At the Heart of Gender Disparities in Health Care is Women's Pain

written by Theresa Hush | March 21, 2019



Pain is a key symptom of injury or disease, and managing acute

pain is usually one of the first services provided to patients. But if the patient in pain is a woman, the provider may require more convincing.

Providers doubt that women's pain is real and underestimate the level of pain for women. Substantial evidence shows that providers report higher levels of pain for men than for women. Gender stereotypes are so strong that in a recent pediatric study, participants evaluating a child's pain reported higher levels when told that the child was a boy and lower if told it was a girl. These stereotypes are embedded in a belief system that typifies men as strong individuals who are unlikely to express pain unless it's real, and women as weaker, more emotional individuals who exaggerate pain.

The pain perception stereotype is not limited to providers who are men. Men and women providers, women nurses, and even male or female participants in studies all tend to treat men's pain as more legitimate than women's.

Those stereotypes feed into delays in pain treatment for women as well as delayed diagnoses and therapies. Symptoms of cardiovascular disease, cancer, and even brain tumors have been dismissed by providers who did not take reported pain symptoms seriously. Women patients with chronic disease have more barriers in referrals to pain clinics; one study reports that referrals for men come from their primary care physicians, but women are referred by specialists. This could be a symptom of their primary physicians' of lack of trust in what they are experiencing and treatment delays; but it's also plausible that women find their way to specialists more often because they are not getting answers at the primary care level, or that primary

care physicians are simply referring women more often for further investigation, rather than treating them directly.

The Physiology of Pain for Women Differs from Men

Numerous studies show significant sex differences in the physiology of pain, due to sex hormones and brain-central nervous system processing. These study results, which have explored variances in neurological responses and specific hormonal effects, are well publicized.

Women have higher pain sensitivity, according to several studies—but in practice are often judged to be simply emotional. And if a woman is African American, not only is pain sensitivity higher, but so are the barriers to care.

Women also report more widespread pain and more constant pain than men, and are considered at greater epidemiological risk of conditions involving pain. Despite this wealth of information, pain symptoms in women may be overlooked, dismissed or viewed in the context of stereotypes rather than clinical evidence.

How can we address these disparities? Let’s examine how pain symptoms in women affect outcomes for specific health conditions, and how these might help us to develop solutions for better quality and outcomes for women. Cardiovascular disease and endometriosis are two representative conditions that all too often involve delayed diagnoses or misdiagnoses, dismissed pain, and significant mortality and morbidity for women.

Why Are Women Having Heart Attacks Still Misdiagnosed, When We Know Their Symptoms Differ from Men?

Our previous articles on cardiovascular disease in women, and even worse results for African American women, distinguish how pain symptoms are usually different than those in men. Women may not have crushing chest pain or may not experience chest pain at all—even as chest pain is the key symptom in men. Women may instead feel a more stinging angina pain in the chest; or pain in the jaw, upper back or arms; have headaches and dizziness; or experience shortness of breath.

Yet studies have found that women presenting in emergency rooms with their type of heart attack symptoms are too often misdiagnosed and sent home. Even when they are correctly diagnosed, it takes longer for women get to each stage of treatment. As a result, they are more likely to die in the hospital as well as within a year of the heart attack.

One study published in 2015 by the American Heart Association adjusted women's higher rate of death statistically downward, due to women's age and other morbidities. That adjustment claims that while women didn't get treatment as quickly as men did, they actually weren't really harmed because their adjusted death rates were the same as for men. That conclusion appears flawed. Outcomes for men is not an appropriate benchmark for women, and it is untested by research. Also, the population in the study may well be underrepresented, only including women who were diagnosed as having heart attacks while missing those who never got the diagnosis.

The fact that measured disparities exist in diagnosis and treatment should translate into action. Providers must be better educated on women's symptoms presented in the emergency room, have evidence-based protocols for testing for women's variants of disease, and receive cultural sensitivity training to avoid minimizing women's pain.

Why Does It Take an Average of 12 Years to Diagnose a Woman with Endometriosis?

Endometriosis is a disease caused by the misdirected migration of endometrial tissue from the uterus during menstruation. Instead of leaving the body vaginally, some tissue escapes through the fallopian tubes into the abdomen, where it creates lesions on and between abdominal organs. The primary symptom of endometriosis is pain, sometimes so severe that afflicted women cannot even stand. An estimated seven million women have endometriosis in the U.S., about 10 per cent of the female population.

The annual cost of endometriosis in the U.S. was estimated at $22 billion annually in one 2007 study, due to hospital admissions, diagnostics, surgeries and productivity loss. But other estimates put the annual loss much higher, with direct costs in the U.S. of $12,118 per woman with endometriosis, and $15,737 for indirect costs, including productivity losses—which extrapolates to nearly $200 billion. The economic burden is similar to other major chronic diseases.

Women with endometriosis experience significant challenges to their quality of life. Their persistent pain affects daily life, social interactions, work performance and career advancement, not only because the pain is disruptive, but also

because of the effort needed to diagnose or ameliorate it. Like many diseases affecting women only, endometriosis is under-researched, despite the magnitude of its impact.

But most staggering is the length of time and amount of effort it takes to determine the reason for pain. Despite the fact that this is a common disease—about 10 per cent of the general female population has endometriosis—it takes an average of 12 years in the U.S. to reach a diagnosis. Again, a persistent belief that women's pain is emotional and not physical leads physicians to dismiss symptoms, prescribe simple painkillers or opioids, and ignore the disease.

The diagnostic protocol has its own problems. Women with endometriosis experience higher levels of abdominal pain than women with other gynecological conditions, according to one laparoscopic study—regardless of the absence of a suspected diagnosis prior to surgery. Yet, historically, practitioners have followed a diagnostic path for endometriosis that requires laparoscopic surgery to visualize the lesions—a procedure that is itself painful and expensive.

Reliance on that protocol could reflect either clinicians' nonacceptance of women's reported pain and other symptoms of endometriosis, or clinicians' wanting definitive visual evidence. But the need for diagnostic laparoscopic surgery is now being called into question. This is a significant development; while women with multiple symptoms are more likely to undergo diagnostic surgery, the large number of other women who just report pain remain undiagnosed and untreated. Less invasive and faster methods of diagnoses will reach more women sooner.

Also emerging is a greater consensus on how to define and disease-stage endometriosis worldwide. This will help to significantly advance research, data sharing and scientific knowledge going forward, and provide more consistent treatment for women. The absence of a common classification and staging mechanism for the disease has stymied diagnosis, symptom management and development of therapies. While it's still early, the recognition of endometriosis as a significant quality of life issue for women is a foundational step toward a more systematic and empathetic approach to women's health.

How Women Experience Pain Also Leads to More Opioid Prescriptions and Related Risks

Women tend not only to have high sensitivity to pain, but also to be more afflicted by illnesses with a strong pain component. These include, in addition to endometriosis, chronic or progressive illnesses such as osteoporosis, osteoarthritis and auto-immune diseases such as rheumatoid arthritis and lupus.

As a result, women are more likely to have opioid medicines in their medicine chests. Indeed, 65 percent of opioid prescriptions are for women, and 40 percent more women than men become long-term users after surgery. Unfortunately, women's reliance on opioids will even further muddle providers' perception of women's pain as distinct from drug-seeking behavior.

Delays in diagnosis and persistent pain can increase prescriptions of opioids for women. Addressing pain in women must be a component of the public health imperative to reduce opioid prescriptions and addictions, because it is a root cause.

Actions Providers Must Take to Create Change for Women

Previous articles have suggested many actions that health systems and providers can take to address women's health and gender-disparate care. But the attitude toward pain is cultural, and simple action steps are not effective. Here's what needs to happen:

1. Provide forums for conversation to air topics and promote cultural sensitivity and equality for women as patients and professionals.

As with any cultural issue, health systems and organizations must address the cultural biases in their delivery of care, working with providers to address stereotypes and promote understanding of the biological differences. Pain is a ready-made topic for education about differential responses to pain and pain incidence in disease.

Cultural sensitivity grows through consistent and frequent dialogue about the issues. Providers need a forum for these conversations to take place, and education regarding recent research or disease trends that suggest new directions.

2. Explore the specific development of measurements for women-predominant diseases where pain is the key symptom.

This should include measurement of patient-reported functionality and outcomes using standardized instruments, if feasible. Standardized instruments may help to assess

differences between what patients are reporting, such as severe chronic pain, and the treatment plan. This information can elicit feedback from providers when there is no positive progression for the patient with a determined diagnosis.

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Image: Alex Boyd