Obesity and Occupational Therapy

Obesity is a significant and wide-ranging health and social problem in the United States. Occupational therapy is a health care profession that is qualified to provide interventions with individuals, groups, and society to effect change to promote optimum health. Occupational therapy services often are used directly and indirectly to influence weight management and related health concerns through attention to healthy lifestyle choices and engagement in fulfilling occupations. The purpose of this paper is to explain the position of the American Occupational Therapy Association (AOTA) to persons within and outside the profession on the role of occupational therapists and occupational therapy assistants\(^1\) in addressing the impact of obesity on people’s ability to engage in daily activities.

Overview of Occupational Therapy’s Domain and Process

Since its founding, occupational therapy has been a healing profession of practitioners who “assist clients (people, organizations, and populations) to engage in everyday activities or occupations that they want and need to do in a manner that supports health and participation” (AOTA, 2008, p. 626). Occupational therapy practitioners\(^2\) apply their knowledge about engagement in occupation—that is, “everyday activity” (AOTA, 2008, p. 628)—to help clients who may be experiencing disease, impairment, disability, dissatisfaction, or adverse circumstances participate in their daily life in a manner that supports their health and well-being. By working with clients from this perspective, occupational therapy practitioners use everyday activities therapeutically to improve the health and quality of life of consumers and to prevent future disease or disability.

AOTA and its members are committed to improving individual quality of life; promoting community health; and supporting primary, secondary, and tertiary care for the management of obesity (AOTA, 2012). This position paper explores the growing dangers of the obesity epidemic for health and describes specific and effective services provided by occupational therapy practitioners in a variety of practice settings for clients at risk for or experiencing the negative health effects of obesity throughout the life course. It also explains how the occupational therapy profession provides expertise and leadership in working with the problem of obesity in U.S. society as it affects individuals, families, groups, and populations across the life course.

Obesity in the United States

Definitions and Prevalence

Being overweight (defined as having a body mass index [BMI] of 25 to 29.9) or obese (defined as having a BMI of 30 or greater; Centers for Disease Control and Prevention [CDC], 2012b) reduces the likelihood of a

\(^1\)Occupational therapists are responsible for all aspects of occupational therapy service delivery and are accountable for the safety and effectiveness of the occupational therapy service delivery process. Occupational therapy assistants deliver occupational therapy services under the supervision of and in collaboration with an occupational therapist (AOTA, 2009).

\(^2\)When the term occupational therapy practitioner is used in this document, it refers to both occupational therapists and occupational therapy assistants (AOTA, 2006).
person’s participation in physical activity, including leisure activity (Trost, Owen, Bauman, Sallis, & Brown, 2002). Although only 9% of Americans believe that they have a weight problem (Lee & Oliver, 2002) and fewer than 45% of overweight and obese patients receive weight counseling from their physicians (Rose, Frank, & Carrera, 2011), an all-time high 35.5% of adult American men and 35.8% of adult American women are considered obese (Flegal, Carroll, Kit, & Ogden, 2012). The prevalence of Grade 3 obesity, also commonly referred to as severe or morbid obesity (defined as having a BMI over 40; Flegal et al., 2012; National Center for Health Statistics, 2007) is rising substantially faster than obesity (Sturm, 2003); the current prevalence of Grade 3 obesity is 6.3% for the population (Flegal et al., 2012).

These figures translate to more than 72 million Americans considered obese (CDC, 2011). Although statistics show that the prevalence of obesity among adults, adolescents, and children plateaued in 2009–2010 compared with 2007–2008 (Flegal et al., 2012; Ogden, Carroll, Kit, & Flegal, 2012), rates are not yet declining.

Risk for obesity is elevated for individuals who have physical disabilities such as spinal cord injuries (Krause & Broderick, 2004); persons diagnosed with schizophrenia and other forms of mental illness (Bacon, Farnworth, & Boyd, 2012; Chwastiak et al., 2009; Northey & Barnett, 2012); persons with fewer years of education or poorer economic or job status; and Latino and African American individuals (Blanchard, 2009; CDC, 2006, 2011; Cousins et al., 1992; Flegal et al., 2012; Friedman & Brownell, 1996; Institute of Medicine [IOM], 2012; Wardle, Waller, & Jarvis, 2002). As a result of increased need across all populations, the field of bariatrics (defined as the medical investigation, prevention, and treatment of obesity with interventions including diet and nutrition, exercise, behavior modification, lifestyle changes, surgical alternatives, and appropriate medications) is continuing to expand (Foti, 2004, 2005).

**Risks and Costs**

Several studies have demonstrated that obesity appears to be correlated with increased risk of both acute and chronic diseases, including Type 2 diabetes, sleep apnea, chronic low back pain, hypertension, hyperlipidemia, multiple forms of cancer, cardiovascular disease, stroke, liver and gall bladder disease, osteoarthritis, activity limitations, reproductive health complications including infertility, psychological distress, discrimination, and an increased mortality rate that is responsible for a remarkable 95.7 million years of life lost across the overweight and obese population (CDC, 2011; Expert Panel on the Identification, Evaluation, and Treatment of Overweight in Adults, 1998; Finkelstein, Brown, Wrage, Allaire, & Hoerger, 2010; Forhan, Law, Vrkljan, & Taylor, 2011; Hemminki, Li, Sundquist, & Sundquist, 2011).

The related medical costs are estimated at $147 billion annually, representing nearly 10% of all medical spending in the United States (Finkelstein, Trogdon, Cohen, & Dietz, 2009). About half of the total is paid by Medicare and Medicaid, creating a significant financial burden for taxpayers (Finkelstein & Strombotne, 2010). Job absenteeism due directly or indirectly to obesity-related illness results in costs of $12.8 billion per year and an additional $30.3 billion in medical costs for employers (Finkelstein, DiBonaventura, Burgess, & Hale, 2010; McKinnon et al., 2009). In addition, reduced productivity by obese workers while on the job, referred to as presenteeism, results in another $30.0 billion in losses to businesses annually (Finkelstein, DiBonaventura, et al., 2010).

Studies show that more than one-third of children aged 6 to 19 years are considered at risk for overweight or are overweight, defined as being at or above the 85th percentile of the sex-specific BMI-for-age growth chart (CDC, 2012a; Center for Health and Health Care in Schools [CHHCS], 2005; Janicke, Harman, Kelleher, & Zhang, 2009); the current prevalence of obesity among children and adolescents is 16.9% (Ogden et al., 2012). These young people are at risk for a variety of health-related concerns, including a trajectory toward obesity as an adult and the health risks associated with it (CHHCS, 2005; Nonnemaker, Morgan-Lopez, Pais, & Finkelstein, 2009; Waters et al., 2011). In addition, a bidirectional relationship between obesity and psychiatric diagnoses has been observed among children (Janicke et al., 2009).
Societal issues—such as easy access to inexpensive junk food and overexposure to junk food marketing; steadily increasing food portion sizes; decreased provision of healthy food choices and physical education in schools; lack of safety for outdoor activities in lower income areas; and the growing popularity of sedentary activities, including viewing television, playing seated video games, and using the computer—have contributed to the rapid rise of overweight and obesity in childhood (Finkelstein & Strombotne, 2010; IOM, 2012; McKinnon et al., 2009; Miller, Rosenbloom, & Silverstein, 2004). As a result, today’s children are the first American generation in modern times who will not have as long a life expectancy as their parents (Nonnemaker et al., 2009).

On a societal level, obesity has been called the “last acceptable form of prejudice” (Chambliss, Finley, & Blair, 2004), one that often results in reduced education, housing, and employment opportunities (Puhl & Brownell, 2001); decreased access to and use of health care and wellness services (Wallis, 2004); exposure to stigmatization, discrimination, and bullying (IOM, 2012); and restricted social participation as a result of negative portrayals in popular media (Greenberg, Eastin, Hofschire, Lachlan, & Brownell, 2003; Moloney, 2000). Such negative consequences can have a devastating impact on individuals throughout their life, limiting their opportunities for or access to participation in their desired occupations.

**Positive Results of Weight Loss**

Weight loss of as little as 5% to 10% of initial body weight can result in significant improvements in measures of blood pressure, cholesterol levels, and glycemic control as well as other improved health outcomes (Expert Panel, 1998; Fabricatore & Wadden, 2003; Manson, Skerrett, Greenland, & VanItallie, 2004; Trogdon, Finkelstein, Reyes, & Dietz, 2009). Conversely, while long-term and appropriate weight loss has been shown to improve health conditions, short-term loss and rebounding with increased weight gain, inappropriate dieting methods, or extreme weight loss may have damaging effects. Typical methods used by consumers who wish to lose weight consist of adhering to a short-term calorie-restricted diet; engaging in a regular, not intense, or irregularly active exercise program; and/or a quick fix of fad diets or weight-loss drugs followed by a return to unhealthy eating habits and a sedentary lifestyle (Andrus, 2011; Heshka et al., 2003: Lowe, Miller-Kovach, Frye, & Phelan, 1999; Manson et al., 2004; Mokdad et al., 2001; Moloney, 2000; Smith & Fremouw, 1987; Willet, 2001). With millions of Americans of all ages struggling—and failing—to achieve and maintain a healthy lifestyle using current methods for weight management, it is clear that health care consumers need to implement successful approaches to attaining effective and sustainable changes in lifestyle that influence weight and, more important, produce related improvements in overall health.

**Occupational Therapy’s Role in Lifestyle Change**

Through a knowledge of psychosocial, physical, environmental, and spiritual factors, as well as of cultural traditions and perspectives that influence performance (AOTA, 2008), occupational therapy practitioners are uniquely qualified to help consumers develop and implement an individualized, structured approach to lifestyle change. A randomized trial published in *JAMA* (Heshka et al., 2003) indicated that weight loss is more effectively achieved when a health care consumer is assisted through a structured program than when a client relies on self-help methods. Using analysis and understanding of performance patterns related to daily life activities (AOTA, 2008; Clark, 2000; Quiroga, 1995; Wilcock, 1998; Yerxa, 2002), occupational therapy practitioners provide meaningful and effective interventions that facilitate participation by the client in modifying daily life habits, roles, and patterns that contribute to chronic conditions, including obesity (Forhan et al., 2011).

For example, occupational therapy interventions are effective in fostering use of virtual reality technology to increase physical activity for patients living in a mental health residential facility (Bacon et al., 2012), engaging adolescents in increased physical activity (Ketteridge & Boshoff, 2008), adapting physical activity for children who are obese (Gill, 2011), and educating children about optimal nutritional choices (Munguba, Valdés, & da Silva, 2008).
When assessing needs, setting goals, and developing and implementing interventions to assist clients who are overweight or obese, the occupational therapy practitioner works closely with the client to design specific plans or programs to meet individual goals and desires in whatever areas of occupation are affected. Occupational therapy intervention may focus on prevention, remediation/restoration, adaptation/compensation, and maintenance programs in either long-term or short-term settings (AOTA, 2008).

Occupational therapy programs incorporate the client’s personal preferences, circumstances, context, and needs into a customized healthy living regimen that takes into account any preexisting medical conditions (AOTA, 2008). Through education, strategies, and intervention planning, occupational therapy practitioners can help clients build habits, including engagement in health-promoting activities, that allow them to maintain targeted changes that influence their weight within the complex dynamic of their everyday lives. Occupational therapists provide interventions for people of diverse populations across the life course, in settings ranging from clinical to community environments.

Occupational therapy interventions in the area of weight management may include community programs of health promotion through lifestyle change; education programs; facilitation of the development of new habits and routines; Lifestyle Redesign® programs; recommendation of home modifications; adaptations/equipment; use of assistive and/or virtual technologies; compensatory training in activities of daily living and instrumental activities of daily living; wellness programs for children, teens, and adults; play and physical education in the schools; safe patient-handling programs in hospitals and skilled nursing facilities; and bariatric and postsurgical acute care interventions (Foti, 2004, 2005). Other relevant resources that can be provided by occupational therapy practitioners include adaptive equipment evaluation, home modification planning, task modification solutions, durable medical equipment considerations, compensatory strategies, caregiver training, and client resource development and advocacy (AOTA, 2008).

These and other occupational therapy services addressing obesity and related conditions may be covered by major health care payers, including Medicare, Medicaid, and private health insurance (Finkelstein & Strombotne, 2010). With the high expenses generated by obesity-related health conditions (Finkelstein et al., 2009; Finkelstein, DiBonaventura, et al., 2010; McKinnon et al., 2009), the need to reduce spending is an economic necessity. Preventing illness is consistently more cost-effective than treating it, and occupational therapy has demonstrated in past research both cost-effectiveness and success in preventing declines in health, for example, among community-dwelling older adults and other populations (Clark et al., 1997, 2012).

A study by Trogdon et al. (2009) using a return-on-investment model found that, in workplaces, a weight loss of 5% among all overweight and obese employees would result in an annual savings in medical and absenteeism costs of $90 per person. Low-cost interventions, such as a group led by an occupational therapist, could reduce costs for businesses, with even more savings realized if substantial weight loss is achieved. Thus, occupational therapy is positioned to become an ever more valuable component of the growing public health imperative to reverse obesity trends in a cost-effective manner.

**Conclusion**

Occupational therapy addresses the prevention and concerns of obesity through a holistic and client-centered approach to lifestyle through participation in activities that promote health. Occupational therapy interventions can facilitate weight loss and enable clients to make healthy changes in daily life, including incorporating productive and social activity as well as informed choices about eating habits and physical activity, to address obesity, thus improving health outcomes and maintaining long-term wellness.

**References**


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