OA Prevalence & Burden

Osteoarthritis Prevention and Management in Primary Care

OA ACTION ALLIANCE
www.oaaction.unc.edu
Arthritis is a serious health crisis. CDC estimates that 1 in 4 (or 54.4 million) US adults have some form of arthritis, a figure that is projected to reach 78 million by the year 2040.\(^1\) **While there are estimated to be more than 100 types of arthritis, OA is the most common form of arthritis, affecting 32.5 million US adults.**\(^2\) The high prevalence of arthritis manifests in enormous societal and personal costs.

**FIGURE 1**

*Diagnosed and Future Projections* of Arthritis

**ARTHРИТ IS WILL INCREASE AS THE POPULATION GROWS AND AGES**

Data from: National Health Interview Survey 2013–2015

**OA PREVALENCE AND BURDEN**

**PREVALENCE BY AGE, GENDER, AND ETHNICITY**

**Age**
- 43% of people with OA are 65 or older and 88% of people with OA are 45 or older.²
- Annual incidence of knee OA is highest between 55 and 64 years old.⁶
- More than half of individuals with symptomatic knee OA are younger than 65.⁶

**Gender**
- 62% of individuals with OA are women.²
- Among people younger than 45, OA is more common among men; above age 45, OA is more common in women.⁶

**Ethnicity**
- 78% of individuals with OA are non-Hispanic whites.²
- However, within their own race/ethnic groups, non-Hispanic black and Hispanic populations have higher rates of OA than non-Hispanic whites.²

**PATIENT BURDEN**

**PAIN**
- People with OA experience greater pain, fatigue, levels of disability, and activity limitations than people of their comparable age.⁴
- While arthritis pain is extremely individualized, severe joint pain is not uncommon. Recent estimates suggest that one-fourth of adults with arthritis experience severe joint pain, characterized by a score of 7 or greater on the 0–10 pain scale.⁵
- Severe joint pain occurs more often in middle-aged adults (45–64), women, non-Hispanic blacks, Hispanics, those with a disability, and in people with the following concurrent health conditions: fair/poor health, obesity, diabetes, heart disease, and serious psychological distress.⁵
- 99% of all hip and knee replacements are done to address pain and functional limitations.¹
- Over 50% of people with knee OA will have a total knee replacement done during their lifetime.⁶

*Pain—both chronic and episodic—can result in depression and other mood disturbances, functional disabilities, and work limitations.*

**DEPRESSION AND SOCIAL ISOLATION**
- One-third of people with arthritis over the age of 45 suffer from depression or anxiety.¹
- People with OA are likely at greater risk for depression because of increased disability and fatigue associated with their pain.⁷
- People with doctor-diagnosed arthritis report more days in the last month of poor mental health (5.4 days vs 2.8 days for people without arthritis).²
- Social isolation and loneliness are often evident among people with OA and other chronic musculoskeletal diseases. There appears to be a bi-directional relationship with pain impacting social isolation and loneliness, and vice versa.⁸

**ACTIVITY LIMITATIONS**
- Almost 44% of people with arthritis have "arthritis-attributable activity limitations," defined as self-reported limitations in "usual activities" because of arthritis symptoms.¹
- By 2040, 11.4% of all adults will experience arthritis-attributable activity limitations.⁹

**WORK LIMITATIONS¹**
- 30% of adults with arthritis find stooping, bending, or kneeling very difficult.
- 20% cannot or find it very difficult to walk 3 blocks or push/pull large objects.
- People with OA (working age) experience lower employment rates than those without OA. Research suggests that arthritis-related activity limitations might contribute to their lack of employment.
The overall economic burden associated with OA in the US is estimated at $136.8 billion annually. This figure has more than doubled over the last decade. For perspective, the annual economic cost of arthritis surpasses that of tobacco-related health effects, cancer, and diabetes. Direct medical costs reach $65 billion annually.

- Because of OA, an estimated 1 million knee and hip replacements are completed each year.
- In 2013, OA was the 2nd most costly health condition treated in hospitals in the US.
- In 2013, total lost wages due to OA were $164 billion, or $4,040 less per adult with OA compared to those without OA.
- Increased absenteeism among workers with OA is fairly well documented, with workers with OA missing an average of 2 more days per year than workers without OA. Presenteeism, or loss of productivity while on the job, is less easy to calculate but is no less costly for workers or businesses.

**ECONOMIC BURDEN**

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**FIGURE 2**

Proportion of Adults Age 18 and Over with Self-Reported Doctor-Diagnosed Arthritis Reporting Limitations of Daily Living (ADL) and Activity Attributed to Arthritis, by Age, United States 2013–2015

<table>
<thead>
<tr>
<th></th>
<th>18 to 44 years old</th>
<th>45 to 64 years old</th>
<th>65+ years old</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All ADL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need help with routine needs</td>
<td>8%</td>
<td>11%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Help with personal care</td>
<td>1%</td>
<td>9%</td>
<td>26%</td>
<td>20%</td>
</tr>
<tr>
<td>Difficulty walking without equipment</td>
<td>8%</td>
<td>15%</td>
<td>30%</td>
<td>22%</td>
</tr>
<tr>
<td>Work Limitation</td>
<td>8%</td>
<td>22%</td>
<td>23%</td>
<td>19%</td>
</tr>
<tr>
<td>Unable to work NOW due to health</td>
<td>9%</td>
<td>23%</td>
<td>23%</td>
<td>19%</td>
</tr>
<tr>
<td>Limited in kind or amount of work</td>
<td>7%</td>
<td>19%</td>
<td>22%</td>
<td>19%</td>
</tr>
</tbody>
</table>

242 million people worldwide have symptomatic and activity-limiting OA of the hip and/or knee. OA pain affects sleep quality, mood, and participating in everyday life.

The Cost of Osteoarthritis

- Absenteeism costs $10.3 billion
- Total costs $136 billion
- Average direct cost $11,000 person/year

Indirect costs are $17 billion (i.e., lost earnings).
Direct costs are $65 billion (i.e., medical expenditures).

3rd most rapidly rising condition associated with disability, just behind diabetes and dementia.

OA significantly limits a person’s ability to self-manage other conditions, such as diabetes and hypertension.
A third of people with OA have 5 of more chronic conditions.
OA increases the risk of developing heart disease by 50%.

Reduced levels of physical activity, comorbid conditions, and adverse effects of medications lead to a 55% increase in all cause mortality.


ADDITIONAL READING


ACKNOWLEDGEMENTS AND DISCLOSURES

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REFERENCES


