

**When
Moving
Hurts**



**Assess
Understand
Take Action**

GLOBAL YEAR AGAINST MUSCULOSKELETAL PAIN

OCTOBER 2009 – OCTOBER 2010

Epidemiology of Musculoskeletal Pain

Prevalence [3]

Virtually all adults have experienced one or more brief episodes of musculoskeletal pain associated with injury or overuse. Recurrent or chronic musculoskeletal pain problems are also common. Prevalence is defined as the proportion of the population with a specific problem at a point or period in time.

- Although prevalence rates vary across studies of a given condition due to different case definitions, time periods, and populations studied, it is clear that the prevalence of certain musculoskeletal pain problems is fairly low (e.g., 2% or less for fibromyalgia, rheumatoid arthritis, and epicondylitis), whereas low back pain is extremely common, affecting 30–40% of adults in the general population at any given time.
- Between these extremes, prevalence is in the range of 15–20% for neck pain and for shoulder pain and 10–15% for knee pain, temporomandibular disorder pain, and chronic widespread pain.

Age/Sex Patterns [3,4]

Although the prevalence rates cited above are useful for estimating the overall burden of musculoskeletal pain problems, rates of many musculoskeletal pain problems vary greatly by age and sex.

- One obvious example is that knee pain from osteoarthritis is extremely common in the elderly, affecting over one-third of persons over age 60 years, but is much less common among younger persons. In contrast, the prevalence of some musculoskeletal pain conditions, such as temporomandibular disorder pain, declines after about 45 years of age.
- Neck, shoulder, knee, and back pain are about 1.5 times more common in women than in men. The female-to-male gender ratio is about 2 females to 1 male for temporomandibular disorder pain and over 4 females to 1 male for fibromyalgia.

Risk Factors for Musculoskeletal Pain [2,5,7]

A number of factors, in addition to age and sex, have been found to increase an individual's risk of developing persistent musculoskeletal pain.

- The presence of degenerative disease processes (rheumatoid arthritis and osteoarthritis) obviously increases the risk of painful joints; however, not all osteoarthritis is associated with pain.
- Both repetitive use and disuse of musculoskeletal structures have been associated with pain.
- In prospective studies, the presence of pain problems (whether musculoskeletal or non-musculoskeletal) at baseline has been found to predict onset of a new musculoskeletal pain problem, and the risk of onset increases with the number of pain problems present at baseline.
- Psychological factors, including depression, negative affect, and (in adolescents) behavior problems, have also been associated with increased risk of onset.
- Finally, some evidence suggests that certain genetic factors may increase risk of onset, at least for temporomandibular disorder pain.

Disability in Musculoskeletal Pain [1,6]

Persons who experience musculoskeletal pain problems may be kept from their usual activities or may limit their activities due to pain.

- Rates of disability from musculoskeletal pain in the general population are generally lower than among persons seeking primary care. For example, among elderly persons seeking care for knee pain, rates of disabling pain were 37%, versus 22% in the population as a whole.
- Because many musculoskeletal pain problems are extremely prevalent, the economic implications of musculoskeletal pain are enormous. In addition to the costs of unemployment compensation paid to persons unable to work due to musculoskeletal pain, pain-related lost productivity among employed persons is extremely common and costly.
- In a survey of the employed population in the United States, 7.2% of workers reported losing 2 or more hours of work in the past week due to back pain, arthritis, or other musculoskeletal pain conditions (including time spent at work without being productive due to pain). The mean time lost was 5 to 5.5 hours/week. The estimated total annual cost of productive time lost due to back pain, arthritis and other musculoskeletal pain problems was US\$41.7 billion in 2002.

References

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