Addressing Gender Bias In the Treatment and Management of Acute and Chronic Pain

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Abstract

There is a long-standing stereotype of women being overly emotional and having low pain thresholds. This stereotype, when applied to medicine, can cause detrimental effects and implicit bias in healthcare providers for men, women, and non-binary genders. Namely, the belief that women's reports of pain are exaggerated and less serious than those brought to light by their male cohorts. This paper will discuss the differences between male and female-reported pain along with critical analysis of case studies in pain management. This examination of the literature notes the unconscious bias in healthcare and seeks a method to remedy it.

Addressing Gender Bias In the Treatment and Management of Acute and Chronic Pain

Pain is the body's way of telling human beings when something is not right. Experiencing pain is a part of being alive. However, some people live with chronic pain, and there is a gender bias in the treatment of this pain. Whether the pain being treated and managed is acute (such as post-operative care) or chronic (rheumatoid disorders), females are more likely to be undertreated for pain than a male with the same condition. But how much more likely is it that a female will be undertreated for pain? And how can the institution as a whole remedy this unconscious bias? The following analysis of literature and studies conducted around provider bias in pain management seeks to find a solution to this problem. The resulting plan impacts a multitude of healthcare practitioners, including primary care physicians, rheumatologists, neurologists, oncologists, chiropractors, OB/GYNs, and anesthesiologists. This issue impacts primarily women.

Gender Differences in the Experience of Pain

When discussing how pain is experienced differently between the genders, two common terms come up: threshold and tolerance. The pain threshold is the level at which one reports feeling pain, and one's pain tolerance is the level of painful stimulation at which point the subject can tolerate no more pain. Both of these limitations can be

determined in a laboratory setting using noxious stimuli such as heat, cold, pressure, and electricity to gain a qualitative result.

There are many theories as to if and why men and women experience pain differently. One such theory is outlined in Amy Criste's *Gender and Pain* and states that men focus on the physiological aspects of pain, and women fixate on the psychological and emotional dimensions. It is hypothesized that this focus on the negative feelings that accompany pain amplifies the negative sensations that people experience in painful situations.[1] Another notes that due to societal conditioning, once children reach elementary school, boys become less likely than girls to report being hurt or distressed to either their teachers or parents.[2] A third looks at the role of sex hormones on nociceptors, and while progesterone and estrogen both have anti-nociceptive effects, testosterone is more anti-nociceptive and protective properties.[3] The same article states that research has shown a link between females experiencing pain and being more aggressive in their pursuit to relieve it, either through taking medication or visiting their doctor.

Management and Treatment of Acute Pain

One of the largest areas of pain management is in the realm of post-operative treatments. However, the treatment bias is still present. One case study has found that a sample of nurse anesthetists is approximately 10% more likely to give a patient a sedative

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[1] *AANA Journal Course: Gender and Pain*, Criste

[2] *The Girl Who Cried Pain,* Hoffman and Tarzian

[3] *Sex Differences In Pain,* Bartley and Fillingim

in conjunction with an analgesic medication following surgery to repair a torn ACL to a male patient than a female patient. In the same situation, the two patients who received either a nonpharmatheraputical therapy or only sedation were both female. This study found that female patients were 150% more likely to be undertreated for pain than their male cohort.[4]

Another study found that in the immediate post-operative period, males were significantly more likely to receive narcotic analgesics than females. Johnson et al. found that women were less likely to be admitted to a hospital for chest pain, and after being denied admission, were less likely to receive a stress test at routine follow-up appointments a month later.[5] The differences in how heart attacks present in men (with sharp chest pain and upper body discomfort) versus how heart attacks present in women (fatigue, shortness of breath, chest pressure) may be a factor here, but seem overwhelmingly like the implicit bias that healthcare providers have that forces women to prove that they are as sick as men to be treated in the same way.

Management and Treatment of Chronic Pain

Gender-based provider bias is also found in the management of chronic pain. Internal medicine practitioners, especially rheumatologists and primary care physicians, have to be extremely mindful of their unconscious bias when treating both men and women. *The Girl Who Cried Pain* notes that the majority of female chronic pain

[4] *Do Nurse Anesthetists Demonstrate Gender Bias In Treating Pain?,* Criste

[5] *Gender differences in the management of acute chest pain,* Johnson et. al

patients were referred to their pain clinics through a specialist, while men were referred by their general practitioner. Fibromyalgia, with up to 90% of its patients being female, is the second most prevalent rheumatologic disorder. However, patients seeking a diagnosis for the cause of their generalized musculoskeletal pain, fatigue, and other symptoms are often placed through a series of exams that include metabolic panels, antibody tests, and hormone screenings before they are referred to a rheumatologist for evaluation.

What Comes Next: Intervention in Practitioner Sex Bias in Pain Management

This review of the literature serves to answer the question "what can we do to address and solve this practitioner bias against women in pain management?". The first step is addressing the issue in classroom settings; by catching the behaviors where they can start, the next generation of doctors and nurses can be very critical in their assessment of the best treatment option for their patients. Next is encouraging their mindfulness in the field and educating healthcare providers of this implicit bias. Through the pointing out of how gender stereotyping can impact their medical choices, it is then just a question of forming a new habit in their treatment behaviors.

Finally, though the issue seems relatively straightforward, it is unlikely that the detrimental effects of gender stereotyping can be resolved until society as a whole stops casting women in the light of over-emphasizing their pain and men acting so tough that they only report their pain when it becomes unbearable.

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