

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

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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

Outline

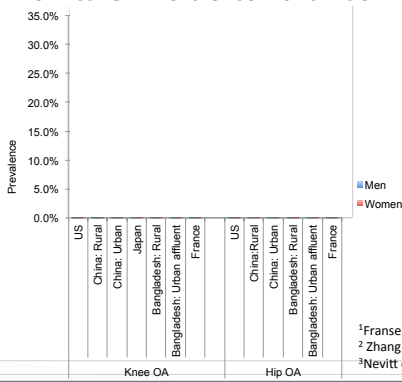
- Definition of osteoarthritis (OA)
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Prevalence in the United States

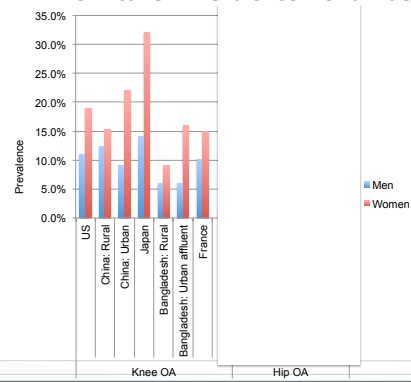
- 27M US adults have clinical OA¹

¹Lawrence et al 2008

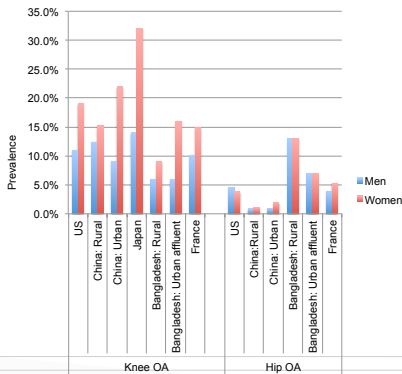
Clinical OA Prevalence worldwide^{1,2,3}



Clinical OA Prevalence worldwide

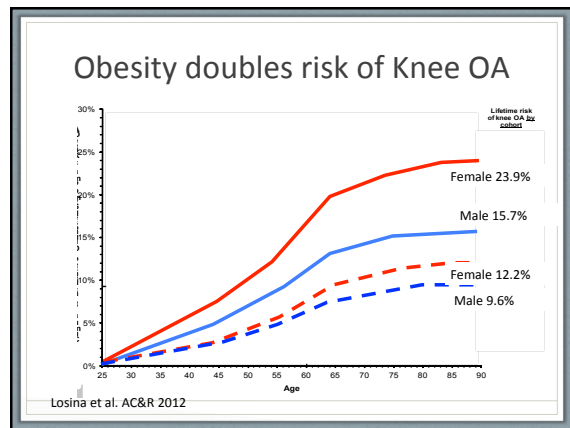
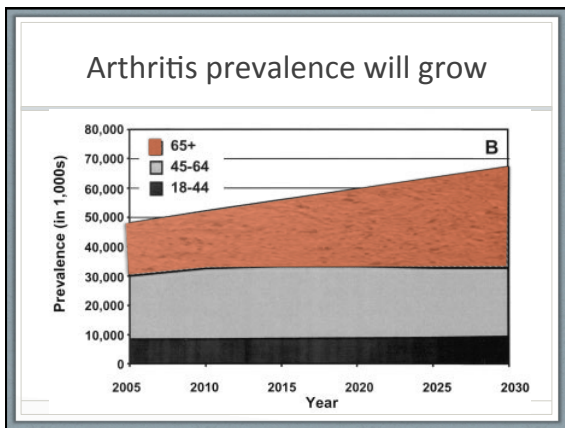
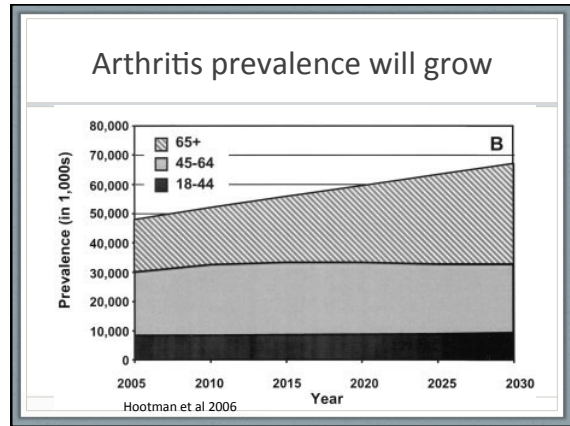
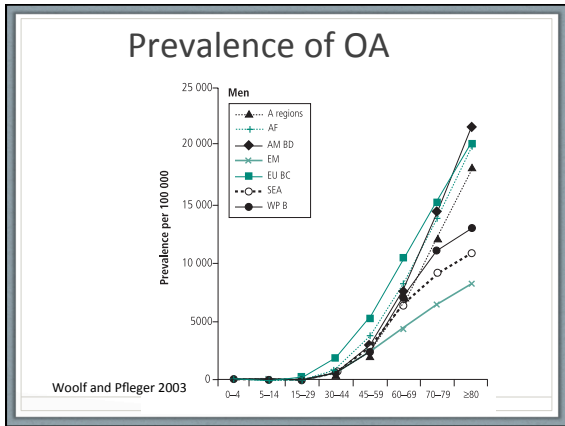


Clinical OA Prevalence worldwide



Risk Factors: Age

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



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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 asymptomatic¹

¹Cherry et al 2007

Functional Limitation

- OA is leading cause of functional limitation/disability in older adults in the US¹
- OA is the 9th most common disease contributing to Years Lived with Disability in the US²
 - 11th most common disease worldwide³

¹Guccione et al 1994 ²US Burden of Disease Collaborators 2013 ³Vos et al 2012

Total Joint Replacement

- Address pain and functional limitation in Hip and knee OA
- Most commonly performed MSK surgery in US
- 2004¹
 - Hip replacement = ~225K
 - 37% increase from 2000
 - Knee replacement = ~431K
 - 53% increase from 2000

¹Kim et al 2008

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