapable of offering testimony broadly speaking; rather, they are presumed incapable of offering *medically relevant* testimony (Carel & Kidd, 2014, p. 537). In later work, Carel and Kidd would come to recognize the persistent epistemic dysfunction in patient-physician exchanges as a systemic feature of the healthcare system (Kidd & Carel, 2017, p. 173).

As a result of the profound power imbalance in the patient-physician relationship, Carel and Kidd claim that patients in general are epistemically vulnerable, as their testimonies are often dismissed as irrelevant, disorganized, inappropriately emotive, and lacking the technical medical vernacular privileged in institutions of healthcare (Carel & Kidd, 2014, p. 529). Clinicians claim that patients offer irrational and irrelevant information, requiring physicians to filter patient testimony in order to extract medically salient information while rejecting superfluous details (Carel & Kidd, 2014, p. 530). Importantly, these judgements vary across

racial and gendered lines, with physicians reporting that Black patients are less intelligent, less rational, and more likely to engage in risky behaviour (van Ryn & Burke, 2000, p. 823). Meanwhile, female patients are judged to be more demanding, more time-consuming, more likely to include irrelevant information in their medical testimonies, and less cooperative when compared to male patients (Foss & Sundby, 2003, pp. 48–49). Accordingly, patients are more vulnerable not only to garden-variety testimonial injustices, but also to hermeneutical injustices on account of the challenges associated with translating the phenomenology of illness from their position as patients into medically accepted forms of evidence. This is especially due to the fact that the phenomenology of illness often differs radically from patient to patient, with many aspects of the illness experience being marginalized in social discourse, such that its articulation is hampered by epistemic barriers (Carel & Kidd, 2014, p. 537).

Finally, the effect of persistent testimonial injustice triggers secondary harms of epistemic injustice. Over time, the progressive accumulation of self-doubt, exasperation, desperation, and irritation, among other things, shapes the patient's affect in medical interactions. This affect risks imbuing patient testimonies with the very characteristics which cost patients' credibility in earlier interactions, thereby engaging a cycle of testimonial deterioration and confirming the unintentional but pervasive epistemic bias lurking among healthcare professionals (Carel & Kidd, 2014, p. 534). Take, for instance, a chronically ill patient seeking diagnosis who, upon reporting symptoms, is routinely told to lose weight first. The patient, whose symptoms have persisted despite weight fluctuations, becomes increasingly irritated at the dismissal of their concerns and increasingly fearful about the state of their health. Suppose that the patient has finally secured a referral to an expert specialist. Upon meeting with the specialist, the patient lists off symptoms, leaving out details which have, in the past, triggered irrelevant diversions to the

topic of weight, doubting whether the specialist will take them seriously otherwise. When the specialist asks the patient about their physical activity, the patient, desperate and agitated due to the assumption that they will once again be diverted to the topic of weight, snaps at the specialist, stressing that they will not consider weight loss as an option. In this example, the patient has delivered a less detailed and less effective testimony than they could have due to an accumulation of affect and self-doubt amassed over many years of testimonial exchanges with healthcare professionals who undermined their credibility.

1.3: Culturally Prevalent Sex Stereotypes

At the intersection of the epistemic issues arising in healthcare and the epistemic injustice due to identity prejudice are female patients, who may be particularly vulnerable not only because—like many patients—they may be regarded as cognitively unreliable, but also because of historically persistent stereotypes of women as emotional, irrational, and unreliable. As such, an ill woman may be susceptible to a constellation of stereotypes in her position as both a woman and a patient which may impact perceptions of her as a knower in healthcare settings. As noted by Fricker, marginalized groups are especially vulnerable to false stereotyping related to credibility, such as that regarding competence and sincerity (Fricker, 2007, p. 45). Hentschel and colleagues acknowledge that sex acts as a cue for stereotyping, as sex is an aspect of identity which is often easily observable and remembered (Hentschel et al., 2019, p. 2).

Stereotypes concerning emotions, such as those of female "intuition" and excessive sensitivity, are particularly well-established in the Western social consciousness and contribute to the perception of women as irrational, unreliable, and in need of paternalistic oversight. The long traditional of female hysteria in medicine and psychiatry, beginning in 1900 BC in the Kahun Gynaecological Papyrus until its formal removal from the DSM in 1980, employed sex as

the basis for a host of—predominantly emotional—deviant female traits, including melancholy, erotic disturbances (including both too much or too little desire to engage sexually with men), female delirium, suicidal ideation, laziness, irritability, and an "unruly" social lifestyle (Tasca et al., 2012). Later Western academic thought has traditionally tended towards a dichotomous characterization of maleness and femaleness, wherein maleness is defined by reason and rationality, while femaleness is defined by emotionality and sensitivity (Fischer, 1993, p. 303). This dichotomy was further entrenched by the gradual rise of psychology and psychoanalysis in the early 20th-century. The Darwinian hierarchy of mental faculties was headed by reason and descended gradually from imagination to intuition to emotion, ending with instinct (Fischer, 1993, p. 304). Thus, women—being closer to nature—were distanced from intellect and considered more prone to emotionality as a result of their purported inferior brain development (Fischer, 1993, p. 304).

A 1975 study by Williams and Bennett asked college students ascribe a series of traits to men and women using the Adjective Check List, developed by Gough and Heilbrun (J. E. Williams & Bennett, 1975, p. 328). Adjectives highly associated with men included "logical", "rational", "realistic", "stable", "independent", and "unemotional" (J. E. Williams & Bennett, 1975, p. 330). Adjectives highly associated with women, on the other hand, included "fickle", "emotional", "weak", "sensitive", "complaining", "dependent", and "rattle brained", among others (J. E. Williams & Bennett, 1975, p. 331). Many of the sex stereotypes demonstrated in the 1975 study by Williams and Bennett persist decades later. In a 2019 study by Hentschel and colleagues composed of 629 participants, women were widely regarded by men as less "agentic"—the latter corresponded to traits such as competence, ability to separate feelings from ideas, logic, objectivity, decisiveness, conscientiousness, emotional stability, knowledgeability,

and reliability, among others (Hentschel et al., 2019, p. 8). Female participants, on the other hand, rated men and women as equally agentic (Hentschel et al., 2019, p. 8). Women were rated as more communal than men, which corresponded to traits such as emotionality, intuition, modesty, and sensitivity, among others (Hentschel et al., 2019, p. 9). A later study demonstrated that the characterization of "emotionality" is most often attributed to "extremity" in emotional reaction, which places emotionality in relationship with traits such as impulsivity, instability, and irrationality (Fischer, 1993, p. 305).

Despite suggesting that there has been some improvement, the study by Hentschel and colleagues demonstrates that, in general, historically persistent sex stereotypes prevail today. Research has demonstrated that women in the workplace continue to be perceived as illogical, emotional, and intuitive (Tabassum & Nayak, 2021). In light of the strong social expectations of women as being caregivers and emotionally sensitive by nature (Fischer, 1993, p. 305), more recent work on gender stereotypes suggests that "women's intuition" is in fact the product of behavioural confirmation (Tabassum & Nayak, 2021). Behavioural confirmation occurs when a perceiver treats a person in a way that aligns with their existing beliefs about the person, which triggers the person to adapt their behaviour to the perceiver's implicit beliefs, thereby confirming the perceiver's original beliefs (M. Chen & Bargh, 1997). Some research has even found that women do not exercise more intuition than male counterparts in the workplace, as women are more likely to engage in frequent analysis before making decisions (Tabassum & Nayak, 2021).

Finally, among the most well-established sex stereotypes is that of the inevitability of motherhood. Pronatalism can be defined as "the belief that a woman's worth is tied to conceiving and bearing children" (Parry, 2005, p. 133). Indeed, motherhood continues to be seen as the primary social role of women in North America, while women who cannot conceive are

portrayed in popular media as deficient, incomplete, or unfulfilled (Parry, 2005, p. 114). Research analyzing the language used to describe infertile women of childbearing age has revealed trends characterizing childlessness as "unnatural" and "pathological" (Ulrich & Weatherall, 2000, p. 324). Thus, insofar as motherhood is considered requisite for self-actualization, pronatalism reinforces dominant sociocultural beliefs that motherhood is necessary to womanhood (Ulrich & Weatherall, 2000, p. 324). In Aristotelian terms, motherhood is considered the *telos* of womanhood. As a consequence, researchers have demonstrated that childlessness is perceived as morally-coded, provoking disgust and moral outrage towards those who are childless on the part of those with children (Ekelund & Ask, 2021, p. 276).

The prevalence of sex stereotypes in both medicine and society at large creates fertile ground for the generation of epistemic injustice towards women across many social spaces, including within the institution of medicine. Stereotypes about women's inability to engage with reason and rationality have historically excluded women from spaces of knowledge production, thus creating the conditions for hermeneutical injustice to arise. Moreover, stereotypes of hysteria, emotionality, and unreliability which create prejudices regarding women's credibility produce the conditions for testimonial injustice. Accordingly, we can hypothesize that there will be not only epistemic injustice in healthcare spaces where women testify, but also the resulting secondary harms that have an impact on testimonial exchanges—in this case, the space of testimonial exchange is acute clinical care.

Physicians are no less likely than the general population to harbour implicit biases and identity prejudices which may subconsciously affect their attitudes and behaviour towards historically marginalized groups. Indeed, research has found that implicit biases may be aggravated by cognitive stressors, such as overcrowding and a higher patient-to-physician ratio

(Johnson, 2020), making acute clinical care settings potentially more likely to manifest epistemic injustice. Against this background of the overlapping social identity of "patient" and "female" borne by women in healthcare settings, I now turn to routine pregnancy testing as a case of epistemic injustice towards women in acute clinical care spaces.

1.4: Routine Pregnancy Testing

Human chorionic gonadotropin (hCG) tests were invented in 1927 by Aschheim and Zondek. Prior to the advent of hCG tests, pregnancy was only detected several months along following weight gain and fetal movements, referred to as "quickening". Still, the earliest hCG tests were inaccessible luxuries reserved for wealthy women and those with critical medical needs, as hCG detection required animal test subjects and at least one week to determine results. In 1972, Vaitukaitis, Braunstein, and Ross developed hCG pregnancy tests which took only minutes or hours and could detect pregnancy as early as two weeks following conception. These tests were highly accurate and hit the market soon after. They were available to be used at home by women wanting to determine pregnancy status without the intervention of a physician. Subsequently, as pregnancy testing became cheaper and more accessible, routine pregnancy testing in hospitals began to be recommended (Laubach & Wilchins, 1975). Among justifications given for the shift towards routine testing, perhaps the most common among healthcare professionals and researchers is that women are unreliable testifiers on matters of pregnancy status and risk (Clement et al., 2018, p. 61; Larcher, 2012, p. 857; Laubach & Wilchins, 1975, p. 691; Lippmann et al., 1988, p. 135; Malviya et al., 1996, p. 854; Manley et al., 1995, p. 693; Ramoska et al., 1989, p. 48; Strote & Chen, 2006, p. 554; Van Norman, 2010, p. 81; Wrenn & Slovis, 1991, p. 1146).

Today, routine pregnancy testing is often practiced in acute clinical care settings (Evans & Slovis, 2021, p. 368; Kempen, 1997, p. 547; Köksal et al., 2013, p. 177; Strote & Chen, 2006, p. 554; Wrenn & Slovis, 1991, p. 1146), especially in cases where the patient has presented to urgent care with abdominal pain and/or vaginal bleeding (Gilboy et al., 2020, p. 20; Hang, 2020, p. 8; Minnerop et al., 2011, p. 215; Ramoska et al., 1989, p. 88). In some cases, routine pregnancy testing is required by departmental policy irrespective of the pregnancy risk reported by the patient (Kempen, 1997, p. 547; Malviya et al., 1996, p. 854). Physicians report administering pregnancy tests to avoid missing ectopic pregnancies, to amend dishonest or unreliable patient reports (Clement et al., 2018, p. 61; Larcher, 2012, p. 857; Strote & Chen, 2006, p. 554; Van Norman, 2010, p. 81), and to protect the fetus from potential contraindications in treatment that would typically be ordered (Lippmann et al., 1988, p. 129; Powell-Bowns et al., 2015, p. 2850). Physicians and patients alike report making changes to the treatment plan upon detection of pregnancy, such as delaying treatment or ordering different medications (Kempen, 1997, p. 549; Manley et al., 1995, p. 690; Stengel et al., 1994, p. 699; Wrenn & Slovis, 1991, p. 1146). Indeed, many medications have never been tested on a cohort of pregnant subjects (Hantsch & Seger, 2003, p. 666). In 2011, Adam, Polifka, and Friedman reviewed FDA drug approvals from 2000 to 2010 and found that teratogenic risk in pregnancy was not determined in 97.7% of the approved drugs, while no pregnancy safety data was available for 73.3% of the drugs (Adam et al., 2011). With little or no data to inform prescription recommendations, it is unclear whether or not a pregnant patient can be safely treated with many medications. Accordingly, physicians report concerns about liability if a test is not ordered, and a pregnancy is later detected (Kahn et al., 2008, p. 182; Kempen, 1997, p. 547; Lippmann et al., 1988, p. 129).

Limited data has been collected on the relationship between women's self-reported pregnancy risk and pregnancy test results. However, the limited results available indicate that patients are likely adept at self-reporting relevant risk factors for pregnancy. Malviya and colleagues surveyed 444 female patients who underwent a total of 525 procedures in which patients presenting for 508 of those procedures confidently self-reported no risk factors for pregnancy (Malviya et al., 1996, p. 855). Pregnancy risk was determined by asking patients a series of detailed questions regarding menstrual cycle, contraception, and sexual history. Moreover, patients were questioned under conditions of total privacy "whenever possible" (Malviya et al., 1996, p. 855). The negative predictive value of patients self-reporting no risk of pregnancy was 100%, thereby demonstrating that patients may be able to self-report pregnancy risk with a high degree of accuracy.

Minnerop and colleagues recruited 377 female patients in the hospital emergency room in Suffolk County, New York to study self-reported pregnancy risk (Minnerop et al., 2011, p. 212). Participants were asked to complete a questionnaire of demographic and clinical items, such as the likelihood of pregnancy. The attending physician was simultaneously asked to estimate the likelihood of pregnancy based on risk factors reported by the patient. Of the patients stating that it was impossible for them to be pregnant, there was a negative predictive value of 100% (Minnerop et al., 2011, p. 214). Of the patients whom physicians assessed as having a low likelihood of being pregnant (on a scale of low, medium, and high), none were pregnant (Minnerop et al., 2011, p. 215).

Similarly, Strote and Chen surveyed 474 female patients for pregnancy risk, with a negative predictive value of 100% for those who reported not being sexually active (Strote & Chen, 2006, p. 555). In total, across all of the aforementioned studies, 1295 female patients were

surveyed and were accurately able to self-report their pregnancy risk. Strote and Chen concluded that patient reports and sexual history are reliable indicators of pregnancy risk, but due to the low cost of testing and high risk of missing a pregnancy, frequent testing is advisable (Strote & Chen, 2006). Stengel and colleagues further conclude that pregnancy risk can be accurately assessed in the emergency department using patient self-reports by asking questions about factors such as menstrual cycle, sexual history, and abdominal or pelvic complaints (Stengel et al., 1994, p. 699).

However, two earlier studies demonstrated higher rates of previously undetected pregnancy. In 1989, Ramoska and colleagues studied 208 patients, of whom 87 reported "no chance" that they could be pregnant, of which only 12 reported not being sexually active (Ramoska et al., 1989, p. 48). Among the 87 patients who reported no chance of pregnancy, 10 returned positive pregnancy tests, including one from a patient who had reported not being sexually active (Ramoska et al., 1989, p. 48). Ramoska and colleagues acknowledge that a potential limitation of the study is that a language barrier was noted in 6.7% of the patients studied. Moreover, it was not made clear whether conditions of patient confidentiality were strictly maintained throughout the study.

In 1995, Manley and colleagues studied 2056 women who presented for ambulatory surgery in a metropolitan teaching hospital. The authors reported previously unknown pregnancies in seven out of the 2056 women in the study cohort (Manley et al., 1995, p. 691). Of the seven, four were scheduled for gynaecologic surgery, of which two were undergoing in vitro fertilization and were activity trying to become pregnant (Manley et al., 1995, p. 691). It should be noted that Manley and colleagues were studying the rate of previously undetected pregnancy, rather than the accuracy of self-reports. As such, patients with a previously undetected pregnancy

such as those who accurately reported trying to become pregnant should be considered (1) accurate reporters, and (2) at risk of being pregnant from a medical point of view.

There are several potential explanations as to why the two earlier studies by Ramoska and Manley reported a lower negative predictive value among women reporting no likelihood of pregnancy. Strote and Chen propose that recent studies may have yielded a higher negative predictive value due to the greater accessibility of accurate sexual health education (Strote & Chen, 2006, p. 556). Another potential explanation may have to do with patient confidentiality. As noted by Van Norman, studies have yet to test the accuracy of self-reported pregnancy risk "in elective conditions when patient privacy is strictly protected" (Van Norman, 2010, p. 81). Indeed, Manley and colleagues note that "interview location restraints" and "embarrassment" are among factors impinging upon the accuracy of self-reports, which suggests that patients were not necessarily asked about pregnancy risk under conditions of privacy (Manley et al., 1995, p. 692). Finally, some patients who reported being sexually active also reported no risk of pregnancy. As such, despite providing a *reliable* account of risk factors, it appears that some patients may not have accurately assessed their level of risk as it pertains to pregnancy. Overall, existing studies have demonstrated a high degree of reliability of patient self-reported risk factors as it pertains to pregnancy.

1.5: Conclusion

This chapter has examined the major concepts and theories which will be applied throughout the following chapters. It has explored testimonial and hermeneutical injustice, power dynamics in healthcare, the epistemic context of the institution of medicine, major historically prevalent sex stereotypes, the justifications for routine pregnancy testing policies, and contemporary data on the relationship between self-reported pregnancy risk and pregnancy test

results. Looking at these topics together, several themes line up to create a context in which female patients are vulnerable to epistemic injustice. In particular, female patients appear to be vulnerable both by virtue of their position as women with regards to pernicious sex stereotypes and by virtue of their position as patients with regards to the dynamic of epistemic power in the patient-physician relationship. Accordingly, the discrepancy between the documented reliability of patients reporting pregnancy risk and the policies in place for pregnancy testing suggest that the practice of routine pregnancy testing may be epistemically unjust and morally problematic in other ways that negatively impact the health care experiences of female patients. The following chapter describes my empirical research—undertaken through a survey—which tests this hypothesis.

II

METHODOLOGY AND DATA

2.1: Study Design

A descriptive cross-sectional online research survey (Appendix A) was conducted from August 17, 2022 to September 29, 2022 to gather data on patients' experiences with pregnancy tests in acute clinical care. The survey was completely anonymous. The total number of responses collected was 326, of which 189 responses were complete and valid. Incomplete surveys and repeat submissions (e.g. responses containing identical answers submitted in sequence) were considered inadmissible. The study was promoted in both French and English on social media and through paid advertisements on Facebook. It took approximately 10 minutes for respondents to complete the survey.

The study was designed around the goal of answering two primary research questions: (1) how common is the experience of being administered a pregnancy test after reporting no risk of pregnancy in acute clinical care? And (2) how does this requirement affect the patient and their health care experience? The study was approved by the McGill University Research Ethics Board. All participants were required to read a consent form (Appendix B) and provide consent by clicking through the form to access the online survey.

2.2: Participants

The participant population included any French- or English-speaking people living in Canada or the United States who have been administered a pregnancy test in acute clinical care and are 18 years of age or older. Participants engaged in voluntary response sampling by clicking on the link to the study when found online (Appendix C). Snowball sampling was incorporated

as individuals and organizations shared the study on social media platforms. Organizations who shared the study include the Abortion Rights Coalition of Canada, Action Canada SHR, the Femmes du Monde Women's Centre, the Y des Femmes de Montreal (YWCA), Monthly Dignity, the SHORE Centre of Waterloo, the North Shore Women's Centre in BC, the CHEW project YEG, West Coast Leaf, the Sex Information and Education Council of Canada, Niagara Reproductive Justice, the Community Health and Social Medicine Incubator, the BC Women's Health Centre, the Ontario Native Women's Association, the Halifax Sexual Health Centre, Atira Women's Resource Society, l'R des Centres de femmes au Quebec, the Women's Health Coalition, Table des Groupes de Femmes de Montreal, Sexplique, and the Alberta Society for the Promotion of Sexual Health. Social media platforms on which the study was shared included Facebook, Instagram, Twitter, and LinkedIn. The study was also distributed in part through word-of-mouth.

Participants were incentivized using a prize draw for a $100.00 CAD digital Mastercard which was made available at the end of the survey. The prize draw was conducted through a second separate survey in order to preserve the anonymity of the responses.

2.3: Procedure

Participants were asked a series of 14 questions, including demographic questions about gender identity, sexual orientation, age, and ethnicity. The format of the questions included multiple choice options, drop-down menus, and freeform answer options, depending on the question. Participants were asked how many times they had completed a pregnancy test in an emergency care setting and in which country those tests were performed. Participants were asked if they had the opportunity to self-report risk factors, whether the tests were required or requested, and how many times they were administered a pregnancy test after reporting no risk.

The final four questions provided respondents with various opportunities to write about their personal experience through comments. Questions 11 through 13 targeted why the patient reported no risk, how they felt being asked to complete a pregnancy test after reporting no risk, and whether it affected their health care experience. The final question on the survey was an open-ended free text for respondents to include any other details about their health care experience that they would like to share.

The study sample was described using descriptive statistics. The data collection method and screening criteria were determined to be appropriate for reaching the target population, as the vast majority of North Americans use social media, with Facebook continuing to lead in popularity. Data were analyzed using Microsoft Excel.

2.4: Results

The majority of respondents (43.3%) were between the ages of 25 and 34, followed closely by respondents aged 35 to 44 (32.8%), then respondents aged 18 to 24 (17.4%) and respondents aged 45 to 54 (5.8%). There was one respondent over the age of 54. Of the 189 valid responses registered, 91% were cisgender women. The study also included eight non-binary people, three transgender men, and a two-spirit woman. Five respondents did not disclose their gender identity. The majority of respondents (65%) identified as heterosexual, followed by bisexual at 20.6% of respondents. A further eight respondents identified as lesbian, seven as asexual, four as pansexual, one as gay or homosexual, one as queer, and one as a gray asexual lesbian. Three respondents did not disclose sexuality.

The majority of respondents (72%) received pregnancy tests in Canada, followed by 24.9% in the United States. Three respondents received tests in both countries, one received a test in Russia, one received a test in Pakistan, and one did not disclose the country in which they

were administered a pregnancy test. Except for the respondent tested in Pakistan, all respondents who were tested outside of Canada and the United States did not report a negative health care experience. A total of 76% of respondents identified themselves as White or Caucasian. An additional ten respondents identified themselves as Black, nine as Indigenous, six as South Asian, six as Hispanic, four as East Asian, three as mixed, and two as Arab. Five respondents chose not to disclose their ethnicity.

A large majority of respondents (76.2%) reported having been administered a pregnancy test after reporting no risk of pregnancy. Of these respondents, five had prior hysterectomies, five had undergone other forms of sterilization, and three had been pronounced infertile by a medical professional. Moreover, 13 of the respondents who had been administered pregnancy tests reported never having engaged in sexual intercourse prior to the test. An additional 62 respondents reported not being sexually active for a period ranging from several months to several years, and 29 respondents reported engaging in sexual activity that was not associated with a risk of pregnancy, such as sexual activity between two cisgender women. One respondent was administered a pregnancy test after reporting that they had not been sexually active following a miscarriage three weeks prior.

The results revealed a strong relationship between being administered a pregnancy test after reporting no risk and having a negative health care experience. Of the 144 respondents who reported being administered a test after reporting no risk, 72.2% reported it negatively affecting their health care experience. This sample includes 98 respondents whose feedback contained negative keywords or negatively coded words when describing their health care experience, such as “disrespected”, “uncomfortable”, and “violated”. This figure also includes six respondents who reported feeling as though the test was a waste of time and/or money. Terms most

frequently used by respondents include “embarrassed”,[2] “untrustworthy”,[3] and “belittled”,[4] which can be understood as shame-related. Of the study respondents, 24 reported experiencing longer wait times and delays in treatment due to pregnancy testing, including respondent no. 84 who wrote: “My treatment was delayed until pregnancy test negative [sic] was confirmed. I did not return to those doctors that asked me for pregnancy tests despite telling them I had no risk.”

Importantly, of the respondents who reported being required to take a pregnancy test after reporting no risk, a minority (38 respondents) described conditions which do not, in fact, preclude pregnancy. These respondents reported either having regular periods, using birth control, or both in justification of their risk assessment. It is unclear whether or not the repondents who reported regular periods were sexually active, so it is not entirely clear what their risk profile would have been at the time of testing. Crucially, respondents who described conditions which could potentially carry a risk of pregnancy were significantly less likely than the overall group to report a negative impact on their health care experience. Less than half (42.1%) of the aforementioned respondents reported a negative impact on their health care experience as a result of the testing, compared to 72.2% percent in the overall group.

A particularly unexpected and troubling finding came as 18 respondents (9.5%) reported discovering that they had been administered pregnancy tests without their consent. Respondents reported discovering the pregnancy tests by various means, such as overhearing a staff member order the test, seeing a pregnancy test billed to insurance, or noticing a pregnancy test in bloodwork forms uploaded to an online medical client space. Respondent no. 53 reported, “[a]s a nurse and someone who has been tested, my experiences in my job and personally have been that

[2] Including synonyms such as: “shamed”, “awkward”, and “humiliated”.
[3] Including reports of not being or feeling trusted by the healthcare practitioner(s)
[4] Including synonyms such as: “juvenile”, “infantilizing”, and “degrading”.

the majority of the time the patient is not told that they are being tested, since blood work and urine need to be collected to test for so many other things". The respondent also reported, "[o]ften they don't tell you that they've tested for [pregnancy] unless you're positive or unless you have online access through the hospital to your test results". Non-consensual pregnancy testing appeared to be especially upsetting for respondents. Respondent no. 118 illustrates how this impacted her trust, writing: "It makes me less trusting of the doctor since they don't trust me. Even more so when they automatically run the test without even asking first". Meanwhile, respondent no. 293 wrote: "[I] wonder what other tests are run without actual consent".

Four major themes were identified through a qualitative analysis of the responses. These themes include trust, shifting health care priorities, silencing, and privacy.

2.4.1: Trust

Several respondents in my study reported the perception that patients are unreliable testifiers on matters of pregnancy risk. Out of 189 total respondents, 75 (39.6%) reported that their experience with pregnancy testing in acute clinical care was negatively associated with trust in the physician-patient dynamic,[5] and an additional three respondents reported believing that pregnancy testing was being conducted because patients might lie about risk. Respondents generally reported feeling that they were regarded as unreliable in that they were not believed, assumed to be lying, were not listened to, or were otherwise regarded as untrustworthy by the health care provider when providing testimony about pregnancy risk. Some respondents

[5] Issues of trust were counted in responses which included deliberate references to trust breakdowns (via terms such as untrustworthy, not believed, lying, judged, or violated), as well as reports that respondents avoided seeking health care in the future or avoided that particular institution or provider as a direct result of their experience with routine pregnancy testing. Also included are reports that the repondents were not being listened to or that they felt their claims did not receive uptake (e.g. feeling that their word "was not worth anything" or that they were not being "taken seriously"). These issues of trust may have occurred in both directions, such as the respondent not trusting the health care provider or the respondent feeling that they were not trusted by their health care provider.

explicitly connected this perception of unreliability to womanhood, with respondent no. 26 reporting that she felt as though “women are not trusted” in healthcare settings, while respondent no. 2 reported that “I felt like they were belittling my pain because I am a woman” when she was required to complete a pregnancy test while in significant pain, despite reporting no risk. Respondent no. 13 similarly wrote: “When women are not believed at a hospital, where will we be believed? I felt like I was not trust worthy [sic] by the hospital when I told them there was no way I was pregnant. I chose to go to a different hospital after the 3 rd [sic] time.”

Some respondents reported that their trust in the physician or in the health care system was impacted by their experience with routine pregnacy testing. Respondent no. 22 expressed that being required to take a pregnancy test despite having never engaged in sexual activity impacted her trust in physicians on a long-term basis, writing: “It made me a bit weary of doctors and how they treat the information I provide them. I feel like I might not be getting the best care based on how they perceive me and what I tell them.” Similarly, respondent no. 118 wrote: “It makes me less trusting of the doctor since they don't trust me”, which was echoed later by participant no. 147, who said: “if they don't trust me then why should I trust them”. Respondent no. 50 wrote: “I didn t [sic] trust the doctors anymore. I felt that they were either prejudiced, like a brown immigrant does not know how babies are made, or is dumb, or that because I am French, I must be promiscuous. Lastly, I felt like my word doesn't count. My symptoms don't matter, my words have no values, just the prejudiced [sic] of doctors.no investigation was made about my serious symptoms”.

Among those who reported developing a distrust in the medical system as a result of mandatory pregnancy testing, several reported avoiding seeking health care. Respondent no. 130 explained: “For several years I was far less trusting of our local hospitals emergency room and

tried to avoid it whenever I could", while respondent no. 143 wrote: "I refuse to go to an ER now unless I'm on the verge of dying". The fallout of being disbelieved and required to undergo frivolous testing appears to have a long-term impact on many patients required to undergo routine pregnancy testing after reporting no risk. As respondent no. 301 described their experience: "Honestly it's the thing that sticks with me the most about that ER visit even years later".

2.4.2: Shifting Health Care Priorities

The study contains responses from 15 respondents who indicated that the pressure to undergo pregnancy testing superseded the medical concerns for which they were seeking care, even among those who reported no possible chance of pregnancy. Respondent no. 41 elucidates this phenomenon, writing: "the focus of my visit became more about the risks of treatment if I was pregnant. Not that at this point, there had been any decision about what course of treatment to take since the exam came to a stop once I started asking why I had to do a pregnancy test". Speaking to the fixation on pregnancy, respondent no. 315 wrote: "I felt as though my actual problem was not likely to be found and that the only thing that mattered to the doctors was my reproductive status." Respondent 315 went on to say: "The Doctor was condescending. The next day she came in, after I had been on pain meds [sic] for abdominal pain all night and said "well, you still aren't pregnant." I had no trust in my medical care and believed the doctor only wanted to prove me wrong the whole time. They never did find the problem. To this day, despite being in a different sector of medicine, I believe that when women enter a medical clinic, they are not a patient with needs of their own. They are reduced to their reproductive status. I'd like to think that there are doctors that see the person, but I have yet to build trust in such a doctor".

Crucially, respondent no. 83 wrote that "They ended up doing the pregnancy test, telling me I wasn't pregnant and sent me home with no help for what I was there for […] [t]he doctor was so focused on pregnancy and miscarriage that they didn't even look for other answers"—an experience which was reported by several other respondents. Among these respondents was respondent no. 120 who reported no sexual activity in over a year. Respondent no. 120 wrote: "the doctor assumed I was pregnant and wouldn't look any further into why I had sought out medical care. They never found out the reason why I was in pain, severely bloated and had fluid in my abdomen". Respondent no. 130 offered a detailed account of her experience with the way in which pregnancy testing became a focus of her medical visit:

> I went to the emergency after a 3 day long migraine and after I was encouraged to do so by TeleHealth Ontario as it seemed to effect [sic] my vision. When I explained my symptoms to the doctor and had personally ruled out pregnancy based on my own lived experience, I was told that we had to rule out pregnancy on their terms. I did not see the point of a pregnancy test - they were not providing me any medication nor was I was going for an x-ray or MRI. They shared that based in [sic] my age and because I was a university student, that I was probably pregnant. I did not appreciate this as a requirement for my severe pain to be taken seriously. I still think of how I was treated to this day. Its [sic] very distressing to recall and even to think of how many other women have had to go through this. I ended up leaving the consultation with a negative pregnancy test and no help for my severe migraine. It was defeating.

Respondent no. 36 wrote: “I often feel that they do pregnancy tests no matter what I have come in for”, adding that she felt that the pregnancy test was unnecessary but did not feel that she was able to bring it up, noting that it felt like staff were searching for a “woman’s issue” to explain her symptoms. Finally, respondent no. 120 explained that it “felt like the possibility of pregnancy overshadowed the real reason I went to the emergency room”, which she described as impacting her trust.

In other cases, respondents were refused treatments or services if they did not provide a pregnancy test, thereby creating coercive conditions of testing. On this, respondent no. 96 who wrote: “[I] refused to do a [pregnancy] test once and they [the health care providers] refused to do additional testing on me because of it”, while respondent no. 99 who wrote: “I was not sexually active but still was required to have a [pregnancy] test before I could receive a medical test”. Respondent no. 141 similarly recalled: “I told the doctor that I wasn't pregnant and still had to take a pregnancy test to get a x-ray done.” Similarly, respondent no. 67 reported that they were refused a sick note unless they took a pregnancy test.

2.4.3: Silencing

Several respondents described feeling unable to explain or defend themselves under the pressure of health care practitioners requesting a pregnancy test. In some cases, it is only after repeated experiences with mandatory pregnancy testing that respondents stopped trying to reiterate that they do not need the test. Respondent no. 90 described being required to take a pregnancy test even after reporting six months of celibacy. She explained: “[I] was not happy but went along with it anyway […] so I could get looked after”.

Respondent no. 36 explained that in past emergency room visits, she would make an effort to tell the staff that the tests were not needed, but was usually told that she would be asked

to take a test "just in case". Recounting a recent experience with routine pregnancy testing, the respondent said: "I felt it [the pregnancy test] was unnecessary but decided it wasn't worth bringing it up"—a sentiment which was later echoed by respondent no. 115. Respondent no. 148 also stated that "I was young and didn't say anything at the time. It was distressing and worrying to me. My answer should have been enough".

2.4.4: Privacy

In addition to non-consensual pregnancy testing, several other major issues of privacy arose from the data. Respondent no. 23 wrote: "I felt like they didn't believe me and thought I was lying because I was a minor and had been brought in by my mom and therefore wasn't answering their questions honestly", while respondent no. 301 stated the following:

> The nurse asked me in the waiting room in front of my mom if they needed to have me take a pregnancy test before x-raying my knee and I said no. The nurse didn't believe me and had me take a test anyways. My mom told me after I should have taken the nurse aside and confirmed I wasn't just saying I wasn't at risk because my mom was there. […] I also felt pretty embarrassed talking out in the open. It felt wrong because they didn't offer me any privacy from the rest of the ER or my mom.

Others felt uncomfortable that they were asked about pregnancy risk in front of family members, with respondent no. 33 explaining that she "had to tell my doctor I was sexually active in front of my mom", while respondent no. 51 recounted that "[o]nce it was in front of my mother, brother and godmother. The staff was very rude about it and quite tactless and I was mortified having to talk about it in front of my family and then wait for the results with everyone knowing we were

waiting. It was horrible. I'm a lawyer now and I can say I was not given the option to consent to the tests, I was told they were required. It's very demeaning to be asked if you could be pregnant, you explain how you're sure you're not, and they make you take the test anyway". Meanwhile, respondent no. 5 wrote: "They did not ask me anything about pregnancy risks but did one with the blood tests without asking or telling me about it, and then told my father I wasn't pregnant before even telling me".

Others described broader concerns about the location and manner in which results were disclosed. Respondent no. 3 wrote: "I know they had to screen me and ask questions about the risk, but it was still uncomfortable talking about it in an area where people nearby could hear. The nature of the questioning is intimate and knowing someone not involved in my care could possibly overhear made me feel very vulnerable". Respondent no. 120 similarly described feeling embarrassed when the attending physician "announced in front of the entire emergency room […] including my mother" the results of her pregnancy test.

2.5: Limitations

This study cannot be considered fully representative as the sample size is too small to adequately represent all people in Canada and the United States who have been asked to complete a pregnancy test in an acute clinical care setting. Moreover, due to the emotionally charged nature of negative health care experiences, including those expressed by participants in this study, there is a possibility for non-response bias, as patients who had positive or neutral experiences with pregnancy testing may be less motivated to complete the questionnaire when compared to patients who were more profoundly impacted by their experience(s).

Of the respondents who reported being administered a pregnancy test after reporting no risk of pregnancy, 38 described circumstances which potentially carried a risk of pregnancy. In

some cases, the responses suggested that the respondents were sexually active with a sperm-producing partner, in which case they may not belong in the no-risk category regardless of menstrual history or use of contraceptives. Two limitations arose as a result of this subgroup. First, this subgroup tended to be more receptive to pregnancy testing, and thus reported significantly better overall health care experiences when compared to the broader group, which skewed study results. This also suggests a limitation of the online-study format, as it prevents additional clarificatory questions from being asked. Had clarificatory questions been asked, a clearer picture of the respondents' risk profiles could have been ascertained.

While gathering data on non-consensual pregnancy testing was not a goal of this study, the 18 unprompted reports of non-consensual pregnancy testing constitute valuable indications of potential problems with the handling of pregnancy test data. However, this data cannot be considered representative, as the survey did not prompt respondents to disclose non-consensual pregnancy tests. Furthermore, due to the nature of non-consensual testing, it is likely that more non-consensual pregnancy tests were conducted but never discovered by the patients.

Finally, although many efforts were made to ensure a representative group of respondents, 76% of respondents identified their race as White or Caucasian. The lack of diversity among respondents presents a limitation to this study. As anecdotal evidence and various sources have reported broad health care inequities among women of colour when compared to men and White people, ensuring a diverse group of respondents will be critical to future research on the topic of routine pregnancy testing. Nevertheless, data collected in this study successfully provide early indicators that problematic pregnancy testing practices indeed exist in acute clinical care and warrant further research.

III

ANALYSIS

3.1: Epistemic Injustice and Sex Stereotypes in Healthcare

Chapter I outlined the history of several dominant sex stereotypes about women, including perceptions of women as hysterical, emotional, and irrational. These stereotypes both generate the identity prejudices that are responsible for testimonial injustice and contribute to the unjust nature and distribution of hermeneutical resources which give rise to hermeneutical injustice. Over time, such stereotypes have been imbued with a sense of legitimacy in medical hermeneutical resources owing to their place in medical practice throughout history—especially during the rise of psychology in the 20th century. It seems necessary to ask: to what degree (if at all) do these sex stereotypes manifest in modern medicine, and how might they affect decisions related to routine pregnancy testing? In this chapter, I argue that such prejudices—and therefore epistemic injustices—are inherent to the practice of routine pregnancy testing. This has the effect of promoting secondary harms of epistemic injustice, including self-silencing, distrust, and communication breakdowns. Given these ethical and epistemic harms, I assess whether or not routine pregnancy testing may still be justified in terms of its practical benefits in section 3.4. To make this assessment, I provide a practical cost-benefit analysis of testing, in which I ultimately find that routine pregnancy testing cannot be justified in practical terms either.

3.1.1: Stereotypes of Emotionality and Unreliability

A wealth of research has been conducted exploring gender bias in medicine and the differential treatment of female and male patients. In tuberculosis research conducted by Karim and colleagues, it was revealed that female patients not only experience substantial delays in

diagnosis when compared to male patients, but they also experience longer delays in treatment (Karim et al., 2007). Research by Jovani and colleagues corroborates these findings in their study on spondyloarthritis diagnosis, showing that female patients experience a significantly higher diagnostic delay compared to male patients, with 11.1% versus 30.2% receiving a correct first diagnosis, respectively (Jovani et al., 2018). Several studies on coronary artery disease have further demonstrated strong evidence of gender bias, finding that male patients are treated more extensively compared to female patients, despite comparable reports of disease severity (Chang et al., 2007; Daly et al., 2006; Redberg, 2005). Similar disparities were detected in research concerning the treatment of Parkinson's disease (Hariz & Hariz, 2000).

Authors such as Hamberg argue that delays and differential treatment can be attributed in part to the long history of interpreting women's health care needs as psychosomatic or psychogenic in nature (Hamberg, 2008). Physicians are significantly more likely to attribute psychosomatic causes to symptoms presented by female patients compared to male patients, even where the symptoms reported are identical (Bernstein & Kane, 1981). Consequently, as revealed in a 2009 study by Maserejian and colleagues, where female and male patients presented with identical symptoms of coronary heart disease, female patients were twice as likely to receive a mental health diagnosis (Maserejian et al., 2009). Moreover, female patients are judged to be more emotional overall than male patients (Colameco et al., 1983). The tendency to view women as more emotional and to treat women's complaints by appeal to inherent emotionality reflects the lasting legacy of Western sex stereotypes, though perhaps this is now more implicit than in earlier medical practices.

Pain research in particular has served as a fertile ground for exploring gender bias in medical treatment. Research conducted by Jovani and colleagues explored diagnostic trends in

female and male patients with spondylarthritis, a form of arthritis predominantly affecting the spine. The study found that physicians were less likely to record reports of pain by female patients, compared to male patients (Jovani et al., 2018). Moreover, a 2008 study by Chen and colleagues demonstrated that female patients wait longer for pain treatment, with one study reporting that female patients waited an average of 16 minutes longer than male patients for analgesic treatment in the emergency department (E. H. Chen et al., 2008, p. 417). In a 2022 publication, Banco and colleagues further found that female patients presenting to acute clinical care with chest pain were less likely to be admitted, waited 29% longer for care, and were less likely to be categorized as emergent in triage when compared to male patients (Banco et al., 2022). Similarly, male patients have been found to be more likely to receive opioid pain treatments despite reporting similar or identical levels of pain (E. H. Chen et al., 2008, p. 417). In some cases, female patients are simply prescribed less pain medication overall (Faherty & Grier, 1984). Additionally, some research has indicated that female patients are substantially more likely to receive sedatives instead of pain medication when compared to male patients (Calderone, 1990).

The effects of implicit bias on assessments of pain appear to be aggravated further by racial discrimination, with several studies demonstrating that people of colour—especially Black and Hispanic people—are undertreated for pain (Bernabei et al., 1998; Bonham, 2001; Drwecki et al., 2011; C. R. Green et al., 2003; Ng, Dimsdale, Shragg, et al., 1996; Ng, Dimsdale, Rollnik, et al., 1996). A study by Cleeland and colleagues in 1997 found that racialized patients were less likely than White patients to receive the recommended analgesic prescriptions according to WHO guidelines (Cleeland et al., 1997). Accordingly, research has found that physicians underestimate the pain levels of Black patients when compared to White patients (Staton et al.,

2007), or even believe that Black patients feel less pain altogether (Trawalter et al., 2012). Consequently, women of colour are vulnerable to pain bias in healthcare both as women and as people of colour. Indeed, Black women in particular are often stereotyped as having a naturally higher pain tolerance (T. L. Green et al., 2021, p. 936).

There is also a higher rate of caesarean section surgeries among Black and Hispanic women when compared to White women—a surgery which is associated with several leading complications in maternal mortality (Saluja & Bryant, 2021, p. 271). The risk of maternal mortality is between three and four times higher for Black women when compared to White women in the United States (Mahomes, 2020; Petersen, 2019), despite Black and White women being equally likely to suffer complications (Mahomes, 2020, p. 19). Black and Hispanic women are also less likely than White women to receive opioids postpartum, whether inpatient or outpatient, after controlling for the levels of pain reported (Badreldin et al., 2019).

Researchers have argued that one reason—among many—for the under-treatment of female pain is the belief that women are not "accurate reporters" (Hoffmann & Tarzian, 2001, p. 13). A study involving hospital nurses administering analgesic found that patients who reported higher levels of pain were (falsely) expected to also show elevated vital signs and different behaviours than patients who reported lower levels of pain (McCaffery & Ferrell, 1992). Indeed, Hoffman and Tarzian explain that "[t]he subjective nature of pain requires health-care providers to view the patient as a credible reporter" in order to effectively treat their health care needs (Hoffmann & Tarzian, 2001, p. 20). These practices of evidencing testimony are epistemically problematic, according to Carel and Kidd, who explain that reliance on objective means of measurement in healthcare over subjective measures or patient reports favours an epistemically privileged means of gathering information, which in turn promotes epistemic injustice in

healthcare settings (Carel & Kidd, 2014, p. 529). This epistemic privilege has three composite factors: first, the physician is epistemically privileged by virtue of their authority to establish and enforce the criteria for epistemic exchange (Carel & Kidd, 2014, p. 535). Second, healthcare practitioners are epistemically privileged in the context of the medical institution due to their position of authority in epistemic exchanges, whereby they enforce the rules of testimonial exchange and standards of credibility (Carel & Kidd, 2014, p. 536). Finally, healthcare professionals are epistemically privileged in that they act as arbiters in treatment by determining what constitutes evidence, when sufficient evidence has been obtained, and when an issue is resolved or otherwise settled (Carel & Kidd, 2014, p. 536).

Routine pregnancy testing is perhaps the quintessential case for exploring the type of bias described by Carel and Kidd: that which favours the measures defined by the medical institution, particularly objective measures, over subjective reports. Clement and colleagues assert that "[b]y questioning the patient regarding the possibility of pregnancy (as per guidelines), the process is entirely subjective, whereas objective evidence of pregnancy status would be much more accurate" (Clement et al., 2018, p. 61). Indeed, reflecting sex stereotypes and institutional medical bias simultaneously, the most prominent motivator for routine pregnancy testing in the literature is doubt about the reliability of women's self-reports (Köksal et al., 2013, p. 177, 2013, p. 177; Larcher, 2012, p. 857; Laubach & Wilchins, 1975, p. 691; Malviya et al., 1996, p. 855; Manley et al., 1995, p. 693; Ramoska et al., 1989, p. 48; Strote & Chen, 2006, p. 554; Van Norman, 2010, p. 82; Wrenn & Slovis, 1991, p. 1146)—that is, the concern that female patients "will provide erroneous information" about pregnancy status and/or risk (Lippmann et al., 1988, p. 135). Wrenn and Slovis assert that, "[b]ecause the reproductive, contraceptive, and menstrual histories of patients in their child-bearing years are unreliable, it is necessary to consider

obtaining a pregnancy test in every patient who has a functioning uterus"; otherwise it becomes too challenging to treat most of their urgent care needs (Wrenn & Slovis, 1991, p. 1146). Many sources purport that women will deliberately lie about pregnancy status when questioned by medical professionals, thus necessitating routine testing for all women of childbearing age (Laubach & Wilchins, 1975, p. 691; Lippmann et al., 1988, p. 135; Malviya et al., 1996, p. 854; Manley et al., 1995, p. 693; Van Norman, 2010, p. 81).

The distrust in patients used to justify routine pregnancy testing appears to trickle down into the patient health care experience, as indicated in the data from Chapter II, producing an impactful sense of distrust operating in both directions. That is, patients report being personally negatively impacted when treated as objects of suspicion in healthcare environments, and they also feel in turn that they cannot trust the health care provider who dismisses them as unreliable. Moreover, it ought to raise substantial concern that some respondents identified this breakdown in trust and communication as gendered, thereby marginalizing them on an identity-power axis.

Given the many existing relational, diagnostic, and treatment consequences of the perceived unreliability of female patients explored at the outset of this section, it is highly plausible that pregnancy testing may constitute yet another case of epistemic injustice towards female patients. The evidence suggests not only that medical institutions defer to objective data in a way that may be epistemically unjust, but also that female patients in particular suffer the consequences of this evaluative bias. Indeed, where subjective data such as patient testimony is not accepted as valid data in diagnostic evaluation, or is otherwise unjustifiably considered unreliable, patients are subjected to a form of testimonial injustice by being assigned deflated credibility in their position as patients. As noted, female patients are uniquely vulnerable to this phenomenon in a way that is distinct from male patients, suggesting that identity prejudice plays

a role in the credibility deficit described. Moreover, the exclusion or devaluation of such testimonies prevents those patients from contributing their medical phenomenology to the space of shared hermeneutical resources in a way that is meaningful. Accordingly, the epistemic standards used in the evaluation of pregnancy risk appear to be not only epistemically and ethically problematic, but the evidence also suggests that these standards may negatively impact diagnostic evaluation and treatment in the practical sense.

3.1.2: Pronatalism

In the previous section, I argued that stereotypes about women's reliability are likely to manifest in identity prejudice and epistemic injustice in healthcare settings. This can be seen in the deflated credibility accorded to female patients' reports of pain and in the bias favoring objective data on pregnancy risk over subjective reports. These phenomena give rise to both testimonial injustice in the interpersonal interaction, and hermeneutical injustice in the structural sense.

I now turn to how other sex stereotypes may affect judgements concerning the necessity of pregnancy tests in acute clinical care settings in particular. Reliance on routine pregnancy testing over self-reports could appear anomalous in the context of acute clinical care because patients' self-reports are typically trusted in other instances. To illustrate, consider the many cases in which patient reports are typically trusted in acute clinical care settings. For example, health care providers frequently rely on patient self-reports concerning allergies to medications such as penicillin prior to administering treatment despite the fact that an allergic reaction carries significant health risks (Marwood et al., 2017). Patients' self-reported weight is trusted before administering general anesthetic, which risks causing complications if weight is inaccurately reported. In an emergency, patients' self-reported medical history will be taken at face-value,

used to inform health care providers on everything from current medications to a history of seizures (Kehoe et al., 1994).

So why treat pregnancy risk any differently than other types of patient self-reports? In other words, what makes this risk unique? One possible explanation, among many explored in this thesis, is due to socially engrained expectations of motherhood which pervade the clinical interaction. The expectation that motherhood is an inevitability for most women may contribute to the perception that routine pregnancy testing policies are justified. The so-called inevitability of motherhood is a norm that is present in Western cultures (and beyond) to which all members of society are exposed, in what has been termed "implicit pronatalism" (Budds et al., 2013, p. 133). In a 2017 systemic review of implicit bias research, FitzGerald and Hurst analysed 42 articles testing bias among healthcare practitioners. The review found that healthcare practitioners were equally susceptible to implicit bias when assessed against the general population and highlighted the need to address implicit bias in practice (FitzGerald & Hurst, 2017, p. 14). Indeed, pronatalism is but one of many biases which will be relevant when analysing routine pregnancy testing policies.

Implicit pronatalism appears to manifest as a fixation on pregnancy in diagnostic evaluation, as was reported by 15 study respondents who felt that pursuing pregnancy testing superseded their own medical concerns when seeking health care. Patients who reported being denied services, such as treatments or a sick note, unless they completed a mandatory pregnancy test are being treated not for their primary health care needs but for assumptions about their reproductive status or potential reproductive status. Recall respondent no. 315 who, after having her own experience with mandatory pregnancy testing, wrote: "To this day, despite being in a

different sector of medicine, I believe that when women enter a medical clinic, they are not a patient with needs of their own. They are reduced to their reproductive status".

Respondents consistently described feeling as though the expectation that they might be pregnant took precedent over their health care needs and precluded efforts to treat them or search for the true underlying cause of their maladies. In these reports, the respondents have become so accustomed to their medical queries being superseded by pregnancy testing that they have become disempowered and distrusting, allowing testing to take place even when they know that it does not respond to or address their medical needs accurately. Indeed, the literature appears to support these concerns. Hantsch and Seger write that "*[r]egardless of the chief complaint,* the possibility of pregnancy must be considered in every woman of reproductive age who presents to the ED" (Hantsch & Seger, 2003, p. 664, italics added), while Ramoska and colleagues write that "[t]he diagnosis of pregnancy and its complications is of the *utmost importance* in the emergency department evaluation of any woman of child-bearing age" (Ramoska et al., 1989, p. 48, emphasis added). Curiously, Wrenn and Slovis write that "[i]t is difficult to treat most complaints of reproductive-age women if their pregnancy status is unknown" (Wrenn & Slovis, 1991, p. 1146).

3.1.3: Stereotypes of Female Intuition

Given the prevalence of sex stereotypes such as "female intuition", as explored in Chapter I, consideration is owed to whether sex stereotypes contribute to expectations vis-à-vis patients' own abilities to discern pregnancy status. So-called female intuition and motherly instinct are commonly invoked by laypeople to explain everything from pregnancy predictions to health care decisions. Preoccupation with the accuracy of self-reported pregnancy risk implies an expectation of intuitive capacity for self-assessment when using questions such as "is there a

chance you could be pregnant?" or scaled pregnancy risk questionnaires. Where normally healthcare practitioners rely on risk factors and trained expert assessment, when evaluating pregnancy risk, patients across several studies were expected to rely on their own capacity for medical self-assessment with questions such as "could you be pregnant?" or "is there a chance you might be pregnant?" (Bastian & Piscitelli, 1997, p. 589; Minnerop et al., 2011, p. 212; Ramoska et al., 1989, p. 48; Strote & Chen, 2006, p. 554). Insofar as female intuition is a false sex stereotype, such questions place the onus on patients to exercise medical assessment skills, rather than on the attending healthcare practitioner. It is plausible to suspect that this expectation reduces the accuracy of responses. Indeed, across several studies, patients most accurately reported factors for pregnancy risk when asked specific questions about sexual history compared to indeterminate questions about pregnancy risk, even in studies where both types of questions were asked (Ramoska et al., 1989, p. 49; Stengel et al., 1994, p. 699; Strote & Chen, 2006, p. 555).

It is difficult to imagine assessing other types of medical risk using similarly non-specific questions. For instance, consider the case of a patient who consults their family physician over a developing cough and fever. Vague questions such as, "how likely it that you have a cold?" or "is there a chance you could have the flu?" are unlikely to yield accurate data for the purposes of medical assessment. Some risky behaviors, such as sharing drinks at a social event, might not register as risk factors in the minds of patients. A physician is more likely to gather accurate data by asking specific questions, such as "have you been around anyone who has been sick in the last week?", during diagnostic assessment. Moreover, symptoms which may help differentiate a cold from a flu, pneumonia, or COVID-19 may not be reported by a patient who lacks the requisite educational background to draw fine distinctions between similar illnesses. While patients can

reasonably be expected to be familiar with the general risks and symptoms of common conditions, the physician's role rests on her authority as an educated medical professional to provide diagnostic assessments and treatment suggestions. As such, evidence suggests that pregnancy assessments may often be conducted with higher standards for self-assessment and patient instinct than other medical assessments, potentially owing to culturally prevalent stereotypes of women as highly intuitive by nature.

Section 3.1 has considered the ways in which sex stereotypes may impact the patient-physician interaction in healthcare settings. Specifically, this section has considered how stereotypes of emotionality, unreliability, motherhood, and female intuition operate or may operate in medical spaces, including their impact on various stages of health care, such as diagnostic evaluation, communication, treatment, and diagnosis, particularly in acute clinical care settings. In the following sections, I will consider more precisely how this differential treatment impacts the epistemic space of the patient-physician relationships and the resulting interactions.

3.2: Epistemic Violence

In her 2011 article, "Tracking Epistemic Violence, Tracking Practices of Silencing", Kristie Dotson offers a mechanism for identifying silencing as a form of epistemic violence. To understand epistemic violence, we take it to be a fact that speakers have a relationship of dependency with their audience, wherein a successful act of communication is contingent upon the audience being both willing and capable of receiving the communication (Dotson, 2011, p. 238). Epistemic violence occurs where entire groups of people are routinely denied the reciprocity necessary for successful testimonial exchange due to "pernicious ignorance" on the

part of the audience (Dotson, 2011, p. 238). Groups that are socially marginalized are more vulnerable to this denial of reciprocity in testimonial exchange.

Dotson identifies two forms of epistemic violence related to silencing, which we have already reviewed briefly: testimonial quieting and testimonial smothering. To recapitulate, testimonial quieting occurs when the audience fails to recognize the speaker as a knower, thereby preventing effective uptake of her testimony (Dotson, 2011, p. 242). In cases of testimonial smothering, the speaker perceives her audience as unable or unwilling to accept her speech as valid testimony, prompting the speaker to truncate her testimony or forgo it altogether (Dotson, 2011, p. 244). I have already examined the ways in which women are not perceived as knowers when they self-report pregnancy risk in acute clinical care settings, suggesting that testimonial quieting is taking place. The data also indicates that women suffer testimonial smothering in this context, as will be explored in depth presently.

Dotson's notion of testimonial smothering occurs in exchanges which are particularly socially and epistemically loaded, namely where (1) there is a risky quality to the testimony, (2) the audience has demonstrated "testimonial incompetence", and (3) the testimonial incompetence can be characterized or appears to be characterized by pernicious ignorance (Dotson, 2011, p. 244). Indeed, reporting on pregnancy status has many risky qualities for patients which were reflected in the data presented in Chapter II, fulfilling Dotson's first criterion. These risky qualities include, but are not limited to, concerns about privacy, insufficient protections for reproductive rights either locally or nationally, and fear of ongoing opposition or reluctance to accept testimony on the part of the health care provider, which have been shown to result in feelings of shame and degradation.

Dotson's second criterion, testimonial incompetence, refers to "the failure of an audience to demonstrate to the speaker that she/he will find proffered testimony accurately intelligible" (Dotson, 2011, p. 245). The data so far explored is consistent with the suggestion that pregnancy testing is often conducted where there is underlying testimonial incompetence—rejection of patient self-reports is, after all, embedded in the very nature of routine testing policies. Given the prevalence of false claims that female patients will deliberately lie about pregnancy risk (Laubach & Wilchins, 1975, p. 691; Lippmann et al., 1988, p. 135; Malviya et al., 1996, p. 854; Manley et al., 1995, p. 693; Van Norman, 2010, p. 81), it can also be concluded that there is a pernicious ignorance (Dotson's third criterion) present in the adoption of routine testing policies and in the perception of many healthcare professionals regarding this particular form of testimony.

Dotson would also likely place this ignorance within the realm of "situated ignorance", which "follows from one's social position and/or epistemic location with respect to some domain of knowledge" (Dotson, 2011, p. 248). In the case of routine pregnancy testing, the domain of medical knowledge and its associated expectations vis-à-vis pregnancy testing compete with the domain of experiential knowledge held by patients. Ultimately, the epistemic privilege of the healthcare practitioner can act to override the testimony of the patient in such competing circumstances, leading to a sort of situated ignorance. As Carel and Kidd explain, healthcare practitioners enjoy several forms of overlapping epistemic privilege by virtue of their training, the authority of the healthcare establishment, and the privileged style of articulating testimony (Carel & Kidd, 2014, p. 529). Indeed, healthcare practitioners and institutional actors are figures of authority in establishing and enforcing the standards of testimonial exchange in healthcare settings (Carel & Kidd, 2014, p. 535). This authority also comprises the authority to include

groups in or preclude groups from involvement in determining epistemic standards and credibility (Carel & Kidd, 2014, p. 536). Finally, in situations of competing testimony, healthcare practitioners have the power of decision—that is, the authority to determine such factors as the point at which the evidence presented is sufficient, the nature of the evidence necessary, and the ultimate endpoint of a given healthcare issue (Carel & Kidd, 2014, p. 356).

Dotson's three conditions are reflected through the data in Chapter II, and indeed, several respondents describe both testimonial silencing and smothering quite clearly. Recalling data from respondents no. 90, 36, 115, and 148, testimonial smothering is evidenced by the respondents' decisions to self-silence in response to the practitioner's unwillingness or inability to receive her knowledge as valid. Moreover, it appears that being repeatedly required to complete pregnancy tests as a matter of routine—regardless of the health care needs or possible risks articulated by the respondent—has caused the respondents to stop resisting the testing, even though they find it unnecessary. These cases provide further evidence of testimonial smothering, although they may have involved testimonial quieting as well if the patient had explicitly reported lifestyle or health factors which excluded pregnancy risk.

Crucially, the requirement to complete a pregnancy test for a patient who is celibate is a requirement rooted in ignorance, and showcases the flaws associated with applying pregnancy testing policies too broadly. Based on past experiences, the respondents have acquired the sense that their testimony will not be taken up as legitimate, and furthermore, if they speak up, they will begin an epistemic struggle with the health care provider(s) to justify the claim that they do not need a pregnancy test. Accordingly, they have begun to self-silence in interactions where they are required to take a pregnancy test that they do not need.

Interestingly, respondent no. 36 connected these experiences to identity prejudicial ignorance, saying that "[d]octors don't seem to care much about women with Heath [sic] issues. They care more about an easy diagnosis of "a woman's issue".". The ignorance pervading this case can thus be categorized as a pernicious form of ignorance, not only for the practical impacts that it may have on the respondent's health care (such as a delay in treatment caused by ordering the pregnancy test), but also because it has marginalized the respondent. The respondent has become sensitive to the ways in which her sex places her at a disadvantage because of how her sex is understood in the healthcare context.

Respondent no. 148 stated, while she did not say anything at the time, she felt that her testimony should have been accepted. This situation is similar to that of the other respondents, wherein the respondents anticipated an epistemic struggle with the attending staff, and so ultimately self-silenced instead. As a result, respondent no. 148 reported that it negatively affected her health care experience because "[i]t caused [her] extra worry and anxiety that wasn't present before".

In all of these cases, the respondents felt disempowered in their ability to offer testimony—in some cases, this was the result of a clear failure on the part of the healthcare practitioner to recognize the respondent as a knower who is capable of providing valid knowledge about health and risk status. As a consequence, all of the respondents discussed in this section eventually began to self-silence. Further, the lasting sense of being considered unreliable has impacted future testimonial exchanges with physicians. In the next section, I will consider how these types of interactions can have a long-term impact on patient trust.

3.3: Trust and Secondary Harms of Epistemic Injustice

It may well be said that the matter of trust lies at the crux of routine pregnancy testing. Claims that patients lie or are otherwise unreliable on matters concerning pregnancy status abound in the medical literature and dominate the discussion on routine pregnancy testing (Clement et al., 2018, p. 61; Larcher, 2012, p. 857; Laubach & Wilchins, 1975, p. 691; Lippmann et al., 1988, p. 135; Malviya et al., 1996, p. 854; Manley et al., 1995, p. 693; Ramoska et al., 1989, p. 48; Strote & Chen, 2006, p. 554; Van Norman, 2010, p. 81; Wrenn & Slovis, 1991, p. 1146). Yet, of the four studies expounded in Chapter I which assessed the reliability of patient-reported pregnancy risk (Malviya et al., 1996; Minnerop et al., 2011; Ramoska et al., 1989; Strote & Chen, 2006), only one found a discrepancy where pregnancy risk was determined based on sexual history (Ramoska et al., 1989). Indeed, of 1567 patient reports of pregnancy risk recorded, only one patient returned a positive pregnancy test after reporting no sexual activity (Ramoska et al., 1989, p. 88); a rate of 0.06 percent.

Van Norman notes that urine pregnancy tests operate at an efficacy of 97% to 99% (Van Norman, 2010, p. 82). Some research has found even lower clinically significant rates of false-negatives, especially after five to seven weeks' gestation (Nerenz et al., 2014, p. 673). Accordingly, patient reports appear to produce a lower rate of false negative responses when compared to many methods of pregnancy testing used in clinical care. As such, Van Norman ultimately finds—as this thesis does—that routine clinical pregnancy testing may not necessarily be a superior technique in diagnostic evaluation where self-reports can be obtained (Van Norman, 2010, p. 82). Moreover, evidence suggests that the accuracy of such reports is likely to be improved further when conditions of patient confidentiality are strictly ensured (Ramoska et al., 1989, p. 49; Stengel et al., 1994, p. 699; Strote & Chen, 2006, p. 555).

With regard to trust, however, it is perhaps the long-term effects on patients and their relationship to the healthcare institution which is of the greatest concern. It has been said that there is something of a crisis of trust in contemporary healthcare, with patients reporting significantly lower levels of trust in medical professionals over the last five decades (Blendon et al., 2014, p. 1570). Yet, trust remains vital to the delivery of effective, quality health care. Research demonstrates that healthy levels of patient trust in health care providers translate into a significantly increased use of preventative health care services (O'Malley et al., 2004, p. 782; Thompson et al., 2004, p. 216; Whetten et al., 2006), superior adherence to health care recommendations such as medication use (Benin et al., 2006, p. 1537; Braksmajer et al., 2018, p. 7; Gupta et al., 2014; Piette et al., 2005, p. 1752; Schoenthaler et al., 2014, p. 573; Thom et al., 1999, p. 514; Whetten et al., 2006), better management of chronic conditions (Birkhäuer et al., 2017, p. 9; Fernandez et al., 2012; Schoenthaler et al., 2014, p. 573), and greatly improved patient satisfaction (Birkhäuer et al., 2017, p. 6; Piette et al., 2005, p. 1750; Thom et al., 1999, p. 513).

As revealed through data in the study expounded in Chapter II, mandatory pregnancy testing is highly associated with a negative health care experience. Of those who reported a negative experience, issues of trust were the most commonly cited cause, appearing in nearly a quarter of responses indicating a negative health care experience. These reports include patients who felt distrusted by the health care provider, patients who developed distrust towards the health care provider, and patients who developed distrust towards the healthcare system more generally, including those who avoided seeking health care in the future as a result of their experience. Not only do these results situate trust at the centre of routine pregnancy testing

policies, but they suggest that the impact on trust, while not entirely reciprocal, may have a long-term interdependent quality.

Supporting these reports, Carel and Kidd write that due to the dialogical nature of the patient-physician relationship, "cumulative experiences—of silencing, say, or trusting—affect the structure and content of later stages of the interaction" (Carel & Kidd, 2014, p. 531). As such, negative trust experiences—particularly when recurrent, such as those prompted by routine testing—will having a lasting impact on the patient and their future healthcare interactions. This may have the effect of epistemic injustice being rendered self-fulfilling, as future testimonial exchanges reflect a greater sense of self-doubt and emotional sensitivity, serving to confirm perceptions of the patient as an unreliable or otherwise substandard testifier (Carel & Kidd, 2014, p. 534). Moreover, these cases can also result in testimonial smothering, which disempowers patients as both speakers and knowers on a long-term recurring basis. Accordingly, this leads to a cycle of poor communication and trust in the patient-physician relationship (Carel & Kidd, 2014, p. 534).

3.4: Cost-Benefit Analysis

Given the evidence from sections 3.1, 3.2, and 3.3, which find a deluge of sex stereotypes resulting in differential health care treatment, epistemic violence, and potentially devastating long-term implications for patient trust, this chapter ultimately finds that routine pregnancy testing causes significant harm. Still, in the name of health care, we may accept certain harms if the benefits to overall wellbeing are sufficiently high. For instance, a patient at risk of hurting themselves may be restrained against their will, or an essential worker during a pandemic may be required to receive a vaccine. In these cases, an ethical trade off of autonomy occurs in favour of

a greater case for overall wellbeing. This section will consider whether the harms of routine pregnancy testing can be justified in terms of the practical benefits of testing.

As has been explored earlier in this thesis, the primary motivator for routine pregnancy testing is doubt about the reliability of women's self-reports (Köksal et al., 2013, p. 177, 2013, p. 177; Larcher, 2012, p. 857; Laubach & Wilchins, 1975, p. 691; Malviya et al., 1996, p. 855; Manley et al., 1995, p. 693; Ramoska et al., 1989, p. 48; Strote & Chen, 2006, p. 554; Van Norman, 2010, p. 82; Wrenn & Slovis, 1991, p. 1146). Out of this motivation, there appear to be three categories of concern prevalent in the literature: harm to a fetus resulting from treatments to the patient if they are pregnant (Kempen, 1997, p. 547; Köksal et al., 2013, p. 177; Larcher, 2012, p. 857; Laubach & Wilchins, 1975, p. 691; Lippmann et al., 1988, p. 135; Malviya et al., 1996, p. 854; Manley et al., 1995, p. 691; Minnerop et al., 2011, p. 215; Strote & Chen, 2006, p. 556), legal liability for the practitioner or the hospital (Kempen, 1997, p. 547; Lippmann et al., 1988, p. 129), and harm to the patient, particularly where this concerns ectopic pregnancy (Minnerop et al., 2011, p. 215; Powell-Bowns et al., 2015, p. 2849; Wrenn & Slovis, 1991, p. 137). Moreover, pregnancy tests are often inexpensive and uninvasive, such as with urine pregnancy tests, or can be added to existing testing, such as routine bloodwork. Proponents may thus contend that routine testing is a low-cost way to ensure that the risks of any treatments ordered are balanced with the competing considerations that pregnancy would present.

As with any form of testing (perhaps especially those conducted routinely), there is a duty to consider the relative costs and benefits in the name of beneficence and nonmaleficence. Van Norman aptly writes that the principle of nonmaleficence "requires physicians to consider, in addition to the monetary costs of a test, both the medical and social harms that may result from unnecessary or poorly conceived testing" (Van Norman, 2010, p. 80). With these principles

of medical ethics in mind, I offer a cost-benefit analysis in order to determine whether routine pregnancy testing may still be justified, given the ethical costs (including the described epistemic injustices and erosion of trust) and the high accuracy of patient-reported pregnancy risk. This section will first explore three types of medical costs associated with routine pregnancy testing in acute clinical care: time, risk, and financial cost. Finally, I offer an analysis of the social costs which may be associated with routine pregnancy testing. I argue that the benefits of routine testing do not outweigh the harms faced by patients who undergo such testing.

To begin, the time-cost associated with dismissing patient self-reports to conduct urine and/or serum analysis during diagnostic evaluation is worth considering when exploring the complete cost of routine pregnancy testing. Delayed treatment may result in prolonging the suffering of the patient, and possibly worsening the underlying condition for which they are seeking urgent care. Some advocate for the continued use of routine pregnancy testing in part because the test can be performed rapidly—especially urine pregnancy tests, which are also non-invasive (Strote & Chen, 2006, p. 554). However, while the results of a urine pregnancy test can be determined in mere minutes once a sample is available, the full scope of steps behind a urine pregnancy test must be considered before judging its time-efficiency. Requiring a pregnancy test for all "women of childbearing age" (Evans & Slovis, 2021, p. 212; Hang, 2020, p. 8; Laubach & Wilchins, 1975, p. 691; Minnerop et al., 2011, p. 212; Strote & Chen, 2006, p. 554), including those who report no risk of pregnancy, results in time spent first on requesting a test and having staff deliver the test materials to the patient. Next, the healthcare practitioner must wait for the patient to produce a sample—this comprises a significant, and potentially underreported, share of time. Worth considering is the time cost incurred if the patient cannot produce a sample and the time necessary for redoing a test which returns a false positive. Time is then spent as the patient

waits for the sample to be collected and brought to the lab. Finally, time is spent completing the actual test—the most time-efficient step in the process—before finally delivering the results to the patient and assessing it in the context of their symptoms.

A 2008 study by Chen and colleagues found that, on average, women presenting to the emergency department waited 16 minutes longer for analgesic pain treatment, compared to male patients (E. H. Chen et al., 2008, p. 417). Chen and colleagues propose that pregnancy tests likely contribute to this delay, despite the fact that analgesics are generally safe even for pregnant patients and the fetus. Indeed, more extensive diagnostic evaluation in general increases analgesic wait times (E. H. Chen et al., 2008, p. 417). The cumulative time-cost of inflated diagnostic evaluation affects not only the patient in question, but also other patients in emergency care, as it employs a room that could be more effectively used to host another patient in need of urgent medical care.

Second, given the impact on the patient and the operation of the emergency room caused by routine pregnancy testing, the matter of risk should be carefully considered when analyzing the costs and benefits of testing. In particular, I will consider the most common risk concerns raised in the literature on routine pregnancy testing: anaesthetics and liability (Kahn et al., 2008, p. 182; Kempen, 1997, p. 547; Lippmann et al., 1988, p. 129). Amid justifications given for routine pregnancy testing, concern for contraindications in anaesthetic treatment are among the most prevalent. In an anonymous questionnaire completed by 170 physicians attending the 1996 *Society of Obstetric Anesthesia and Perinatology* meeting, one third of respondents indicated a policy of mandatory pregnancy testing for all elective patients (Kempen, 1997, p. 547). Of these respondents, 67% indicated specific concern pertaining to the effects of anaesthetic on pregnancy. Accordingly, in a 2018 paper, Clement and colleagues recommend mandatory routine

pregnancy testing for all “females of reproductive age admitted to the hospital” prior to being administered general anesthetic or ionising radiation on the basis of risk mitigation for the potential fetus (Clement et al., 2018, p. 61).

Yet, as noted by Van Norman, numerous large population-based research studies have not yet managed to demonstrate higher rates of fetal anomalies or spontaneous miscarriage among those exposed to anaesthetics in the first trimester of pregnancy (Van Norman, 2010, p. 81). Supporting this assessment, Kempen confirms that the majority of respondents in his 1996 study acknowledged that there is very little evidence of adverse fetal effects following exposure to anaesthetic, indicating that calls for routine pregnancy testing policies have persisted in spite of the longstanding consensus that a single anaesthetic exposure during pregnancy is not known to cause harm to the fetus (Kempen, 1997, p. 549).

A 2009 monograph by Cheek and Baird explored several studies indicating that no evidence currently exists to suggest an increase in teratogenicity resulting from a single exposure to anaesthetic during pregnancy (Cheek & Baird, 2009, p. 535). There may be, however, a small potential increased risk of miscarriage or preterm labour following anaesthetic and surgical intervention (Cheek & Baird, 2009, p. 536), although it ought to be noted that the advent of modern anaesthetic and surgical techniques have successfully decreased overall maternal illness and morbidity rates, resulting in a greater total rate of healthy deliveries (Cheek & Baird, 2009, p. 540). Moreover, it is unclear whether a slightly higher rate of miscarriage and preterm labour is purely the result of anaesthetic and surgical intervention, or whether there is a physical impact brought on by the underlying conditions or circumstances producing the need for anaesthetic and surgery. For instance, a 2005 metanalysis by Cohen-Kerem and colleagues at the University of Toronto found that the rate of miscarriage for subjects undergoing appendectomy during

pregnancy was 2.6%—more than double that of all other surgical interventions during pregnancy, thereby suggesting that appendectomy carries unique risks which cannot be generalized to characterize the overall risk of surgical intervention during pregnancy (Cohen-Kerem et al., 2005, p. 570). Overall, the studies concluded that surgery and general anaesthetic are not major risk factors for miscarriage, nor do they increase the rate of major birth defects (Cheek & Baird, 2009, p. 536; Cohen-Kerem et al., 2005, pp. 471–472).[6]

However, despite considerable concern about liability, data suggests that pregnancy tests, once obtained, are not always treated with the care expected of data touted to be of such significant importance. Indeed, Malviya and colleagues write that during the course of their study, seven patients were anaesthetized after producing samples for pregnancy tests before the results became available. Of these patients, one returned a positive pregnancy test (Malviya et al., 1996, p. 856). Moreover, Kempen emphasizes the gendered nature of the delivery and interpretation of such risk data. Kempen notes that, while anaesthesiologists in the 1996 study recognized the risk of anaesthetics to spermatogenesis at a similar rate to the risk of anaesthetics during pregnancy, an interest in similarly warning male patients about the risks of anaesthetic has not emerged (Kempen, 1997, p. 549).

[6] Importantly, Cheek and Baird note that recent studies have explored the rate of neuronal cell death in the brains of immature rodents, finding that those exposed to anaesthetic agents experienced a greater rate of neuronal cell death compared to control groups (Cheek & Baird, 2009, p. 539). However, Cheek and Baird remain apprehensive of the applicability of this data to human subjects. For instance, susceptibility to neuronal cell death is likely to depend on the developmental stage of the subject, the duration of exposure, and the quantity of anaesthetic agent used (Cheek & Baird, 2009, p. 540). Rapid synaptogenesis lasts for several years in humans, beginning in the second trimester of pregnancy, while in rodents it occurs after birth for a shorter period of time (Cheek & Baird, 2009, p. 540). Because exposure occurs for a smaller fraction of this critical developmental period, humans may be less vulnerable than rodents. Cheek and Baird offer a comparison, stating that, "[f]rom a developmental perspective, exposing an infant rat to isoflurane for 6 hours is said to be the equivalent of producing general anesthesia for several weeks in the human neonate" (Cheek & Baird, 2009, p. 540). Moreover, lab studies using animal subjects typically require significantly higher doses of anaesthetic agents when compared to humans (Cheek & Baird, 2009, p. 540). Finally, such studies fail to replicate the conditions under which anaesthetic interventions occur in humans, as rodent studies do not involve pain stimulus which would otherwise activate excitatory receptors in the central nervous system, thereby potentially affecting the long-term outcomes of exposure (Cheek & Baird, 2009, p. 540).

The next issue in the cost-benefit analysis is the financial impact placed on hospital resources when unnecessary tests are ordered as part of routine evaluation. With many hospitals across North America suffering the consequences of underfunding, it is prudent to avoid tests that patients neither need nor desire. In their 2006 study, Strote and Chen reveal that if tests were only ordered for the patients who reported risk factors for pregnancy,[7] the hospital would have saved $14,521.00 USD during the course of their four-month study (Strote & Chen, 2006, p. 556). When adjusted for inflation, this amounts to almost $65,000.00 USD annually. Other resources to consider include the cost of staffing healthcare workers, who are notoriously in demand in acute clinical care settings.

The burden of the financial strain of frivolous testing may be passed on to patients in such cases where patients do not have access to universal health care. In the United States, for instance, pregnancy tests—including those ordered routinely—are billed to patients or their insurance provider directly. A 15-month investigative project in the United States conducted by Kliff had Americans send in their emergency room bills. This study reported, among other things, pregnancy tests ranging from $111.00 USD to $465.00 USD each (Kliff, 2018). Moreover, the Hospital Price Index lists pregnancy tests provided at a wide range of costs, such as at the Southern California Hospital in Culver City, which is documented as having provided urine pregnancy tests at a cost of $214.00 USD and lab pregnancy tests at $389.00 USD (*Hospital Price Index*, 2021).

[7] This figure excludes one patient who reported that they did not believe they could be pregnant despite being sexually active without using contraception. As stated previously, believing patients' self-reports concerns reported risk-factors, and not patients' opinions about how those factors impact health. It is the responsibility of the healthcare practitioner(s) to determine how reported risk-factors impact health and, as such, the patient should have been offered a test on the account of pregnancy risk analysis employed in this thesis.

Several inferences are apparent when considering the costs of routine pregnancy testing: first, the practice may not be as convenient and time efficient as normally assumed. Given the implications for patient privacy, it may not be as non-invasive as generally touted, either. Moreover, the implications for overall emergency department efficiency have the potential to be far-reaching. Turning to the risk of anaesthetic exposure on early pregnancy, this chapter finds that the research does not currently support claims that minor exposure, such as one-time exposure during surgery, has a negative impact on fetal wellbeing. As such, concerns for potential fetal wellbeing do not serve to justify routine testing policies. Finally, routine pregnancy testing comes at a potentially significant financial cost, both to patients and the healthcare system as a whole over time, giving us a strong financial incentive to discourage testing which is neither needed nor desired by patients.

Ultimately, the practical benefits of routine pregnancy testing cannot be said to outweigh the harms it causes among patients. The treatment delays and financial costs of routine pregnancy testing are unlikely to pay off given that there is no evidence that a one-time exposure to anaesthetics poses any risk to a potential fetus. Moreover, concerns of liability are inconsistently applied, as suggested by evidence that surgery may occur before the results of a pregnancy test are obtained and a failure to similarly warn male patients of the purported risks of anesthetics. Finally, as explored in the previous section, the relative accuracy of patient self-reports when compared to point-of-care hCG tests strongly suggests that there exists a reliable alternative to the current practice of ordering pregnancy tests for all patients who have a uterus.

3.5: Social Harms

With the practical costs of routine testing in mind, I turn now to the social costs of routine pregnancy testing. The primary and secondary forms of epistemic injustice explored thus far may

be compounded by social factors, including but not limited to violations of autonomy, lack of privacy, and failure to obtain informed consent. Moreover, given the inconsistent and often precarious nature of reproductive rights, particularly in the United States, a higher degree of protection for reproductive health privacy may be warranted. Testing patients' biological material for pregnancy against their wishes, without their knowledge, or before establishing conditions of total confidentiality opens the door to a variety of pernicious implications for the wellbeing and security of the patient.

An American organization known as the National Advocates for Pregnant Women (NAPW) has recorded over 1200 cases of pregnant women and people who have been persecuted on pregnancy-related charges across the country (Enos, 2021). According to the NAPW, pregnancy-related persecutions have seen a sharp increase following a 2020 ruling by the Oklahoma Court of Criminal Appeals which established that pregnant women and people "can be criminally charged for activities related to effects on a viable fetus" (Enos, 2021), that is, any fetus after a period of 20 weeks' gestation. Those who have used drugs while pregnant have seen charges of first-degree manslaughter leading to years-long prison sentences following miscarriage, even in the absence of clear medical evidence that drug use contributed to the documented pregnancy outcomes (Enos, 2021).

Moreover, in the state of Alabama, pregnant women and people may be held in prison indefinitely for endangerment of a fetus (Iati, 2022). The state's 2006 "chemical endangerment of a child" statute has been expanded to include fetuses, such that pregnant women and people who use drugs or alcohol during pregnancy—even one time—may be reported and jailed accordingly (Iati, 2022). Meanwhile, there remains no scientific evidence to suggest that low (and in some studies, even moderate) alcohol consumption during pregnancy poses any risk to a

developing fetus (Armstrong, 2017; Henderson et al., 2007; Khalil & O'Brien, 2010; McCarthy et al., 2013).

It would be remiss to neglect from this discussion an overview of the implications arising from the 2022 decision in *Dobbs v. Jackson Women's Health Organization*. Following the ruling, the Center for Reproductive Rights predicts that 26 of the 50 states in the United States will ultimately ban or severely restrict abortion (Kaufman et al., 2022, p. 1). At the time of writing, 13 states have enacted total bans on abortion, with no exceptions for cases of rape or incest except in the state of Idaho (Times, 2022). Several additional states are enforcing abortion bans at various stages of gestation, typically at or before the point of viability, otherwise known as 20 weeks' gestation (Times, 2022).

As Van Norman explains, pursuant to the principle of nonmaleficence, physicians have a duty to take into consideration all costs associated with medical testing, which includes monetary costs, medical costs, and social harms (Van Norman, 2010, p. 80). Given the sensitive nature of reproductive health data—especially pregnancy status—pregnancy testing ought to be subjected to exceptional considerations of sensitivity. Yet, conditions of total privacy are seldom obtained before questioning patients on pregnancy risk (Larcher, 2012, p. 857; Manley et al., 1995, p. 693; Van Norman, 2010, p. 81), and as evidenced by the study results expounded in Chapter II, the process for obtaining informed consent appears to be inconsistent and unreliable at best. Indeed, respondent no. 51, reflecting on her experience, wrote that: "I'm a lawyer now and I can say I was not given the option to consent to the tests, I was told they were required".

Palmer raises several issues with routine pregnancy testing and its implications on patient privacy. First, Palmer considers to whom the results may be revealed. As explored by Van Norman, in many cases patients have a right to total privacy of test results, which may be

challenging or impossible to maintain if the patient's diagnostic evaluation has not been conducted under conditions of total privacy (Van Norman, 2010, p. 82). As such, family members, friends, or partners who accompanied the patient may become aware of the test results either directly or indirectly, especially if a medical procedure is cancelled as a result (Palmer et al., 2009, p. 1715; Van Norman, 2010, p. 82).

Indeed, the data described in Chapter II raised several serious issues pertaining to the privacy of pregnancy risk inquiry and testing. In addition to the 18 patients who discovered that pregnancy tests had been conducted on their biological material without their consent, a further seven respondents described a failure to secure conditions of privacy during diagnostic evaluation or disclosure of test results. Respondents who sought medical care with a family member present often felt that the presence of their family members during diagnostic evaluation impacted their sense of trust and privacy in the health care experience. Even when family members were not present, diagnostic evaluation and the delivery of results were not conducted under condition of privacy, as other patients nearby could hear. Revealing the results of a pregnancy test to an unauthorized individual is a violation of patient confidentiality laws in many jurisdictions in North America (Palmer et al., 2009, p. 1715). Moreover, it is impossible to know at first glance whether exposing pregnancy test results will put the patient at risk from serious physical or psychological harm at the hands of others (Van Norman, 2010, p. 82).

Palmer also raises concerns about informed consent, stating that many patients may be unaware that pregnancy test results are added to their permanent medical record (Palmer et al., 2009, p. 1715). Furthermore, in certain jurisdictions, failure to obtain informed consent is itself an actionable legal claim, regardless of whether or not medical harms resulted from this failure (Van Norman, 2010, p. 82). Additionally, some jurisdictions require that positive pregnancy tests

obtained from minor patients be reported to proper authorities, as pregnancy in a minor constitutes child abuse and/or statutory rape (Kempen, 1997, p. 549; Palmer et al., 2009, p. 1715; Van Norman, 2010, p. 82). Yet, anaesthesiologists surveyed by Kempen largely reported that they are unlikely to disclose these results to the requisite authorities, despite acknowledging their legal responsibility to do so—a decision which itself presents legal liabilities (Kempen, 1997, p. 549).

Finally, coercive and/or mandatory pregnancy testing violates the principle of autonomy, to which all patients are entitled (Palmer et al., 2009, p. 1715; Van Norman, 2010, p. 82). The principle of patient autonomy entitles competent patients to be fully informed on their treatment options, free from coercive influence, and authorized to make the final decision on their health care (Murgic et al., 2015). On this matter, respondent no. 125 aptly wrote: "I understood the implications of doing X-rays on a pregnant woman. However if someone reports no risk, then that's my risk to take if I was pregnant." According to some reports, positive pregnancy tests can result in the automatic cancellation of procedures or the use of inferior pain management techniques (Kempen, 1997, p. 549; Palmer et al., 2009, p. 1715; Van Norman, 2010, p. 82)—a clear violation of the principle of patient autonomy. This claim was supported by the respondents in my study who described being refused treatment or services without providing a pregnancy test. In research by Kempen, patients who either refused pregnancy testing or produced a positive pregnancy test were equally likely to have their procedures cancelled either automatically or by the anesthesiologist presiding over their care (Kempen, 1997, p. 549). This trend persisted when (1) the patient was experiencing significant pain, (2) the surgeon would be advised that they could proceed with local anaesthetic, and (3) the procedure in question could be managed with spinal anesthesia, as is the preferred technique for pregnant patients (Kempen, 1997, p. 549).

Concerns that female patients are prone to lying or that research on anaesthetic during pregnancy is inconclusive do not represent sufficient justification to override the principle of patient autonomy. Indeed, given the precarious nature of reproductive rights and the poor establishment of privacy during diagnostic evaluation, it may even be appropriate to ask whether lying is itself a reasonable expression of patient autonomy under such coercive circumstances.

With a critical eye to emerging setbacks in reproductive rights across the United States, a high degree of protection for reproductive health data is justified. Coerced, non-consensual, or mandatory pregnancy tests risk placing patients in a legally, personally, and/or medically vulnerable position. This is particularly the case as conditions of privacy are not consistently established and medical data, such as pregnancy tests, are stored on patients' medical files. The protection of reproductive health data and respect for the bioethical principle of autonomy ought to be seen as two components integral to the effective upholding of reproductive rights.

3.6: Conclusion

This chapter has explored the main issues, both ethical and practical, concerning routine pregnancy testing. Section 3.1 examined how sex stereotypes operate within the context of healthcare, resulting in significantly differential treatment for female patients. Female patients are treated less extensively and more slowly than male patients, are more likely to receive a mental health diagnosis for physical ailments, and are undertreated for pain across several metrics. Section 3.1 then examined how implicit pronatalism may foster a fixation on pregnancy in diagnostic evaluation, and how the concept of female intuition may play into diagnostic evaluation, in subsections 3.1.2 and 3.1.3, respectively.

Turning to epistemic violence, section 3.2 analyzed how the study results from Chapter II demonstrate epistemic violence in the form of testimonial silencing, per the work of Dotson.

Section 3.3 then considered the secondary harms of epistemic injustice, including long-term implications for patient trust—a critical component in effective health care. Finally, through section 3.4, I have argued that the benefits of routine testing do not outweigh these costs to patients, as evidenced by the unsubstantiated claims of teratogenicity, unfounded concerns for liability, and excessive costs in both time and financial expenditures. On the contrary, the potential social costs outlined in section 3.5 reinforce the arguments against routine testing policies in favour of supporting patient privacy and autonomy.

IV

RECOMMENDATIONS

This chapter proposes five recommendations in an effort to remediate the persistent harms to patients that result from routine pregnancy testing in acute clinical care settings. These recommendations will focus on (1) eliminating routine pregnancy testing, (2) securing informed consent, (3) establishing conditions of privacy, (4) utilizing clear and specific questions in diagnostic evaluation, and (5) promoting the role of healthcare practitioners in acting as responsible hearers.

4.1: Eliminating Routine Pregnancy Testing

First and foremost, in order to effectively rectify persisting systemic harms directed towards patients *qua* knowers, any existing institutional policies establishing the routine administration of pregnancy tests must be eliminated. The decision to order a pregnancy test ought to occur on a case-by-case basis at the discretion of the healthcare practitioner and always in accordance with the wishes of the patient. Concurrently, pursuant to the bioethical principle of autonomy, patients have the right to refuse testing, which must be supported by healthcare practitioner(s). This right to accept or refuse testing must not be coercive in nature, and as such, ought not to result in the disruption, change, or withholding of treatment.

4.2: Securing Informed Consent

The apparent practice of obtaining pregnancy test results without the consent of patients is troubling, to say the least. In light of the many and overlapping risks associated with pregnancy testing, as well as the intrinsic rights-based concerns surrounding reproductive health data and medical decision-making, informed consent absolutely must be secured before

conducting a pregnancy test. In order to obtain informed consent, pregnancy testing ought to be discussed under non-coercive conditions, wherein the risks are disclosed in an honest and unbiased fashion. While failure to obtain informed consent is a major legal liability for healthcare practitioners (*Consent*, 2006; Van Norman, 2010, p. 82), it is also ethically unsound in that it fails to respect the rights of the patient, and risks damaging the critical underpinnings of trust in the patient-physician relationship.

4.3: Establishing Conditions of Privacy

Diagnostic evaluation concerning sensitive patient information such as pregnancy risk must only ever be conducted under the strictest conditions of confidentiality and privacy. Without knowing the personal circumstances of each patient, healthcare practitioners may not know whether patients can speak freely in front of friends, family members, or partners who may be present at the time of evaluation. It is not sufficient to ask a patient if they would like to conduct the evaluation in private, as the burden is thus placed on the patient to secure conditions of privacy. Moreover, such a request on part of the patient may be sufficient to arouse suspicion for those patients who are seeking health care in the company of potentially coercive others.

Such cases may also not be effective for adequately judging the patient's epistemic credibility due to the potentially coercive nature of the environment. Indeed, patients being evaluated under conditions of coercion are not given the conditions necessary to speak freely about personal circumstance and risk. Accordingly, the default position should be that healthcare practitioners request to conduct diagnostic evaluation alone with the patient and clarify privately with the patient that they can request to bring their companion(s) back into the room if they prefer while answering questions about pregnancy risk or menstrual history.

4.4: Using Clear and Specific Questions for Diagnostic Evaluation

Diagnostic evaluation ought to make use of clear and specific questions related to pregnancy risk when evaluating the need to administer a pregnancy test. Questions such as "are you a virgin?" or those employed by Strote and Chen (''might you be pregnant?'' or ''is there a chance you are pregnant?'') are inadequate for exploring the full scope of risk that a patient may be able to report (Strote & Chen, 2006, p. 556). Respondent no. 301 from my study wrote that they were "frustrated [that] they only asked a yes/no question, they didn't clarify why I knew I wasn't at risk (I hadn't had sex in a while, I only had sex with people who couldn't get me pregnant, and I had an IUD)". Giving patients the opportunity to talk about specific risk factors is critical to effective and informed diagnostic evaluation. Accordingly, healthcare practitioners should rely on a short series of specific questions, particularly, "are you (or in the last x months have you been) having penetrative sex involving a penis?"

The importance of shifting towards clear and specific questions regarding pregnancy risk may be especially important for regions lacking in comprehensive sexual education. Limited access to adequate sexual education may obscure patients' understanding of which relevant risk factors to consider when approached with vague questions such as "are you a virgin" or "might you be pregnant?" Indeed, as explored in Chapter III, the use of specific questions about sexual history improves the accuracy of patient reports, even where both types of questions are asked (Ramoska et al., 1989, p. 49; Stengel et al., 1994, p. 699; Strote & Chen, 2006, p. 555).

4.5: Acting as a Responsible Hearer

In cooperation with the aforementioned efforts to rectify the harms associated with routine pregnancy testing, healthcare practitioners have a duty to act as responsible hearers in their respective positions as healthcare authorities. Fricker suggests that responsible hearers can

train testimonial sensibility through epistemic socialization (Fricker, 2007, p. 82). To begin, the hearer develops an initial testimonial sensibility through the community of which they are a part wherein the hearer witnesses and participates in testimonial exchanges (Fricker, 2007, pp. 82–83). Lived experience then provides the reflective groundwork necessary for the development of a distinctively individual formation of testimonial sensibility, which may sometimes conflict with the initial epistemic socialization of the community (Fricker, 2007, p. 82). This range of testimonial experiences informs the hearer's underlying sense of socially-situated trustworthiness, allowing the hearer to develop an inductive framework for trust allocation (Fricker, 2007, p. 83).

Fricker writes that hearers' perceptions of interlocuters "are judgements conditioned by a vast wealth of diverse testimony-related experiences, individual and collective" (Fricker, 2007, p. 83), which may be understood to include some degree of culturally prevalent prejudice and bias. The lived experience portion of the development of testimonial sensibility involves a certain degree of cognitive dissonance and belief adjustment owing to the efforts of the responsible hearer to correct for the biases embedded in community-inherited testimonial sensibility (Fricker, 2007, p. 83). This process will involve active critical reflection on the otherwise passive and internalized patterns of the hearer's response (Fricker, 2007, p. 84). Over time, the responsible hearer exercises a corrective effect on their testimonial sensibility, ultimately resulting in the internalization of the new, adjusted beliefs for future exercise in testimonial exchange (Fricker, 2007, p. 84). The expectation is thus that the sensibility of responsible hearers matures and adapts through the ongoing process of critical, reflective testimonial experience (Fricker, 2007, p. 84). In other words, Fricker writes that the responsible hearer exercises a testimonial sensitivity which is "a spontaneous critical sensitivity that is

permanently in training and continuously adapting according to individual and collective experience" (Fricker, 2007, p. 84).

For the purposes of receiving patients' self-reports concerning pregnancy risk, healthcare practitioners have a duty to trust patients' self-reports to at least the same degree as they trust the self-reports of patients on other topics, generally speaking. Patients' self-reported pregnancy risk has proven to be a reliable source of information for the healthcare practitioners determining how to treat them. As such, healthcare practitioners taught or trained under the myth that patients lie about pregnancy risk, thus necessitating routine testing, ought to exercise critical reflection in light of compelling evidence of the reliability of patient self-reports.

CONCLUSION

The aim of this thesis has been to offer an account of the previously unstudied and rarely acknowledged ethical implications of the practice of routine pregnancy testing, with particular attention to acute clinical care settings. This thesis reported the data from my original survey and analyzed this data by employing the philosophical framework of epistemic injustice. By exploring historically prevalent sex stereotypes and their relationship to phenomena in testimonial exchange, I have argued that the context of medical testimony is rife with gender-based identity prejudice. Pregnancy testing, if not explicitly gendered, is incontrovertibly a gender-coded practice in medicine. It is a quintessential case at the intersection of the harms resulting from current practices in pregnancy testing, including testimonial and hermeneutical injustices, damage to patient trust in healthcare, treatment delays, inferior treatment outcomes, troubling management of patient privacy, and implications for patient rights.

Finally, this thesis has provided policy recommendations that would remediate the described harms namely: (1) supporting patient autonomy, (2) securing informed consent, (3) establishing conditions of privacy, (4) improving diagnostic evaluation, and (5) preparing healthcare practitioners to act as responsible hearers. As such, this thesis ultimately finds that there are several major, but practical, changes required to the current conduct of pregnancy testing in order to effectively remedy several serious and frequent ongoing harms to predominantly female patients.

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APPENDIX A

SURVEY QUESTIONS

ENGLISH

These questions all refer to your experience with pregnancy tests in emergency care.

1. What is your gender identity?
    a. Cisgender female
    b. Transgender male
    c. Non-binary
    d. Other (please specify): _____
2. What is your sexual orientation?
    a. Asexual
    b. Bisexual
    c. Lesbian
    d. Pansexual
    e. Heterosexual
    f. Other (please specify): _____
3. What is your age?
    a. 18-24 years old
    b. 25-34 years old
    c. 35-44 years old
    d. 45-54 years old
    e. Over 54 years old
4. How would you describe your ethnicity?
    a. White/Caucasian
    b. Indigenous
    c. Arab
    d. South Asian
    e. East Asian
    f. Black/African American
    g. Hispanic
    h. I prefer not to answer.
    i. Other (please specify): _____
5. Approximately how many times have you been asked to complete a pregnancy test in an emergency care setting (please specify)?: _____
6. In which country did you receive these tests? Please specify: _____
7. Before being asked to complete the pregnancy test(s), were you asked to self-report any risk factors (e.g., when you were last sexually active, if you are menstruating regularly, if the sexual activity you engage in carries a risk of pregnancy)?
    a. Yes
    b. No
    c. Sometimes

8. Have you ever been administered a pregnancy test after reporting no risk of pregnancy?
    a. Yes
    b. No
9. Were the pregnancy tests required or requested?
    a. Required
    b. Requested
    c. Mixed
    d. Unsure
10. How many times have you been administered a pregnancy test after reporting no risk of pregnancy? Please specify: _____
11. Why did you report no risk of pregnancy? Select all that apply:
    a. I was not sexually active for approximately nine months or more
    b. I was engaging in sexual activity that did not carry a risk of pregnancy
    c. I was menstruating regularly
    d. Other (please specify): _____
12. How did you feel being asked to complete a pregnancy test after reporting no risk?: _____
13. Did being asked to complete a pregnancy test after reporting no risk affect your healthcare experience? If so, please describe how: _____
14. If there are any other details about your experience that you would like to share, please do so here: _____

FRANÇAIS

Ces questions font toutes référence à votre expérience des tests de grossesse dans les soins d'urgence.

1. Quelle est votre identité de genre ?
    a. Femme cisgenre
    b. Homme transgenre
    c. Non binaire
    d. Autre (veuillez préciser): _____
2. Quelle est votre orientation sexuelle ?
    a. Asexué.e
    b. Bisexuel.le
    c. Lesbienne
    d. Pansexuel.le
    e. Heterosexuel.le
    f. Autre (veuillez préciser): _____
3. Quel âge avez-vous ?
    a. 18-24 ans
    b. 25-34 ans
    c. 35-44 ans

    d. 45-54 ans
    e. Plus de 54 ans
4. Comment décririez-vous votre origine ethnique ?
    a. Arabe
    b. Blanc / Caucasien.ne
    c. Indigène
    d. Asiatique – Indien.ne
    e. Asiatique – Est
    f. Noir.e / Afro-américain
    g. Hispanique
    h. Je préfère ne pas répondre
    i. Autre (veuillez préciser): _____
5. Environ combien de fois vous a-t-on demandé.e de faire un test de grossesse dans un établissement de soins d'urgence (veuillez préciser) ? : _____
6. Dans quel pays avez-vous vous été administer.e ces tests ? Veuillez préciser: _____
7. Avant qu'on vous demande de faire le(s) test(s) de grossesse, vous a-t-on posé.e des questions sur les facteurs de risque (par exemple, quand avez-vous eu des relations sexuelles pour la dernière fois, si vous avez des règles régulières, si l'activité sexuelle que vous pratiquez comporte un risque de grossesse) ?
    a. Oui
    b. Non
    c. Parfois
8. Avez-vous déjà subi un test de grossesse après avoir indiqué.e aucune risque de grossesse ?
    a. Oui
    b. Non
9. Les tests de grossesse étaient-ils obligatoires ou demandés ?
    a. Obligatoire
    b. Demandé
    c. Mixte
    d. Incertain
10. Combien de fois vous a-t-on administer.e un test de grossesse après avoir signalé.e l'absence de risque de grossesse ? Veuillez préciser: _____
11. Pourquoi n'avez-vous déclaré aucun risque de grossesse ? Sélectionnez tout ce qui s'y rapporte:
    a. Je n'ai pas été sexuellement actif pendant environ neuf mois ou plus
    b. Je me livrais à une activité sexuelle qui ne comportait pas de risque de grossesse
    c. J'avais des menstruations régulières
    d. Autre (veuillez préciser): _____
12. Qu'avez-vous ressenti lorsqu'on vous a demandé.e de faire un test de grossesse après avoir signalé l'absence de risque ? : _____
13. Le fait d'être invite.e à effectuer un test de grossesse après avoir signalé.e l'absence de risque a-t-il affecté.e votre expérience en matière de soins de santé ? Si oui, veuillez décrire comment : _____
14. S'il y a d'autres détails sur votre expérience que vous aimeriez partager, veuillez le faire ici : _____

APPENDIX B

CONSENT FORM

ENGLISH

Participant Consent Form

Please read this document before continuing on to the survey. Submitting your study responses indicates that you consent to participate in this study. Please save or print a copy of this document to keep for your own reference.

Eligibility: If you are 18 years old or older and have ever received a pregnancy test in an emergency care setting and you'd like to participate in an anonymous survey on this topic, please read on.

Purpose of the Study: We are conducting research about the use of pregnancy tests in emergency care settings to evaluate the necessity of routine pregnancy testing policies and the experience of patients who are subject to them.

Study Procedures: The survey consists of multiple-choice questions, as well as a few open-ended questions, and will take about 10 minutes to complete. The survey will ask about your experiences related to pregnancy tests in emergency care settings, as well as about your attitudes towards these tests.

Voluntary Participation: Your participation in the survey is entirely voluntary and anonymous. You will have the option to skip any questions that you do not wish to answer. This is to protect your confidentiality so that you can answer the questions in this survey freely.

Compensation: At the end, you will have the option of being entered in a draw to win a $100 CAD prepaid Mastercard. If you are interested, you will be taken to a new survey page to enter your information, so that your data from the survey will not be linked to any identifying information. The draw will occur on September 30th and all email addresses will be deleted after the draw is complete. Odds for winning the draw will be contingent upon the number of survey respondents reached who wish to enter the draw. The target number of survey respondents is between 500 and 1000 respondents.

Confidentiality: Data will only be used from surveys that were completed. Data from incomplete surveys will be deleted once the data collection process is finished. Only the Primary Investigator and the study supervisor will have access to this data. Email addresses will be stored in a password-encrypted Word document and will only be used for the purposes of contacting the draw winner to award the gift card.

Potential Risks: This topic may be distressing for some participants, so please feel free to stop or take a break from the survey at any point. You may not personally benefit from completing this survey.

Potential Benefits: This research will provide data on the frequency of unnecessary pregnancy tests and patients' attitudes towards these tests. The data collected in this survey may help to inform future research and policies.

Dissemination of Results: This research will be included in a thesis paper and may be published in future research.

Researchers: Amanda Sears, Student, McGill University: Department of Philosophy, Bioethics Unit.
Email: amanda.sears@mail.mcgill.ca

Supervisor: Professor Natalie Stoljar at McGill University.
Email: natalie.stoljar@mcgill.ca

If you have any ethical concerns or complaints about your participation in this study, and want to speak with someone not on the research team, please contact the Associate Director, Research Ethics at 514-398-6831 or lynda.mcneil@mcgill.ca citing REB file number 22-04-111.

FRANÇAIS

Page de consentement pour les participants

Veuillez lire ce document avant de poursuivre l'enquête. La soumission de vos réponses à l'étude indique que vous consentez à participer à cette étude. Veuillez enregistrer ou imprimer une copie de ce document pour votre propre référence.

Admissibilité : Si vous avez 18 ans ou plus et que vous avez déjà subi un test de grossesse dans un établissement de soins d'urgence et que vous souhaitez participer à une enquête anonyme sur ce sujet, veuillez lire la suite.

Objectif de l'étude : Nous menons des recherches sur l'utilisation des tests de grossesse dans les établissements de soins d'urgence afin d'évaluer la nécessité de politiques de tests de grossesse de routine et l'expérience des patientes qui y sont soumises.

Procédures d'étude : L'enquête se compose de questions à choix multiples, ainsi que de quelques questions ouvertes, et prendra environ 10 minutes à remplir. L'enquête posera des questions sur vos expériences liées aux tests de grossesse dans les services de soins d'urgence, ainsi que sur vos attitudes à l'égard de ces tests.

Participation volontaire : Votre participation au sondage est entièrement volontaire et anonyme. Vous aurez la possibilité de sauter les questions auxquelles vous ne souhaitez pas répondre. Ceci afin de protéger votre confidentialité afin que vous puissiez répondre librement aux questions de cette enquête.

Rémunération : À la fin, vous aurez la possibilité d'être inscrit à un tirage pour gagner une carte Mastercard prépayée de 100 $ CAD. Si vous êtes intéressé, vous serez redirigé vers une nouvelle page d'enquête pour entrer vos informations, de sorte que vos données de l'enquête ne seront pas liées à des informations d'identification. Vous devrez répondre à une question d'habileté afin de participer au tirage. Le tirage aura lieu le 30 septembre et toutes les adresses e-mail seront supprimées une fois le tirage terminé. Les chances de gagner au tirage dépendront du nombre de répondants au sondage rejoints qui souhaitent participer au tirage. Le nombre cible de répondants à l'enquête se situe entre 500 et 1000 répondants.

Confidentialité : Les données ne seront utilisées que pour les enquêtes qui ont été complétées. Les données des enquêtes incomplètes seront supprimées lorsque l'enquête est terminé. Seuls l'investigateur principal et le superviseur de l'étude auront accès à ces données. Les adresses e-mail seront stockées dans un document Word crypté par mot de passe et ne seront utilisées que dans le but de contacter le gagnant du tirage pour attribuer la carte-cadeau. Les adresses e-mail et les noms seront supprimés immédiatement après que le gagnant de l'enquête aura été contacté.e. Ceux qui ont participé.e au tirage mais qui souhaitent ultérieurement retirer des données identifiables peuvent le faire en contactant la chercheuse principale à amanda.sears@mail.mcgill.ca et seront retirés du tirage.

Risques potentiels : Ce sujet peut être pénible pour certains participants, alors n'hésitez pas à arrêter ou à faire une pause dans l'enquête à tout moment. Il se peut que vous ne bénéficiiez pas personnellement de la participation à cette enquête.

Avantages potentiels : Cette recherche fournira des données sur la fréquence des tests de grossesse inutiles et sur les attitudes des patientes à l'égard de ces tests. Les données recueillies dans cette enquête peuvent aider à éclairer les recherches et les politiques futures.

Diffusion des résultats : cette recherche sera incluse dans un mémoire et pourrait être publiée dans de futures recherches.

Investigateuse : Amanda Sears, étudiante, Université McGill : Département de philosophie, bioéthiquez.
Courriel : amanda.sears@mail.mcgill.ca

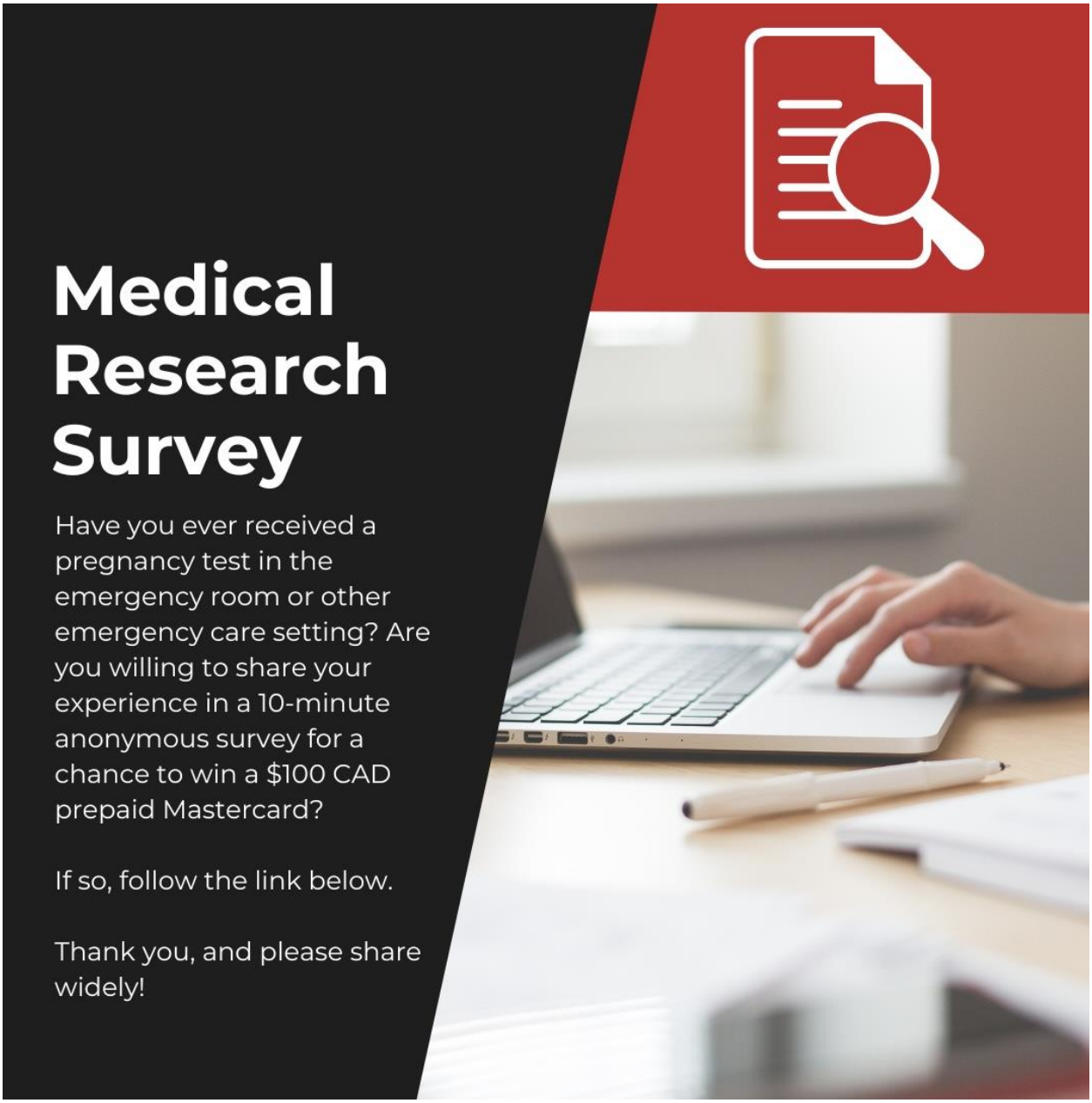
Superviseur : Professeure Natalie Stoljar à l'Université McGill.
Courriel : natalie.stoljar@mcgill.ca

Si vous avez des préoccupations ou des plaintes d'ordre éthique concernant votre participation à cette étude et que vous souhaitez parler à une personne ne faisant pas partie de l'équipe de recherche, veuillez contacter le directeur associé, éthique de la recherche au 514-398-6831 ou lynda.mcneil@mcgill.ca en citant Numéro de dossier CER 22-04-111.

APPENDIX C

SURVEY ADVERTISEMENT

ENGLISH



FRANÇAIS


Enquête sur la recherche médicale
Avez-vous jamais subi un test de grossesse aux soins d'urgence ? Voudriez-vous partager votre expérience dans un sondage anonyme pour courir la chance de gagner un Mastercard prépayée de 100 $ CAD ?
Si oui, suivez le lien.
Merci et partagez largement !