

Women and Men Perceive Pain Differently

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Pain seems to affect women and men differently, even at early ages. Studies have shown that women report pain more often than men. Certain studies even suggest that women can handle and cope with pain better than their male counterparts.

As young children, boys are socialized to cope with pain differently than girls. Boys are expected to internalize their feelings when they get hurt, while girls aren't expected to hide their emotions when they're injured. But research has shown that male and female babies exhibit different responses to pain only hours after birth. Therefore, other factors must be at play.

Past studies suggest that men and women use different pathways in the brain when it comes to pain.

"Men and women both have pain and both can inhibit pain, but may do so by the activation of neural mechanisms that are different in each sex," said Jeffrey Mogil, Ph.D., who serves as the E.P. Taylor Professor of Pain Studies at McGill University in Montreal.

While social expectations and the brain definitely play a role in pain perception, there are other factors involved. It has been shown that a woman's pain threshold varies throughout her menstrual cycle, suggesting a potential role for estrogen and progesterone. For example, some women with migraine headaches complain that the pain gets worse during menstruation.

Chronic pain conditions including osteoarthritis, temporomandibular joint disorder, fibromyalgia and migraines affect women more frequently than men. "Women feel more pain, seek help more aggressively, and make more active attempts to cope with pain than men," said Mark Young, M.D., of John Hopkins University in Baltimore, in his book "Women and Pain." Pain conditions often hit women harder during their childbearing years, further suggesting that hormones play a role.

Examining the way pain medications work may hold the key in understanding the differences between the sexes. Mogil and colleagues have conducted many studies in the field of pain genetics, thoroughly researching gender differences in pain perception. They discovered that certain pain medications actually work better in women than in men.

Researchers at the University of California in San Francisco discovered that female patients achieved better pain control than male patients from kappa opioids, a well-known class of pain relievers, after surgery to remove their wisdom teeth. In 2000,

Australian researchers at the University of New South Wales showed in a randomized controlled trial that ibuprofen, the active ingredient in several over-the-counter medications, works more effectively in men.

It is obvious that the perception and modulation of pain among women and men differ. But, “we aren't doing enough to understand and close this gender gap,” Young said. More research is needed to further understand the role that gender plays in the response to pain and pain relief.

August is National Pain Awareness Month. The observance is sponsored by the National Pain Foundation and the American Academy of Pain Medicine. You can learn more by visiting the pain foundation's Web site at www.painconnection.org.

Sources

Moir, Anne, and David Jessel. *Brain Sex: The real difference between men and women*. Dell, New York, 1992.

Young, Mark. *Women and Pain: Why It Hurts and What You Can Do*. Hyperion, New York, 2001.