Diagnosing Womanhood:
Lessons Learned from Gender Bias in 20th Century Psychiatry

By

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A Submission to the Pam and Rolando Del Maestro
William Osler Medical Student Essay Competition

On a quiet afternoon at the Osler Library, a medical student browsing its books, enjoying an exhibit, even peeking at its manuscript collections, can learn much about the history of our chosen profession, from paradigm shifts in medical thinking to the advent of diagnostic and therapeutic tools. In class, we learn that the authority we will soon wield as clinicians is rooted in the immutable laws of science: evidence-based medicine, in the form of aggregate data from double-blinded randomized control trials or meta-analyses, informs the creation of clinical guidelines and practice. We know that medicine's past is imperfect; the term "evidence-based medicine" implicitly suggests a time when medicine was not based on evidence at all. But we like to think that medicine has progressed along a linear, rational path. That vision of medical history is more than comforting: it gives us the confidence to be great doctors. History is on our side.

An afternoon at the Osler can shatter that view, revealing a history that is messy, contingent, and inseparable from subjective interpretation. Here, I will examine several points in the history of women and modern psychiatry to illustrate the ways subjective notions of gender have driven the definition and treatment of mental illness, from the disproportionately large number of women lobotomized by psychosurgeons in the mid-20th century, to the use of gender stereotypes by pharmaceutical companies to influence medication seeking and prescribing behaviours. I will close by exploring how EBM can be applied alongside research in the social and humanistic sciences to reduce harmful bias and prioritize equitable treatment of our patients.

One of the more surprising therapeutic inventions you can learn about within the comfy confines of the Osler is the electromechanical vibrator. A British physician is credited with its invention, in response to the tiring nature of 'genital massage', a well-documented therapy physicians used to treat hysteria and related disorders in female

patients in the late nineteenth century[1]. While this may seem a curious response to a socially constructed problem, particularly because of the sexually repressive culture in which it was used, this example is but one of many--both historical and modern --that illustrates how restrictive definitions of normal womanhood influenced the diagnosis and treatment of mental illness. In the words of social critic Ivan Illich, "In every society, medicine, like law and religion, defines what is normal, proper, or desirable. Medicine has the authority to label one man's complaint a legitimate illness, to declare a second man sick though he himself does not complain, and to refuse a third social recognition of his pain, his disability, and even his death"[2]. Today, when compelling evidence suggests women are disproportionately diagnosed with depression and anxiety[3], are less likely to have their medical concerns as thoroughly worked-up[4] and more likely to be undertreated for phenomena ranging from chronic pain[5] to heart attack[6], we must pay closer attention to who and what is influencing definitions of health and illness. Examples drawn from psychiatric practice, since doctors used vibrators to "treat" hysteria through to modernity, illustrate how changing interpretations of the 'normal' female gender continue to influence the medical care of female patients.

Lobotomy was a Nobel Prize winning medical intervention and yet, is probably the most conspicuous example of discriminatory treatment and gender bias in twentieth-century medicine—it is therefore a reminder that what gets counted as "good medicine" changes by time and place. Neuropsychiatrist Walter Freeman and neurosurgeon James Watts popularized lobotomy in the 1940s in North America, spurred by positive reports of its effects in treating dementia praecox (what today can be roughly considered schizophrenia)[7]. The act of performing a lobotomy usually involved forcing an instrument (sometimes referred to as an 'ice pick') through the skull above the orbit of the eye, directly into the brain. Once the instrument is in place, the physician would use it to cut the lower sections of the frontal lobes. Some modern scholars have likened the act of performing a lobotomy to the movement of wipers on a windshield, damaging the frontal lobes and the connections to and from the prefrontal

cortex. The resultant reduction in psychiatric symptoms was acknowledged to be at the expense of the patient's personality and intellect[8]. By 1951, almost 20,000 lobotomies had taken place in the US, as doctors touted this novel approach for those exhibiting otherwise "incorrigible behaviour" in a patient population that was disproportionately female (7).

Freeman and Watts' 1937 article in the *Southern Medical Journal* details the technique in six case studies (5 women, 1 man), evincing cautious optimism about how the surgery minimizes undesirable symptoms and behaviours in psychiatric patients[9]. The authors note that lobotomized patients immediately become "more placid, more content, and more easily cared for by their relatives" and that the most "outstanding deficit symptom is a certain lack of spontaneity". Based on the gendered norms of the time, being more "placid" and lacking "spontaneity" would be a desired, socially acceptable outcome for female patients in particular. In *Mental Ills and Bodily Cures* psychiatrist and historian Joel Braslow digs further into the glaring gender disparity of patients selected for this surgery. A comprehensive survey of all psychiatric institutions and general hospitals with psychiatric wards in the United States between January 1, 1949 and June 30, 1951, shows nearly 60% of the lobotomy patients were women although men significantly outnumbered women as patients at the majority of these institutions. This disparity was noted by many practitioners at the time; one neurosurgeon with approximately two times more female than male lobotomy patients sought to explain and justify the gap: "one of the criteria for surgery on chronically ill patients has been disturbed behaviour; and female patients are generally more disturbed on a behaviour level"(7).

Braslow analyzes the records of Stockton State hospital, a public hospital, to try and explain this phenomenon. At Stockton, 89% of standard/radical lobotomies, 77% of transorbital lobotomies and 93% of multiple lobotomies were performed on women. Braslow considers potential drivers for these statistics, such as the proportion of women residents, the relative frequency of dementia praecox (the most frequent

diagnosis of those lobotomized at the hospital) and the potential for overcrowding. Finding none of these sufficient to account for the disparity, he analyzes transcripts between doctors with patients and their families, and finds many consistent differences between the treatment of female and male patients. For example, female patients were more harshly reprimanded for use of foul language. Braslow cites the following as an example:

> *Dr. Baron:* Be a good girl and talk to us.
> *Patient:* No.
> *Dr. Adam:* If you are a good girl, and don't use such bad language we will talk to you.
> *Patient:* Shut up.

This patient's behaviour represents improper conduct for a woman, as demonstrated by telling her to be a "good girl". Other examples include describing behaviour as "unladylike". Braslow notes that physicians almost never comment on male patients' foul language and do not mention male gender when berating patients' behaviour. The idea that females are more disturbed on a behavioural level, as suggested by the neurosurgeon above, is easily argued when the definition of bad behaviour is more rigidly defined for women. Women's seemingly ungovernable behaviour resulted in being "shackled, straitjacketed, bound and secluded" in psychiatric institutions at this time; at Stockton, they were 30 times more likely to be physically restrained (7).

This unequal treatment of men and women is further exemplified in the response to women known for sexually deviant behaviour. While men did not lose their penises or testicles for masturbating (and there is no evidence to suggest that women masturbated more frequently than men at Stockton) of the earlier noted cases, four women also received a clitoridectomy between September 1947 to February 1950 because of frequent public masturbation. At a period in our history when the only socially acceptable narrative of female sexuality was the desire for penetrative sex with

her husband, sexually deviant behaviour cast these women as more extreme in their illness and consequently, they received more extreme interventions.

Harkening back to Ilich's words about medicine's power to define both normalcy and that which deviates from it, the history of lobotomy demonstrates how definitions can dramatically affect outcomes. By judging women's minds and behaviours according to contemporary gender norms, physicians justified what we would today consider to be horrific psychosurgeries.

The decline of lobotomy is largely attributed to the invention of Thorazine (chlorpromazine) and the other ensuing anti-psychotic medications, what marked the beginning of the rise of psychotropic medications. In *Selling Sanity through Gender* psychiatrist and scholar Jonathan Metzl discusses how gender norms influence the definition and treatment of mental illness in the realm of psychotropic drugs. He turns a critical eye to pharmaceutical advertisements from the 1950s to the 1990s that propose pill remedies for women for everything from being single, finding balance between work and family, and being a good mother and wife. Metzl discusses his experiences as a clinician, treating women who come to his office seeking his support and a prescription for their inability to conform to the hyperbolic descriptions and images common to the mass media, that pharmaceutical advertisements leverage to promote their product. For example, in light of the modern day pressure for women to expertly balance work and family, Effexor (an antidepressant of the serotonin-norepinephrine reuptake inhibitor class) ran ads in the 90s with children claiming "I got my mommy back", featuring an image of a mother in a business suit hugging her child next to a bag of groceries. The message is quite clear: if you are not able to meet the current ideal of womanhood, you need psychiatric treatment.

Metzl acknowledges that he cannot know how women would characterize, or even admit to having, psychological problems in the absence of those ads. What is clear, however, is that for an unknown number of women, ads provide a visual snapshot and prose that women appropriate and use to measure their own well-being. Through

slick marketing, women see their failures as women as a diagnosable and treatable disease.

Doctors prescribe more to women in general, which can be partially explained because women visit their family physician more often and are more likely to use language common to illnesses such as depression. This disparity in prescribing is particularly noteworthy in the category of benzodiazepines, a central nervous system depressant that is used as an anxioloytic, hypnotic, muscle relaxant, anti-seizure and amnesiac. However, irregardless of men and women's drug-seeking behaviours, doctors are more likely to prescribe benzodiazepines to women than to men *presenting the same complaints*[10]; this is of particular importance given the now widespread knowledge concerning the habit-forming properties of these medications. Currently, it is estimated that 3-15% of the adult population is taking benzodiazepines, and of this population, 60-65% are women[11]. Research suggests that not only are women more likely to receive prescriptions for benzodiazepines, their prescriptions are for longer periods of time, and they are more likely to receive benzodiazepines and sleeping pills for non-medical issues such as grief and stress (11). The decision to prescribe a medication such as a benzodiazepine is a complicated one that requires the judicious physician to balance multiple considerations, at once respecting patient autonomy and scientific expertise. And yet, as people, we are socially conditioned, a product of the time and culture in which we are raised. This begs the question of how can we deliver objectively valid clinical care within the richly subjective doctor-patient relationship?

Many within the medical community celebrate evidence-based medicine, or EBM, the "conscientious, explicit, judicious and reasonable use of modern, best evidence in making decisions about the care of individual patients"[12] as the response to eliminating subjectivity and the resultant harm as expanded upon above. However, science, too, is a product of human institutions. Factors such as funding dictate which research questions are studied, and funding too often reflects the interests of those in positions of power who are disproportionately men. As a result, our "evidence" tells us less about how best we can care for and treat women. Feminist scholar Sue Rosser

provides examples of the androcentric bias of medicine, such as clinical studies of medications that exclude women as study participants or the frequent lack of gender analysis despite potentially significant differences in the way men and women metabolize certain drugs[13].

As well, even the best scientific research cannot be applied in a medical context without taking into account other factors. For decades, anthropologists, sociologists, and historians of medicine have demonstrated how medical ideas and practices are not universal but culturally contingent, rooted in time and place. From the prolific work scholars have produced, we have learned, for example, that variations in local diet and differences in the language women invoke to communicate their well-being and distress mean that women in Japan and Canada may interpret and experience the meaning of menopause differently[14]. In the same spirit, we have seen how religious views can limit women's access to contraception in underserved communities where the very idea of a male doctor providing a gynecological exam constitutes transgressive behaviour, for which a woman may be punished.

As medical practitioners, one of our tasks is to acknowledge the most important variables that define the boundaries of the doctor-patient environment: from poverty, financial and geographic access to medical services, systemic racism, religion, and, of course, the unique traits of the individual patient. As such, we cannot eliminate the social and humanistic component, nor would we want to—the history of lobotomy demonstrates how cutting edge scientific innovation applied in the absence of patient-focused care leads to disastrous consequences. The EBM triad offers a more balanced perspective, with EBM in the centre of a Venn diagram that blends 'patient values & expectations', 'individual clinical experience' and 'best external evidence'. Part of our clinical experience relies on pattern recognition, being able to form quick and effective judgments; however, not all of our judgments are useful or even ethical. For example, studies have shown how sociocultural stereotypes influence students' clinical decision-making, in regard to factors like attractiveness, gender and race[15].

As practitioners, we must work to uncover and address our hidden biases. In the clinic and in the hospital we are constantly prioritizing, figuring out who needs to be seen first, and how much time we can afford them. Our biases can show up in surprising ways, such as a 2008 study in an urban Emergency Department that showed women, compared to men with similar mean pain scores, were less likely to receive any analgesia[16]. One of the reasons physicians undertreat women's pain is because they discount women's self-reports of pain due to cultural stereotypes (5). We triage as much as possible according to medical issues (chest pain will always surpass a sprain ankle); but to what extent are we triaging based on our prejudices and snap judgments? If we have memorized statistics purporting that women are more likely to have panic disorder, when a young female patient with chest pain and no discernible risk factors enters our ED, do we still order a full work-up? If women are known to suffer from anxiety more than men, do we defer to a psychosomatic explanation with vague, chronic symptoms more readily than say, investigating a possible autoimmune disorder? Perhaps the greatest challenge for prospective medical practitioners such as myself is to apply the critical inquiry of the humanities and social sciences to the 'short circuit' thinking of clinical decision-making—to be as scrupulous in identifying our own biases about patients as we are in examining the clinical evidence.

Medicine exists in a social context and is thus subject to our human biases, gendered and otherwise: a survey of history reveals manifold examples of how medical practitioners define and treat mental illness in relation to stereotypes and beliefs about normal womanhood. The example of lobotomy offers a haunting example of how physicians used cultural ideas concerning acceptable female behaviour to disproportionately subject them to brain damage, and in some cases, genital mutilation as well. Pharmaceutical companies continue to leverage ideals of womanhood to drive prescribing behaviours, reinforcing the idea that women can be medically manipulated to meet societal expectations. Medical history is replete with such examples of

discrimination, not only in regard to gender, but also race, class, sexual orientation, gender identity and disability.

And yet, exploring medicine's past is a benefit rather than a drawback. What gives medical history its ongoing utility, what historian and haematologist Jacalyn Duffin coins 'timelessness', is not about skimming over the less favourable chapters[17]. We can acknowledge mistakes, identify biases, and rethink assumptions. As doctors mindful that the "hard numbers" we invoke as scientific evidence – from blood pressure to cholesterol counts-- are made meaningful by how we interpret them, we can step back and analyze our interpretations. If modern medicine is, to some extent, of our own making, we can remake it.

There are multiple forces engaged in remaking the field of medicine. The women's and LGBT movement— especially the pioneers of transgender rights— continue to challenge and question the ways we define and perpetuate ideas of gender in our societies, working within and alongside academia to disprove both the gender binary as well as common gender stereotypes. EBM continues to gain traction, with its advocates challenging clinicians to use only the highest quality of evidence and to reject subjective, biased approaches based on tradition alone. Medical schools, such as seen in McGill's new curriculum, are incorporating visions of equity and diversity into their core mandates, as well as increased teaching on the social sciences and humanities. Students are enthusiastically advancing these ideas within the curriculum via special interest groups, actively pushing for improvements to their education and towards a healthcare system as a whole that promotes equity and justice.

An afternoon at the Osler will teach you that medicine's past is a blend of inspiring and outrageous, with examples of stunning humanitarianism juxtaposed with cruel ignorance, brilliant innovation wedged beside harmful primitivism. While we cannot alter the past, we certainly can use it to build a more promising future—and Osler's legacy inspires us to do just that.

Acknowledgements:

A special thank you to my brilliant mentor: for consistently challenging my thinking, urging me to connect the past to the present, and opening my eyes to the complex and wonderful world encased within the Osler library.

As well, my gratitude to the Board of Curators of the Osler Library of the History of Medicine and to the Medical Students' Osler Society for affording me such a meaningful and enriching learning opportunity.

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