WOMEN IN SCIENCE AND MEDICINE
Molecular biologist Dr. Flossie Wong-Staal (1947-2020) was the first person to clone the HIV virus, a major research advancement in the treatment of AIDS.

African American trailblazer and Chemist Alice Ball (1892-1916) developed the first successful treatment for Hansen’s disease, also known as leprosy. The “Ball Method,” was used on thousands of infected individuals for over thirty years until sulfone drugs were introduced.

In 1986, Dr. Patricia Bath invented the Laserphaco Probe system for removing cataracts—a laser-based system that made removal of cataracts more accurate and less painful. Bath was both the first African-American to finish a residency in ophthalmology in 1973 and the first African-American female doctor to win a medical patent in 1988.

The first American woman to win a Nobel Prize in the sciences Gerty Cori’s (1896-1957) work involved studying the mechanism by which the body processes food (the Cori cycle) leading to treatments for diabetes and other diseases.

Ellen Ochoa was the first Hispanic woman astronaut. She went on four missions with NASA, spending 978 hours in outer space. She also added co-inventor to her resume when she helped develop three patents in the field of optics.

Honoring Women in Medicine and Science
Blog: "Because She’s a Woman" - Joanna Petrides, PsyD
Women Scientist's Advancements
Podcasts: Stigmas and Sexism
Book Club + Resources
As a female mental healthcare provider, it’s hard to not acknowledge the evolution of women’s roles in the field of psychology, both as providers and patients, across time. Initially, women who experienced difficulty with mood and emotions were dismissed with a single diagnosis: hysteria. It did not take long for this diagnosis to be used as the medical scapegoat for a multitude of physical and emotional disorders. The male-dominated field of psychology in the 18th century further simplified the explanation of mental and emotional symptoms experienced by women by attributing the cause to an organ thought to be “wandering the body.” Not only was this unfounded and not empirically supported, it was also widely accepted in society at the time. This planted the seeds of a dangerous stigma against women and emotions in general, one that would bleed beyond the realm of women seeking medical and psychological help and into all areas of a woman’s life.

Fast forward to present day…I sometimes reflect back to the origin of “hysteria” and slightly chuckle at how silly this thought was...and yet how easily it was accepted as a true cause for females struggling with a variety of disorders. “Did they really think organs just floated around unattached,” I wonder to myself. My chuckle is quickly followed by a long blink and a deep sigh as I am reminded of how this sexist, unfounded belief developed hundreds of years ago often still prevails and is applied to women across various situations and roles. These microaggressions are easily evident every day. When someone makes a joke about a woman being “on their period” when she responds to a situation with anything other than a flat, unemotional response; or when someone believes a woman is unqualified to hold a professional position at a certain level of responsibility out of a worry she might be affected by mood swings brought on by “their time of the month.”

It strikes me as ironic how, despite the psychology profession transitioning from a male-dominated to a female-dominated field, there is still a substantial implicit bias towards women being “not good enough” existing in me and others. This may account for why it is not uncommon for female patients to enter treatment in a psychological state well beyond when treatment could have (and likely should have) been initiated in a meaningful, appropriate manner. Most will share they did not want to admit they were struggling out of fear of being judged as being weak and needy. Other female patients often use “broken” or “damaged” to describe themselves, believing they are the only ones experiencing this level of vulnerability is not their weakness is palpable, powerful, and equally heartbreaking.

It is not uncommon that women have been conditioned to meet the expectations of a society which is still overtly male-dominated and pushes against normalizing the expression of emotional distress. As a result, their emotions are frequently suppressed. This disturbing trend often leads to a vicious cycle of women believing they need to match the unemotional, reserved temperament commonly displayed by their male counterparts to be taken seriously while not being dismissed as being too emotional or “hysterical.” Mixed message? Did these messages really imprint on my brain and carry forward throughout my life? What does my education in psychology tell me? I come to reflect that if the brain never unlearns a behavior and it simply weakens while in the same breath being told “a lady shouldn’t do that,” Mixed message?”

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Though the field of mental health is no longer male-dominated, the effects of these foundational beliefs still remain. Could there be an implicit bias in society against women being viewed as equals? It’s hard to argue that there is absolutely no bias surrounding traditionally gendered roles that factor into a woman’s every-day life. I can reflect back to my childhood where on the one hand I was told I can do anything and be anyone I wanted to be, while in the same breath being told “a lady shouldn’t do that.” Mixed message? Did these messages really imprint on my brain and carry forward throughout my life? What does my education in psychology tell me? I come to reflect that if the brain never unlearns a behavior and it simply weaken even if in a muted form. So why wouldn’t the same process apply to the messaging I received? It would be foolish to me to expect old messaging to have completely evaporated. Early childhood messages and biases role modeled to us are still present—we don’t outright forget those early teachings, but rather we override them with new messages, learnings and patterns of behaviors. The original beliefs can and often are still present with the capability to influence our interactions with others despite the efforts we make to correct those earlier messages and learnings that no longer serve us—hence the implicit bias of there being limitations on how women measure up.

It is not uncommon that women have been conditioned to meet the expectations of a society which is still overtly male-dominated and pushes against normalizing the expression of emotional distress. As a result, their emotions are frequently suppressed. This disturbing trend often leads to a vicious cycle of women believing they need to match the unemotional, reserved temperament commonly displayed by their male counterparts to be taken seriously while not being dismissed as being too emotional or “hysterical.” This kind of “code-switching” is, quite frankly, dehumanizing and exhausting. I chuckle at how silly this thought was…and yet how easily it was accepted as a true cause for females struggling with a variety of disorders. “Did they really think organs just floated around unattached,” I wonder to myself. My chuckle is quickly followed by a long blink and a deep sigh as I am reminded of how this sexist, unfounded belief developed hundreds of years ago often still prevails and is applied to women across various situations and roles. These microaggressions are easily evident every day. When someone makes a joke about a woman being “on their period” when she responds to a situation with anything other than a flat, unemotional response; or when someone believes a woman is unqualified to hold a professional position at a certain level of responsibility out of a worry she might be affected by mood swings brought on by “their time of the month.”

As we celebrate and honor women’s history this March, I think you may be surprised to find that early sexist teachings and opinions surrounding women’s mental health and behavior are still floating around and influencing our interpersonal connections. Let’s make an effort to better understand what lessons and experiences we’ve endured, and are potentially showing up as a bias for ourselves. Only when we do the hard work and identify these roadblocks can we grow and change the future. And when discomfort presents, which I guarantee you it will, I hope you will lean into it; allow it to be present so you can strengthen your newly found beliefs and behaviors while finally letting go of a past that never really served you in the first place.
Podcasts of Interest

Eliminating Shame, Stigma & Sexism from Health Experiences: Medical Herstory- Peer Med Foundation


Melanin Medicine: A Podcast for Black, Indigenous & Women of Color Committed to the Health Justice Movement

https://melaninandmedicine.co/podcast/

Articles of Interest

Regarding Women in Science and Medicine

As More Women Enter Science, It’s Time to Redefine Mentorship

https://www.wired.com/story/as-more-women-enter-science-its-time-to-redefine-mentorship/

Women Physicians and Promotion in Academic Medicine

Each time a woman stands up for herself, without knowing it possibly, without claiming it, she stands up for all women.

- Maya Angelou

Additional Articles of Interest

Stop Telling Women They Have Imposter Syndrome
by: Ruchika Tulshyan and Jodi-Ann Burey

https://hbr.org/2021/02/stop-telling-women-they-have-imposter-syndrome

Dear Black [woman] Boss from Reflective MedED Newsletter

“I stand on the sacrifices of a million women before me thinking "what can I do to make this mountain taller so the woman after me can see farther"?

-Legacy: Rupi Kaur