



Global Year Against Pain in Women

real women, real pain

Epidemiology of Pain in Women

Gender Differences in Rates of Common Pain Conditions in the General Population^{1,2}

- Age and sex-specific prevalence patterns differ for different pain conditions. However, prevalence rates of most common chronic pain conditions are higher among women than among men. For example, in population-based studies of adults, the female:male ratios for headache, neck, shoulder, knee and back pain average around 1.5:1; for orofacial pain conditions the ratios are about 2:1; for migraine headache the ratio is 2.5:1; and for fibromyalgia (a less prevalent but often disabling condition) the gender ratio is over 4:1.
- It is not yet clear whether we find higher rates of pain in women in prevalence surveys because women are more likely to get these conditions in the first place (i.e., higher incidence rates) or if the conditions have a longer duration in women.
- Women are more likely than men to experience multiple pains simultaneously. Having multiple pain conditions is associated with higher levels of disability and psychological distress than having a single pain condition, and having multiple pains is a risk factor for onset of new pain conditions.

Sex and Gender-Related Risk Factors for Pain³⁻⁵

- The female reproductive hormone estrogen clearly plays a role in some pain conditions (e.g., migraine headache, temporomandibular disorder pain). For other pain conditions, the evidence of hormonal involvement is less clear. However, rates of many common pain conditions increase for girls as they pass through puberty, whereas rates for adolescent boys are stable or rise less steeply than for girls.
- Men and women respond differently to various classes of opioid medications, suggesting that endogenous opioid system may differ in the two sexes, possibly influencing rates of pain.
- Women are more likely to experience depression than are men, and depression appears to be a risk factor for common pain conditions; similarly, women experience more physical conditions than do men, and the presence of such co-morbidities is hypothesized to be a risk factor for pain.

Epidemiology of Female-Specific Pain Conditions⁶⁻⁹

- Dysmenorrhea (painful menstrual periods) is extremely common, affecting 40-90% of women. About 15% of women describe their menstrual pain as excruciating. The prevalence and severity of primary dysmenorrhea are highest in late adolescence and the young adult years.
- Chronic (non-menstrual) pelvic pain can be caused by gynecological conditions (e.g., endometriosis, infection) or non-gynecological conditions (including irritable bowel syndrome or bladder-related pain). A large US study found that the prevalence of chronic pelvic pain from all causes was approximately 15% among women of reproductive age.
- Vulvodynia is chronic pain in the vulvar area in the absence of known infectious, dermatological, metabolic, autoimmune or neoplastic causes. In one community study, pain in the vulvar region was reported by over 18% of women, with 12% reporting knife-like pain or pain on contact, and over 6% reporting persistent itching or burning sensations; however, it is not known the extent to which these conditions were attributable to the medical causes mentioned above.
- Approximately 45% of women experience pain in the lower back/pelvic girdle during pregnancy. One-quarter of all women have pain of sufficient severity to require medical attention. Post-partum, about 25% of women experience lower back/pelvic girdle pain, with about 5% of all women experiencing severe pain.
- Labor pain is almost universal, experienced in over 95% of labors.

Pain-Related Health Care Use and Disability^{3,6}

- Women are more likely to seek health care for pain than men are, resulting in a high proportion of women in many pain treatment settings. The higher rate of treatment seeking among women may be due to the fact that pain is often more severe for women than for men.
- It is unclear whether women or men are more likely to experience employment disability associated with pain conditions; numerous factors such as type of work and family responsibilities influence employment disability

rates. However, when disability is defined in terms of limitations in activities of daily living as well as work absence, women have higher rates of pain-related disability.

- Although rates vary across populations, a median of about 20% of girls report missing school days due to dysmenorrhea.

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