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PREVENTION OPPORTUNITIES UNDER THE BIG SKY

The Burden of Arthritis in Montana

Arthritis is a collection of more than 100 different types of joint and connective tissue related diseases. It is one of the most common chronic diseases and affects children and young adults as well as older adults. In 2009 twenty-six percent of U.S. adults of all ages reported ever being diagnosed with arthritis.[1] Arthritis often causes severe joint pain and stiffness and can lead to permanent joint damage and disability. Arthritis is the leading cause of disability in the United States. Among the 47.5 million Americans that reported having a disability in 2005, 8.6 million reported arthritis as the cause of their disability.[2]

The Montana DPHHS recently was awarded a cooperative agreement from the Centers for Disease Control and Prevention to implement a comprehensive arthritis management program in the state. The Montana Arthritis Program will collaborate with the Montana Arthritis Foundation to recruit and train community organizations such as local hospitals, community health centers, and senior centers to provide the Arthritis Foundation Exercise Program[3,4] and Walk with Ease Program[5,6] to residents in their communities. This issue of *Montana Public Health* describes the prevalence of arthritis and arthritis-related disability in Montana.

Source of information This report utilizes data from the 2009 Behavioral Risk Factor Surveillance System (BRFSS) to assess the burden of arthritis in Montana. BRFSS is a random digit dialing telephone survey of non-institutionalized adults. The survey asks respondents whether they have been diagnosed with any type of arthritis and collects information about pain severity and activity limitations due to arthritis.

Prevalence of arthritis in Montana Arthritis is common among Montana adults with 28% (approximately 200,600 adults) reporting ever being diagnosed with arthritis. Moreover, the prevalence of arthritis has increased from 24% in 2001 to 28% in 2009.[7] The prevalence is significantly higher among adults who are women, older, have lower household income, overweight or obese, or less educational attainment than in adults without these characteristics. (Table 1)

Arthritis-related disability is also common in Montana. Among adults with arthritis in 2009, 46% (95%CI: 44%-49%) reported being limited in their usual activities because of joint symptoms; 31% (95%CI: 29%-34%) reported their arthritis affected whether they work, the type of work they do, or the amount of work they do; another 37% (95%CI: 33%-41%) reported their arthritis interfered with their normal social interaction. Notably, 57% (95%CI: 54%-41%) of adults with arthritis reported at least one of these three types of limitation. Regardless of disability status, 23% (95%CI: 21%-25%) reported their pain was severe (7 to 10 on a ten point pain scale) and 36% (95%CI: 33%-38%) reported their pain was moderate (4 to 6) on average during the past 30 days.

Table 1. Prevalence of arthritis in Montana adults, 2009

Characteristic	Percent (95%CI) diagnosed with arthritis
All	27.5 (26.2-28.8)
Sex	
Men	24.8 (22.9-26.8)
Women	30.1 (28.3-31-9)
Race	
White	27.7 (26.3-29.1)
American Indian	27.8 (22.8-33.4)
Other	24.5 (18.7-31.5)
Body Mass Index	
Not overweight	20.1 (18.2-22.0)
Overweight	27.9 (25.8-30.0)
Obese	38.4 (35.3-41.5)
Age (years)	
18-44	8.9 (7.2-10.5)
45-64	35.9 (33.9-37.9)
65+	54.2 (51.8-56.6)
Income	
<$25,000	35.9 (32.2-38.3)
$25,000 to $49,000	30.1 (27.5-32.6)
$50,000 +	21.8 (19.9-23.8)

Other chronic diseases in persons with arthritis

Montana adults with arthritis assume a higher burden of other chronic conditions compared to adults without arthritis. Adults with arthritis have three times higher rates of cardiovascular disease; more than twice the prevalence of hypertension and diabetes; and about 50% higher prevalence of high cholesterol and current asthma (Table 2). Additionally, adults with arthritis reported they do not engage in any physical activity outside of their regular job significantly more often than adults without arthritis (28% vs. 19%) and 17% (95%CI: 15%-20%) of adults with arthritis are current cigarette smokers.

Benefits of arthritis physical activity programs The Arthritis Foundation (AF) Exercise program and Walk with Ease (WWE) program are each 6 week instructor lead group exercise classes. The classes teach participants how to be physically active without putting added stress on their joints as well as providing social support and arthritis management education. Randomized clinical trials have shown that participants experienced significant improvement in both functional fitness and ability to complete activities of daily living after completing the AF Exercise program.[3,4] Similarly, participants in the WWE program showed increased confidence and physical abilities and decreased pain and fatigue.[5,6]

Table 2. Prevalence of selected chronic conditions among adults with and without arthritis, Montana, 2009

Chronic conditions	Percent diagnosed (95% CI) in persons	
	With arthritis	Without arthritis
Hypertension	48.5 (46.0-51.0)	20.1 (18.5-21.6)
High Cholesterol	48.0 (45.5-50.6)	30.9 (28.9-32.9)
Cardiovascular Disease	15.5 (13.8-17.2)	4.5 (3.8-5.2)
Diabetes	12.3 (10.8-13.9)	4.7 (4.0-5.3)
Asthma	11.0 (9.5-12.5)	7.2 (6.1-8.4)

Recommendations

- All adults (including those with arthritis) should get AT LEAST 2 hours and 30 minutes of moderate intensity aerobic activity throughout each week AND do muscle strengthening activities on 2 days per week. Adults 65 or older should also include activities that promote balance on at least 3 days per week.
- Health care providers should encourage patients to include physical activity as a key part of arthritis treatment.
- Contact the Arthritis Foundation Montana Office at www.arthritis.org/montana for information about resources available in your community**.**

For more information, contact Stacy Campbell with the Montana Arthritis Program at (406) 444-3138 or stcampbell@mt.gov.

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