

Relationship Between a Sedentary Lifestyle and Health Outcomes

Introduction

The health of an individual is directly impacted by daily behaviors and attitudes which is a major area of concern for public health professionals. Lifestyle choices contribute to 60% of risk factors for diseases and health conditions that can lower the quality of life for an individual (Farhud, 2015). Eating behaviors, physical activity, smoking, alcohol use, and sleeping are examples of lifestyle choices that contribute to the health of an individual. A sedentary lifestyle is a large issue found throughout the United States that must be addressed because of the health outcomes that are related to this behavior. Health-promoting and health-compromising behaviors are found within the adulthood age group that can impact the health of an individual throughout all adult years (Shultz et al., 2019). For example, an individual can develop daily exercise behaviors that improve their current health and leads to better health outcomes further in adulthood. Sedentary lifestyles in adulthood can have severe health outcomes for an individual and lead to the development of further health issues, but changes can be made throughout the United States to improve this health behavior and result in a healthier nation.

Health Outcomes

The various lifestyle factors are related to many health conditions that can affect an individual or population. Li et al. (2014) found that life-expectancy for American adults can be prolonged by 12.2 years for males and 14.0 years for females when low-risk lifestyle behaviors are adopted. Sedentary lifestyles can have severe health outcomes for an adult and lead to the

development of worse health conditions. Public health professionals are concerned over disease cascades which occur when a modifiable risk factor leads to a certain disease which brings along more risk factors and can lead to further diseases and health conditions (Shultz et al., 2019).

Disease cascades can occur in people that participate in common sedentary behaviors and result in more health issues for an individual.

Sedentary behaviors are linked to multiple health outcomes which makes this health issue an important area for research and intervention. A common form of a sedentary behavior is sitting for long periods of time with low energy exertion which is found often in watching television. T.V. viewing was found to have a strong correlation with developing cardiovascular disease, Type 2 diabetes, metabolic syndrome, and some forms of cancer like colon and ovarian cancer (De Rezende et al., 2014). The health outcomes related to a sedentary lifestyle can have a large impact on an aging adult and lead to further health implications. For example, there is a 13% increase for all-cause mortality in individuals that sit and watch television for more than two hours in a day (De Rezende et al., 2014). Sedentary behaviors can be dangerous to an individual when done in abundance because of the health outcomes that can occur throughout the adult years.

The largest health outcome for an individual that shows high levels of sedentary behaviors is the development of obesity and the health issues that come with this condition. Sedentary behaviors have been associated with low physical activity and unhealthy diets (Deliens et al., 2015). Early adulthood is an important time of life for an individual when developing daily behaviors and health habits. Physical inactivity and sedentary behaviors are two separate and distinct health behaviors, but they work closely in affecting an individual's health and both can lead to obesity and high weights in the population (Deliens et al., 2015). Obesity is

also found to be related to unhealthy eating behaviors which is impacted by sedentary behaviors in adults. Watching television can increase eating for an individual because advertisements promote the action of eating unhealthy foods, and many adults eat high sugar and high fat snacks while sitting down in front of the television (Jezewska-Zychowicz et al., 2018). Obesity is a health condition that can lead to the development of further health issues and diseases which points out the importance of targeting sedentary behaviors in the adult population. The health outcomes related to sedentary lifestyles are very severe and can greatly reduce the quality of a person's life and lead to early death for many adults.

Sedentary Behavior Prevalence

Sedentary behaviors are commonly found throughout the American population and have high prevalence rates which impacts the health of many individuals. On average, adults spend 6 to 8 hours a day performing sedentary activities like sitting for long periods of time or watching television (Young et al., 2016). Sitting is a popular activity that is practiced by many Americans, and this activity can have severe health implications if done in abundance. It has been found that 25.7% of adults in the United States sit for longer than 8 hours a day performing various sedentary activities (Yang et al., 2019). Lifestyles that consist of high rates of sedentary behaviors are seen in all age groups, but adults have higher prevalence rates than other age groups which further shows the importance of changing this health behavior in the adult population. Researchers measure sedentary behavior prevalence through common activities, and the most used form of measurement is studying television watching time. A reported 62% of adults between the ages of 20 and 64 spend 2 hours or more watching television each day (Yang et al., 2019). The high prevalence of television viewing in the American population is directly related to high sedentary rates which has also been associated within certain population groups.

For example, African Americans are a larger concern for public health professionals regarding health outcomes related to sedentary behaviors because of the high rates of T.V. watching for this racial group (Young et al., 2016). Along with the black population, males, obese individuals, and physically inactive people show higher prevalence rates of sitting in front of the television which has a large effect on health outcomes (Yang et al., 2019). The prevalence of sedentary behaviors in the American population further reveals the importance of studying this health behavior and the health outcomes related to a sedentary lifestyle.

An individual that participates in more sedentary activities is at a higher risk of developing health issues like cardiovascular disease and Type 2 diabetes, but a major health outcome for this health behavior is the development of obesity which can lead to future health issues. Obesity is a serious health problem within the United States and affects all populations and age groups. In 2018, the prevalence of obesity was 42.5% for the adult population, and middle age adults showed the highest rates at 44.8% (Centers for Disease Control and Prevention, 2020). Obesity is also found to have higher prevalence rates for different racial groups. Similar to the prevalence of sedentary behaviors, non-Hispanic blacks have higher rates of obesity at 49.6% (Centers for Disease Control and Prevention, 2020). The high prevalence of obesity within the American population is an important public health issue, and the many risk factors that affect this health condition make this a complicated health outcome. Sedentary lifestyles directly contribute to the obesity rates, and an individual that participates in many sedentary behaviors is at a larger risk for developing obesity and further raising the prevalence of this health condition.

Background of Sedentary Behaviors

The behaviors associated with a sedentary lifestyle frequently occur throughout the United States, and these behaviors can be difficult to change because of the high reliance on the sedentary activities. Lavie et al. (2019) describes sedentary behaviors “as any waking behavior characterized by an energy expenditure ≤ 1.5 metabolic equivalents of task (METs), while in a seated, reclined or lying posture.” This definition encompasses many common activities such as sitting, watching television, reading, working, and computer use which can have a negative impact on the health of an individual. These activities fall under the individual level of the Social Ecological Model because they are behaviors that the individual showcases daily that impact various health outcomes. Sedentary lifestyles have become a common feature in the present world because of the large advancements in technology and the strong push to perform minimal activities (Thyfault et al., 2015). Behaviors that are sedentary are more likely to occur in the population because of societal changes and the belief that people should relax more often. On the other hand, physical activity has become a popular health behavior that has been adopted by many Americans that want to live healthy lifestyles (Thivel et al., 2018). The contrast of these two lifestyles is a major barrier for public health professionals because the social norms that are present in the current society must be changed in order to reduce the rates of sedentary behaviors.

Sedentary behaviors are more likely to occur in the adult population because of the current work environments and responsibilities associated with the adult age group. For example, sedentary behaviors increased by 20% between the 1960 and 2008 within the United States because of the shift to less physically active occupations (Thivel et al., 2018). Adults spend a large part of each day at work, and many jobs require sitting for long periods of time in front of a computer screen which raises the risks for sedentary-related health outcomes. Along with sitting

at a desk, many other factors are associated with the relationship between employment status and sedentary behaviors in an adult. Long commute times, busy work schedules, and the stress that can come along with many jobs have large effects on the health behaviors of an adult and can cause an individual to be at a higher risk for various negative health conditions (Rawlings et al., 2019). The organizational level of the Social Ecological Model is a large barrier for decreasing sedentary behaviors in the population because of the social norms associated with many occupations and the built environment that favors sedentary activities and lifestyles.

The responsibilities and common activities within the American adult lifestyle largely contribute to sedentary behaviors. Obligations of adults in the family role have a large impact on daily health behaviors. Parenting and family commitments make it more difficult for an adult to practice daily physical activities and many parents perform sedentary behaviors to relax at the end of the day (Rawlings et al., 2019). The social networks of an adult individual directly impact the displayed health behaviors and can increase the rates of sedentary behaviors. However, friends and families can also encourage healthy behaviors through various activities and reduce sedentary behaviors in an adult (Rawlings et al., 2019). There are many areas for intervention to decrease sedentary behaviors in the adult population and make this health behavior less common. The individual, interpersonal, and organizational levels of the Social Ecological Model all have a direct relationship with sedentary behaviors and offer areas for intervention to decrease sedentary behaviors in the adult population.

Conclusion

Adult lifestyles that show high rates of sedentary behaviors can lead to negative health outcomes that can greatly reduce the quality of life, but sedentary activities can be decreased through changes in the American society. Sedentary behaviors are a common feature in the

American adult lifestyle because of the easy access and social norms associated with this behavior. However, a person that performs high sedentary behaviors is at a larger risk for developing adverse health conditions that can lead to early death. Obesity is largely linked to sedentary behaviors which brings along further health issues and makes this an important area of public health concern. Sedentary behaviors are more likely to occur because of work requirements, household responsibilities, and individual characteristics, but interventions can be proposed to reduce sedentary behaviors in the population. The relationship between lifestyle and health outcomes is fully displayed in the health issues surrounding sedentary behaviors, and all public health professionals must understand this connection and work on improving the health of all people.

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