Monitoring Progress in Arthritis Management—United States and 25 States, 2003

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3 tables omitted

Arthritis is a chronic disease affecting an estimated 43 million (20.8%) U.S. adults and is the leading cause of disability in the United States. Arthritis results in activity and work limitations, decreased quality of life, and substantial burden to the U.S. health-care system. Promotion of arthritis self-management through weight counseling, physical activity counseling, and arthritis education can reduce pain, improve function and quality of life, and delay disability among persons with arthritis. To encourage arthritis self-management, three objectives were added to the national health objectives for 2010. To monitor progress toward achieving these objectives and assess that progress by selected characteristics, CDC analyzed data from the 2003 National Health Interview Survey (NHIS) and the state-based 2003 Behavioral Risk Factor Surveillance System (BRFSS) survey. This report summarizes the results of those analyses, which indicated no statistically significant progress toward reaching the targets for weight counseling, physical activity counseling, and arthritis education. To meet these targets by 2010, public health and health-care agencies should increase efforts to improve awareness of these three factors among both health-care providers and patients. Such interventions will enable persons with arthritis to better self-manage their disease.

NHIS is an annual, in-person survey of persons of all ages in the United States. In 2003, approximately 31,000 adults were selected as a nationally representative sample of the U.S. civilian, noninstitutionalized adult population aged ≥18 years; response rate for the adult sample was 74.2%. Respondents were considered to have doctor-diagnosed arthritis if they answered “yes” to the question: “Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?” Those who answered “yes” were asked three questions designed to monitor progress toward meeting the national arthritis management objectives for 2010 regarding weight counseling (objective 2-4a), physical activity counseling (objective 2-4b), and arthritis education (objective 2-8).

BRFSS is a state-based, random-digit-dialed telephone survey of the U.S. civilian, noninstitutionalized population aged ≥18 years conducted in all 50 states, the District of Columbia, and three U.S. territories. In the arthritis management module of the 2003 BRFSS survey administered in 25 states, the same questions were asked as in the NHIS survey to identify persons with arthritis and to monitor progress toward meeting the national arthritis management objectives for 2010. Response rates among the 25 states ranged from 28.8% in Connecticut to 65.5% in Utah; median response rate was 42.7%. Because NHIS and BRFSS both use complex sample designs, statistical weighting was used to calculate estimates and 95% confidence intervals; both NHIS and BRFSS estimates were age-adjusted to the standard 2000 U.S. population.

For both surveys, prevalence estimates for physical activity counseling and arthritis education objectives were calculated from the total number of respondents who reported doctor-diagnosed arthritis. Prevalence estimates for the weight counseling objective were calculated from the total number of respondents with doctor-diagnosed arthritis who were also overweight (i.e., their self-reported height and weight produced a body mass index [BMI] of 25.0-29.9) or obese (i.e., BMI of ≥30.0). In NHIS, physically inactive was defined as no participation in any leisure-time physical activity. Persons with doctor-diagnosed arthritis were considered to have activ-
ity limitations attributable to arthritis if they responded “yes” to the question: “Are you now limited in any way in any of your usual activities because of arthritis or joint symptoms?”

When compared with baseline data for the national objectives collected on NHIS in 2002, NHIS data for 2003 indicated no statistically significant progress toward meeting the targets for the three arthritis management objectives. Age-adjusted data for 2003 indicated that 21.3% of U.S. adults had doctor-diagnosed arthritis. Among overweight or obese persons with arthritis, weight counseling was reported by 37.3% overall; among obese persons with arthritis, 56.1% reported weight counseling. Among all adults with arthritis, 55.5% reported receiving physical activity counseling. The percentage of persons receiving physical activity counseling who were obese (64.9%) was significantly higher (p<0.05) than for persons who were overweight (52.5%). Overall, arthritis education was reported by 10.8%. Adults with activity limitations attributable to arthritis were more likely to have met all three objectives than were those without such limitations. Differences within age, sex, racial/ethnic, and education groups were minimal for all three objectives.

In the 2003 BRFSS, among the 25 states that administered the arthritis management questions, the age-adjusted percentage of overweight and obese persons with arthritis who received weight counseling ranged from 23.4% to 35.9%, with no state reaching the 2010 target. Among all persons with arthritis, the percentage receiving physical activity counseling ranged from 42.6% to 57.9%, with no state reaching the 2010 target; the percentage receiving arthritis education ranged from 5.8% to 15.7%, with seven states reaching the 2010 target.

The findings in this report indicate that, from 2002 to 2003, no statistically significant progress occurred toward reaching the targets for the three 2010 national health objectives for arthritis management, although for two of the objectives (i.e., weight counseling and physical activity counseling), results suggested movement in the right direction. However, only 37.3% of persons categorized as overweight or obese and only 56.1% of those categorized as obese received weight counseling. The results suggest that opportunities are being missed by health-care providers and persons with arthritis to employ nonpharmacologic arthritis management techniques that have been determined to reduce pain, improve function and mental health, and delay disability.3

Health-care–provider counseling for behavior change might have a priming effect, making patients more likely to practice beneficial behaviors. Although the evidence is insufficient to suggest that physical activity counseling alone leads to long-term increases in physical activity levels, such counseling has resulted in short-term improvement.8 Provider counseling coupled with promotion of self-management; medical, social, and community support systems; community-based arthritis programs; and interventions that address behavioral factors (e.g., readiness to change behavior, belief in ability to change behavior, or depression) might help persons with arthritis attempt and maintain desirable self-management behaviors.

The CDC Arthritis Program is addressing arthritis self-management objectives by funding 36 state programs that partner with local chapters of the Arthritis Foundation and others to increase availability of evidence-based community self-management programs such as People with Arthritis Can Exercise®, the Arthritis Foundation Aquatics Program, and the Arthritis Self-Help Course. CDC is also evaluating additional community-based physical activity programs and investigating new methods to decrease barriers by delivering self-management education classes through the mail or Internet. The CDC health communications campaign, Physical Activity. The Arthritis Pain Reliever, has been implemented in 35 states; a similar campaign for Spanish-speaking persons with arthritis is under development. The goal of all these activities is to increase availability and access to self-management programs at the community level for persons with arthritis.

The findings in this report are subject to at least three limitations. First, data are based on self-reports. Certain persons who reported doctor-diagnosed arthritis might not actually have the disease or might not have accurately reported whether they received provider counseling; however, the arthritis case-finding question used has been determined appropriately sensitive for public health surveillance.9 Second, this analysis did not adjust for factors such as sociodemographic characteristics of participants or access to health care, which might have affected likelihood of receiving arthritis counseling or education. Finally, BRFSS findings for individual states are limited in their comparability to national data from NHIS because of (1) different sampling schemes, (2) different modes of survey administration (telephone interview in BRFSS versus in-person interview in NHIS), (3) different ordering of questions, and (4) lower response rates and state-specific sample sizes in the BRFSS survey.

As the U.S. population ages, the personal and societal burdens of arthritis will continue to increase. Evidence-based, self-management interventions for arthritis have been underutilized. Further research to understand and overcome barriers to use of these interventions might help persons with arthritis. Systematic efforts to encourage persons to self-manage their arthritis also might help reduce the burden of arthritis on the health-care system. Efforts to increase health-care–provider counseling for weight control and physical activity and referral to arthritis education programs are a first step toward increasing self-management behavior in persons with arthritis.