Critical Issues and Trends: Underserved Populations; Fitness

The Conspicuous Absence of People With Disabilities in Public Fitness and Recreation Facilities: Lack of Interest or Lack of Access?

James H. Rimmer, PhD

INTRODUCTION

The lack of participation in beneficial exercise is a serious public health concern for all Americans, but it is even more acute for the estimated 52 million Americans with disabilities who are demonstrably at much greater risk for developing the types of serious health problems associated with a sedentary lifestyle.[1–6] Despite the enormous health benefits that can be derived from regular physical activity,[7] people with disabilities remain one of the most physically inactive groups in society.[8–10] *Healthy People 2010* uses cross-sectional surveys to outline current levels of physical activity and exercise for various subpopulations in the United States and lists goals for the year 2010.[6] As shown in Table 1, people with disabilities are currently much less active than their nondisabled counterparts and participate in less regular and vigorous physical activity. They also report a substantially high number of secondary conditions, which are directly or indirectly associated with their disability but in most cases are considered preventable (e.g., fatigue, weight gain, pain).[11]

Efforts to eliminate health disparities must address issues, needs, and barriers of people with disabilities for positive lifestyle change. The level of physical inactivity observed among people with disabilities has been linked to an increase in the severity of disability and erosion of involvement in community activities.[12] These patterns of low physical activity reported among people with disabilities raise serious concern regarding their health and well being, particularly as they enter their later years when the effects of the natural aging process are compounded by years of sedentary living and severe deconditioning.[13–15]

DISABILITY-UNFRIENDLY PHYSICAL ACTIVITY ENVIRONMENTS

The *Healthy People 2010* chapter entitled ''Disability and Secondary Conditions'' notes that the significantly lower rate of participation among people with disabilities in physical activity may be related to environmental barriers—including architectural barriers, organizational policies and practices, discrimination, and social attitudes—and recommends that public health agencies begin to evaluate which environmental factors enhance or impede participation in physical activity.[6] Presently, many people with disabilities consider most local and state parks, fitness centers, health clubs, spas, gymnasiums, playgrounds, pools, trails, and sports fields to be ''unfriendly'' environments because of a lack of accessibility.[16–18]

Physical environments, both indoor and outdoor, have an important role in influencing participation in physical activity.[19–22] Factors that affect accessibility include the built environment, equipment, information, staff training, and policies and procedures.

Physical (Built) Environment

Indoor environments of many fitness facilities and health clubs impose substantial barriers to participation among people with disabilities.[17,18,22] Doors are often difficult to open; bathrooms are not always accessible, particularly in smaller gymnasiums and health clubs; and stairs often lead from one part of the facility to another (e.g., cardiovascular equipment is on one floor and strength equipment is on another floor). Although the Americans with Disabilities Act requires facilities to be architecturally accessible, many facilities are not in compliance with the federal law.[23]

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Table 1

Healthy People 2010
Goals for Increasing Physical Activity

	% People With Disabilities	% People Without Disabilities	% *Healthy People 2010* Target
No leisure-time physical activity	56	36	20
30 min of moderate physical activity 5+ days per week	12	16	30
20 min of vigorous physical activity 3+ days per week	13	25	30

The outdoor environment can be even less accessible than indoor facilities. Streets often do not have curb cuts; sidewalks are broken and damaged, creating a higher risk of falling; walkways in parks and recreation areas are too narrow for a wheelchair user and partner walking side-by-side; the community does not have sidewalks; paths are poorly lit; many urban and suburban communities have a high traffic volume and excessive noise from motor vehicles; or the terrain is too steep. Other potential problems with outdoor environments include unsafe neighborhoods, poor weather that makes sidewalks slippery or impassable, too few benches along a trail for people who need frequent rest periods, poorly designated signage, no accessible bathrooms along a trail or path, and no handicapped parking spaces close to a trail.[24]

Exercise Equipment

Most manufacturers of exercise equipment do not consider in their design specifications how to make their equipment accessible for people with physical, cognitive, and sensory disabilities. Inaccessible equipment is a major problem in terms of participation in fitness-enhancing activities for people with disabilities. Most commercial cardiovascular exercise equipment requires propulsion by using the musculature of both lower extremities (i.e., treadmills, stationary bikes, elliptical cross-trainers, and steppers), thereby restricting use among people with lower extremity disabilities (e.g., paralysis, limb loss). Although a few fitness facilities may be able to purchase a commercial-quality arm cycle or wheelchair ergometer, the vast majority of fitness centers either cannot afford this equipment or do not find it cost effective to purchase one for a small percentage of their clientele.[25] Another problem with inaccessible equipment is that offering clients with disabilities the opportunity to use one piece of adaptive exercise equipment when the rest of the membership has access to all the equipment clearly limits the amount of enjoyment and benefit that can be obtained from a more diversified program.

People with visual or cognitive disabilities also have problems using various types of exercise equipment. Display panels are often difficult to read or understand, getting on and off the equipment presents some risk of falling, and machines are often hard to propel or lift (e.g., weights are too heavy) for people with low strength levels.

Increased access to standard exercise equipment by people with disabilities would be beneficial to individuals with physical, cognitive, and sensory limitations. Many find it difficult to use the variety of exercise machines currently available to people without disabilities to enhance cardiovascular and musculoskeletal health.

Walking Is Often the Recommended Modality for Increasing Physical Activity

Public health messages often include recommendations that encourage increased walking as the primary mode of physical activity, taking the stairs whenever possible, or parking farther away from work and walking the remaining distance. The current initiative, Steps to a Healthier U.S., sponsored by the Department of Health and Human Services, encourages people to use pedometers to walk 10,000 steps a day either through work-related activity (e.g., walking to and from work) or general activity. Unfortunately, this initiative is not targeted to people with disabilities and chronic health conditions who are unable to walk or have difficulty walking, and inexpensive and simple pedometers are unavailable to monitor physical activity in wheelchair users.

It is understandable why many public health organizations recommend increased walking as the primary mode for increasing physical activity. The majority of the population is able to walk, and walking does not involve any cost or skill and can be done at convenient times during the day (e.g., to and from work). However, for people with disabilities and chronic health conditions who have lower limb paralysis or weakness (e.g., spinal cord injury, multiple sclerosis, cerebral palsy, Parkinsons disease); arthritis; knee, back, or hip pain; extreme obesity; pulmonary diseases; or other types of disabling conditions, this recommendation is not a realistic option. Alternative forms of physical activity, such as performing various types of chair-exercise regimens that can be done at home or outdoors (e.g., chair-exercise videos or television shows, resistance exercise with milk containers or soup cans, wheeling in a local park), using upper body exercise equipment such as an arm ergometer, or having access to a swimming pool at a local public fitness facility should be recommended so that people with disabilities can participate in a parallel set of public health recommendations that achieve similar health benefits. Many YMCAs and park district programs offer discounted memberships for people with disabilities.

Commercial and Print Media

Much of the commercial and print media portray slender individuals participating in various types of physical activity. The concept of being physically active and disabled is not a common visualization in the mainstream media. The lack of photos of people with disabilities exercising outdoors or in health clubs and recreational facilities is a missed opportunity to encourage greater participation among a subgroup with some of the highest levels of physical inactivity. Additionally, brochures and other

print materials produced by private and public fitness facilities seldom provide information on what services and programs are available to people with disabilities.[26]

PLANNING FOR A BETTER FUTURE

Physical activity could have substantial benefits in improving the health of people with disabilities by reducing the incidence of chronic diseases (e.g., type 2 diabetes, heart disease, obesity), improving secondary conditions associated with various disabilities (e.g., weakness, fatigue, reduced mobility, joint stiffness, social isolation, depression), and allowing individuals to maintain a higher level of independence in performing various activities of daily living and instrumental activities of daily living.[27–30] Public and private health organizations, as well as industry and policymakers, must work together in addressing the large and growing disparity in physical activity participation observed between people with and without disabilities.[6]

Future promotional campaigns focusing on greater participation in physical activity among the U.S. population must present a more inclusive image that suggests to people with disabilities that they, too, should participate in regular physical activity most days of the week. Organizations working to increase physical activity among the general population should also use resources that provide services for people with disabilities. One example is the National Center on Physical Activity and Disability (www.ncpad.org, 1-800-900-8086), which is a federally funded information center containing many useful physical activities for people with varying types of disabilities, including home-exercise videos for upper body exercise and a list of organizations nationwide that provide disability-friendly physical activity programs. Increasing access to physical activity for the more than 50 million Americans with disabilities will take a cohesive and structured plan that emphasizes equal access for everybody.

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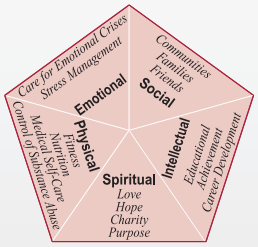

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(O'Donnell, *American Journal of Health Promotion,* 1989, 3(3):5.)

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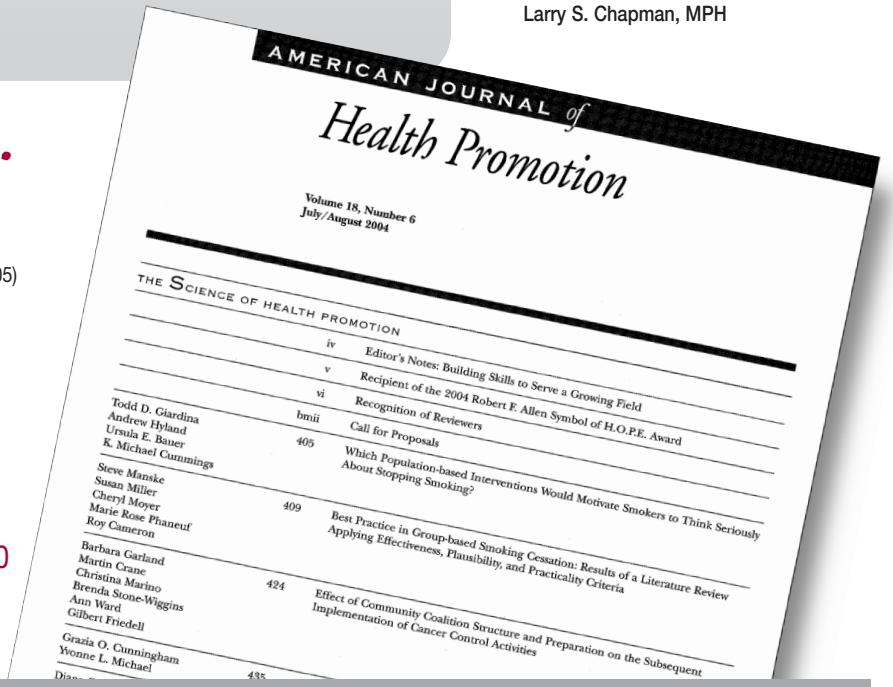
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Volume 18, Number 6
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THE SCIENCE OF HEALTH PROMOTION
iv Editor's Notes: Building Skills to Serve a Growing Field
v Recipient of the 2004 Robert F. Allen Symbol of H.O.P.E. Award
vi Recognition of Reviewers
bmii Call for Proposals
405 Which Population-based Interventions Would Motivate Smokers to Think Seriously About Stopping Smoking?
Todd D. Giardina, Andrew Hyland, Ursula E. Bauer, K. Michael Cummings
409 Best Practice in Group-based Smoking Cessation: Results of a Literature Review Applying Effectiveness, Plausibility, and Practicality Criteria
Steve Manske, Susan Miller, Cheryl Moyer, Marie Rose Phaneuf, Roy Cameron
424 Effect of Community Coalition Structure and Preparation on the Subsequent Implementation of Cancer Control Activities
Barbara Garland, Martin Crane, Christina Marino, Brenda Stone-Wiggins, Ann Ward, Gilbert Friedell
Grazia O. Cunningham, Yvonne L. Michael
435