Public health burden, epidemiology, and importance of osteoarthritis as a health issue

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Disclosures

- No relationships to disclose

Outline

- Description of osteoarthritis (OA)
- Epidemiology of OA
- Burden of OA

OA

- Pathology involves the whole joint
  - Loss of hyaline articular cartilage
  - Development of bony outgrowths, osteophytes
  - Inflammation of the joint capsule, synovium
  - Lax ligaments and muscular weakness

OA definitions

- Radiographic
  - Evidence of structural disease on x-ray
- Symptomatic
  - X-ray findings AND knee pain
- Clinical OA
  - Presence of pain and physical exam findings
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**Prevalence in the United States**

- 27M US adults have clinical OA

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**Clinical OA Prevalence worldwide**

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<thead>
<tr>
<th>Region</th>
<th>Men</th>
<th>Women</th>
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**Risk Factors: Age**

- CDC: OA in at least one joint in US
  - > 25 years = 13.9%
  - > 65 years = 33.6%
Prevalence of OA

Arthritis prevalence will grow

Obesity doubles risk of Knee OA

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Major OA Health Symptoms

- Pain
- Functional limitation and Disability
Pain

- Arthritis-related conditions
  - Second most common reason for medical visits in 2005
  - Hypertension was 1st, which is asymptomatic

Functional Limitation

- OA is leading cause of functional limitation/disability in older adults in the US\(^1\)
- OA is the 9th most common disease contributing to Years Lived with Disability in the US\(^1\)
  - 11th most common disease worldwide\(^3\)

Total Joint Replacement

- Address pain and functional limitation in Hip and knee OA
- Most commonly performed MSK surgery in US
  - 2004\(^1\)
    - Hip replacement = \(\sim225K\)
    - 37% increase from 2000
    - Knee replacement = \(\sim431K\)
    - 53% increase from 2000

Conclusions

- OA is highly prevalent and will become more prevalent worldwide
- Modifiable risk factors
  - Obesity, avoidance of repetitive activities
- Substantial public health burden
  - Treatment for pain and functional limitation
  - Total joint replacements