

## **Arthritis: A Potential Barrier to Physical Activity for Adults with Heart Disease or Diabetes**

Arthritis, heart disease (HD) and diabetes are common chronic diseases among adults in the United States, affecting approximately 46.4 million, 14.1 million, and 20.6 million adults, respectively. Physical activity (through aerobic exercise and strength training) is a beneficial and recommended tool in the self-management of all three of these chronic diseases by reducing symptoms and risk factors for complications, as well as improving disease outcomes. Adults with and without chronic diseases face barriers to regular physical activity such as lack of time, competing responsibilities, lack of motivation and difficulty finding an enjoyable activity. However, those who have arthritis face additional disease specific barriers, such as concerns about aggravating arthritis pain and causing further joint damage and they might be unsure about which types and amounts of activity are safe for their joints.

The Centers for Disease Control and Prevention (CDC) analyzed data from combined 2005 and 2007 Behavioral Risk Factor Surveillance System (BRFSS) to estimate the prevalence of 1) self-reported doctor diagnosed arthritis among adults aged  $\geq 18$  years with self-reported HD or those with diagnosed diabetes and 2) the prevalence of physical inactivity among adults with HD or diabetes by arthritis status.

The results of the analysis with respect to arthritis and HD indicate that arthritis affected 57.4% of adults with HD, compared with 27.4% of adults in the general population. Also, for adults with HD the likelihood of physical inactivity was 30% greater for those with arthritis than for those without arthritis. In general, state specific estimates were consistent with the overall findings; however, data for Minnesota did not show as great a difference in physical inactivity level. This was possibly the result of varying levels of potential confounders (e.g. age, race, and education level) within the state.

The prevalence of arthritis was 52.0% among adults with diabetes. Also, the prevalence of physical inactivity was higher among adults with diabetes and arthritis (29.8%) compared with adults with diabetes alone. This finding held true for the state of Minnesota as well with higher prevalence of physical inactivity among adults with diabetes and arthritis (20.3%) in comparison with those without arthritis (16.0%). These results suggest that arthritis may be an under recognized barrier to being physically active for adults with arthritis and diabetes as well as, arthritis and HD.

Because arthritis appears to be an independent barrier for physical activity among adults with diabetes and HD, it is important that programs whose aim is to increase physical activity in these adults integrate their efforts with arthritis

programs, whenever possible. Self-management education interventions such as the Arthritis Foundation (AF) Self-Help Program and Chronic Disease Self Management Program can help individuals learn to manage arthritis pain and discuss how to safely increase physical activity. Some additional exercise programs including AF Exercise Program, the AF Aquatics Program and EnhanceFitness are available in many communities and are appropriate for adults with HD, diabetes and arthritis.

Full Articles:

Centers for Disease Control (CDC) - *MMWR Morb Mortal Wkly Rep* 2008 May 9; 57(18):486-489. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5718a3.htm>

Centers for Disease Control (CDC) - *MMWR Morb Mortal Wkly Rep* 2009 Feb27; 58(7):165-169. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5807a2.htm>