



ELSEVIER

Contents lists available at ScienceDirect

Research in Developmental Disabilities



Effects of declared levels of physical activity on quality of life of individuals with intellectual disabilities



Rachel N. Blick, Adam E. Saad, Anthony J. Goreczny^{*},
KatieLynn Roman, Cambria Hunter Sorensen

Chatham University, United States

ARTICLE INFO

Article history:

Received 6 October 2014

Accepted 28 November 2014

Available online 17 December 2014

Keywords:

Physical activity

Exercise

Intellectual disabilities

Residential setting

Community

Participation

ABSTRACT

Routine physical fitness improves health and psychosocial well-being of individuals with intellectual and developmental disabilities. The current study investigated impact of physical fitness on quality of life by comparing individuals who maintain a physically active lifestyle with those who do not report exercising. We assessed several indicators of quality of life, including inclusion and community participation; satisfaction with professional services, home life, and day activities; dignity, rights, and respect received from others; fear; choice and control; and family satisfaction. Our data suggested that individuals who regularly exercise reported having more frequent outings into the community than did their peers who reported exercising infrequently; regular exercisers were also more likely to live in intermediate care facilities (ICF) as opposed to living independently or with family members. We discuss possible reasons for this as well as ideas for future research needed to expand on this area.

© 2014 Published by Elsevier Ltd.

1. Introduction

Health disparities affecting individuals with intellectual disabilities (ID) are a critical public health concern. A growing body of literature has indicated that, compared to the general population, individuals with ID experience disproportionate rates of many disease states, including but not limited to arthritis, asthma, cardiovascular disease, diabetes, periodontal disease, and gastrointestinal conditions (Anders & Davis, 2010; de Winter, Magilsen, van Alfen, Willemsen, & Evenhuis, 2011; Haveman et al., 2010; Khocht, Janal, & Turner, 2010; Reichard, Stolzle, & Fox, 2011). These incommensurate rates of morbidity are consistent with a life expectancy that is lower than those without ID; a review of death certificates suggested that individuals with ID live, on average, 15 years less than do other individuals (Glover & Ayub, 2010). Furthermore, self-appraisal of health status affirms epidemiological data: a mere 5% of individuals with cognitive disabilities described themselves as having an excellent health status, far less than that reported by 30% of persons without disabilities (Reichard et al., 2011).

Obesity is a major contributor to poor health and is a highly prevalent risk factor for individuals with ID. Barnes, Howie, McDermott, and Mann (2013) suggested that upwards of 79.6% of individuals with ID are overweight or obese. At heightened

^{*} Corresponding author at: Chatham University, Woodland Road, Pittsburgh, PA 15232, United States. Tel.: +1 4123651886.
E-mail address: Goreczny@chatham.edu (A.J. Goreczny).

risk are women, individuals with mild intellectual impairment, those with Down syndrome, and persons living in their own place of residence (Stancliffe et al., 2011). A major contributor to obesity is a sedentary lifestyle, whereas physical activity is a health-sustaining behavior that improves health outcomes for individuals with ID. For instance, participation in physical activity decreases risk of obesity, improves cardiovascular fitness, and increases bone mineral density in this population (Bodde, Seo, Frey, Van Puymbroeck, & Lohrmann, 2013; Hemayattalab, 2010; Mikulovic et al., 2014).

Psychological benefits of regular physical fitness for individuals with ID are also impressive; Vogt, Schneider, Abeln, Anneken, and Strüder (2012) suggested that moderate running exercises enhance affective states, improve self-confidence, and increase perceived social acceptance for individuals with ID. Exercise has also shown promise as a negative reinforcement for individuals with ID; physical activity has demonstrated the ability to reduce trait and state anxiety (Carraro & Gobbi, 2012). Psychosocial benefits of physical activity may be most beneficial when conducted in groups, especially in inclusive settings; individuals participating in community-based physical fitness programs reportedly enjoyed learning how to play new sports, maintaining social contact with others, and receiving social praise and acknowledgment from those without a disability (Lante, Walkley, Gamble, & Vassos, 2011). Positive benefits of regular physical activity are so prominent that Robertson and colleagues (2000) argued that increasing intensity and frequency of physical activity would be the best way to improve overall health of persons with ID.

Despite indisputable health effects, most individuals with ID fall exceedingly short of meeting recommended exercise guidelines. Released in 2008, The Physical Activity Guidelines for Americans recommends that Americans engage in at least 30 min per day of moderate-to-vigorous physical activity (MVPA) 5 days per week (U.S. Department of Health and Human Services, 2008). Although 47% of adult Americans satisfied this recommendation in 2010 (U.S. Department of Health and Human Services, 2013), only 15% of individuals with ID did so (Finlayson, Turner, & Granat, 2011). Furthermore, Bodde and colleagues (2013) suggested that individuals with ID accumulate, on average, only 7.73 min of MVPA per day.

Although rate of exercise for the ID population is a well-documented finding, there is little research about how frequency of exercise affects quality of life (QoL) beyond measurable health benefits. The purpose of this study was to compare quality of life of individuals with ID who reported never exercising versus individuals with ID who reported frequently exercising (defined as more than 12 times per month). Indicators of quality of life in the present study included satisfaction with services received; amount of dignity, rights, and respect received from others; choice and control over daily activities; employment; quality of interpersonal relationships; and inclusion in community activities.

2. Methods

2.1. Participants

Our study utilized data from Pennsylvania's Independent Monitoring for Quality Program (IM4Q). IM4Q is a multifaceted program designed to assess quality of life of individuals with ID who receive funding for services through Pennsylvania's Office of Developmental Programs (ODP) or are on the wait list to receive such services. IM4Q uses feedback from consumers and people in their lives to inform changes in policy and improve quality of services available in Pennsylvania's intellectual disability system. For this study, we used data from 788 participants residing in three counties in Southwestern Pennsylvania. Reported ages of participants ranged from 11 to 92 years, with an average of 49 years (S.D. = 16.4). Types of living arrangements included group home ($n = 531$, 67.3%), family home or life sharing provider ($n = 139$, 17.6%), intermediate care facility (ICF; $n = 76$, 9.6%), personal residence ($n = 17$, 2.1%), and other ($n = 31$, 3.9%).

2.2. Instrument

The primary data source for the IM4Q program is the Essential Data Elements (EDE), an 85-item structured interview developed by the state-wide IM4Q program that assesses the following domains: inclusion/community participation; satisfaction; dignity, rights, and respect; fear; choice and control and family satisfaction. Interviewers administered the EDE in an on-site interview with individuals with ID and a caregiver (e.g. family member, guardian, friend, advocate, or staff person). Only individuals receiving supports and services could answer the first 35 questions of the EDE; these questions pertained to their treatment by and satisfaction with paraprofessional staff, residential programs, and daytime activity programs (e.g. vocational programs, community-integrated employment, or day programs). The EDE demonstrated high inter-rater reliability in a previous investigation (Goreczny, Miller, Dunmire, & Tolge, 2005).

2.3. Procedure

The Pennsylvania Office of Developmental Programs (ODP) compiled a randomized sample of individuals within the counties served by the program and sent that listing to the local program to indicate which individuals to attempt to interview. This randomization was to ensure that every consumer of services had an equal opportunity to participate. There were no exclusionary criteria. Upon receipt of the listing, county staff or supports coordinators completed a presurvey, the purpose of which was to provide vital information (such as contact information and accessibility) enabling program staff to schedule interviews. A team of two staff members interviewed consumers and persons close to the individual (e.g. paraprofessional staff, family, friends, or guardians) in either their place of residence or at their daytime activity (e.g. school,

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات