

Epidemiology of Osteoarthritis

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KEYWORDS

• Osteoarthritis • Weight-bearing joints • Risk factors

Osteoarthritis (OA) is the most common joint disorder in the United States.¹ Among adults 60 years of age or older the prevalence of symptomatic knee OA is approximately 10% in men and 13% in women.² The number of people affected with symptomatic OA is likely to increase due to the aging of the population and the obesity epidemic.

Pain from OA is a key symptom in the decision to seek medical care and is an important antecedent to disability.³ Because of its high prevalence and the frequent disability that accompanies disease in major joints such as the knee and hip, OA accounts for more difficulty with climbing stairs and walking than any other disease.⁴ OA is also the most common reason for total hip and total knee replacement.⁵ The rapid increase in the prevalence of this already common disease suggests that OA will have a growing impact on health care and public health systems in the future.⁶

DEFINING OSTEOARTHRITIS

Epidemiologic principles can be used to describe the distribution of OA in the population and to examine risk factors for its occurrence and progression. For the purpose of epidemiologic investigation, OA can be defined pathologically, radiographically, or clinically. Radiographic OA has long been considered the reference standard, and multiple ways to define radiographic disease have been devised. The most common method for radiographic definition is the Kellgren-Lawrence (K/L) radiographic grading scheme and atlas, which has been in use for over 4 decades. This overall joint scoring system grades OA in 5 levels from 0 to 4, defining OA by the presence of a definite osteophyte (Grade ≥ 2), and more severe grades by the presumed successive appearance of joint space narrowing, sclerosis, cysts, and deformity.⁷ Other radiographic metrics including semiquantitative examination of individual radiographic features, such as osteophytes and joint space narrowing, or the direct measurement

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