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Individual and Environmental Barriers to Successful Aging: The Importance of Considering Environmental Supports

Abstract: *The cornerstone to successful aging is maintaining a consistent physical activity routine and healthy diet. This is particular important for aging adults to preserve their independence. However, for low-income aging adults there are significant individual and environmental barriers that reduce their ability to maintain a healthy lifestyle. Understanding how environmental supports can be found in existing programs geared toward older adults is a way to insure long-term behavioral changes.*

Keywords: independence; low income; nutrition; mobility impairments; physical activity; Older Americans Nutrition Program

The US population has been shown to be an aging one,¹ and concerns about meeting the nation's late-life care needs continue to increase.² The increase is expected to peak in 2030 when 20% of the US population will be at least 65 years of

age.³ This will be a large increase over a short amount of time given that approximately 15% of the population in 2015 was 65 or older. Not only is this rapid increase problematic, additional areas of concern are occurring within this age group as well. For example, gender disparities are observed with women experiencing a greater number of debilitating

group may be more likely to engage in lifestyle change.^{5,6} Given that health care costs rise with age, it is promising that some of these individuals are more likely to mitigate issues associated with aging through lifestyle change. As discussed in this issue by Leon,⁷ clear lifestyle steps can be taken to reduce the risks associated with aging. Not surprising, the basis of

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conditions such as arthritis, depressive symptoms, and fall-related fractures.¹ Racial differences are also present with Black adults aged 65 and older seeing smaller postponements in disability compared to Whites.⁴

Although there is clear reason for concern about these issues of aging, some evidence suggests that this age

successful aging includes maintaining a regular physical activity routine and a consistent healthy diet. Although the benefits of maintaining a regular physical activity routine are known to most adults, less than 3% of aging adults attain sufficient physical activity to meet public health recommendations.⁸

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Some barriers have been identified that may affect this age group engaging in consistent lifestyle behaviors. For example, individual-level barriers to participating regularly in physical activity among aging adults include intimidation, social isolation, lack of motivation, pain associated with physical activity or potential for injury, and health perceptions that exercise is for the young and fit.^{9,10} While some older adults feel that they lack time to be physically active, others identified the lack of daily structure as a barrier.^{9,10}

Low Income

For low-income aging adults, participating in regular physical activity can be more difficult compared to aging adults with more resources. In addition to the individual-level barriers mentioned above, environmental barriers are also present. Low-income aging adults that live in neighborhoods with high rates of poverty, unemployment, female-headed households, and low education levels have a high probability of being surrounded by crime and incivilities, and their neighborhoods lack order and social cohesion.^{11,12} Thus, high levels of disadvantage can easily discourage low-income aging adults from being physically active because they perceive their environment as unsafe.¹³ Although a gym membership may be a simple solution, financial constraints make it difficult to pay the associated cost. Initiating and maintaining a behavior change to increase physical activity in the presence of the various individual and environmental barriers can be daunting for low-income aging adults.

Consuming proper nutrition on a consistent basis is also necessary for successful aging, but similar to physical activity, a difficulty arises in the area of regularly obtaining proper nutrition for many low-income aging adults. For instance, low-income aging adults or aging adults on a limited budget are at risk for food insecurity, which is the lack of availability or access to healthful food because of insufficient money or other resources.¹⁴ A number of these

individuals also live in census tracts that have been either designated as (1) food deserts, or areas of where the majority of the residents are over 1.0 miles from the nearest grocery store, or (2) areas with low vehicle availability, which means that individuals in that census tract report having no vehicle available and are more than 0.5 miles from the nearest grocery store.¹⁵ Although these areas of town have limited access to a grocery store, the areas are populated with convenience stores, fast-food restaurants, and liquor stores. Consequently, aging adults have greater access to energy-dense foods (high in empty calories and/or fat and low in nutrients), which if they are overconsumed, can lead to weight gain and additional poor health outcomes.¹⁶⁻¹⁸ These risk factors, on top of the risk factor that affects all individuals as they age—difficulty of absorbing nutrients from food—which is also heightened by the high incidence of polypharmacy, places aging adults at risk for malnutrition.¹⁹ Malnutrition can contribute to an increased risk for infectious diseases, ultimately deterring aging adults from engaging in routine physical activity.²⁰

Older Americans Nutrition Program

Maintaining a regular physical activity routine and consistent healthy diet are preventive behaviors that are prescribed because of the overall health benefits. In the presence of various individual and environmental barriers this may be difficult for low-income aging adults to achieve; yet this foundation is particularly important for aging adults to maintain their independence. Having aging adults retain their independence is a public health goal that is rooted in multiple policies for this segment of the population. A federally funded nutrition assistance program aimed at adults 60 years and older is the Older Americans Nutrition Program (OANP). Although the program is not an income-based program, like other food assistance programs, it targets individuals of greatest economic or social need who

may be at nutritional risk.²¹ This program will be in high demand as the US older adult population reaches 92 million by 2030.²²

To engage in long-term behavior changes, strategies that address the environmental needs of this group are clearly necessary. For instance, the main component of the OANP is the meal program. Providing meals to individuals in this program has shown to improve the dietary intake of participants and reduce the prevalence of food insecurity.^{23,24} Additionally, OANP addresses the sedentary behaviors of the low-income, aging adult population by providing transportation services, which can be valuable in providing participants access to exercise programs in the community.

Importance of Environmental Supports

The likelihood of behavior change taking place is extremely low without considering environmental constraints. This is seen clearly in low-income aging adults. Without supports in place, many older adults in the United States do not have the ability to engage in a healthy lifestyle on a consistent basis. Changing the environment to support healthy lifestyles is a fundamental concept to behavioral theory and equals in importance to issues such as appropriate education, lifestyle skills training, and social support. However, changing the environment may seem like too daunting of a task for many health care professionals. This is likely due to several issues including (but not limited to) the built environment is fairly set, environmental considerations often fall outside the expertise of health care professionals, and it is difficult for patients to clearly communicate environmental barriers because many have limited exposure to healthier environments. Because of this, it is critical that healthcare professionals (1) assess the impact of an individual's environment to his or her health and (2) know community resources that can help to offset limitations. This is especially

true for populations that have limited mobility as is the case for many aging adults.

Conclusions

Health care professionals can greatly benefit from knowing the community resources that are available for their clients, and incorporating these resources into treatment plans can greatly enhance the likelihood that lifestyle change occurs. Additionally, gaining an understanding of environmental limitations is necessary for health care professionals to effectively plan with their patients on how to address these barriers. As more individuals transition into the life stage of 65 years and older, it is likely that the number of community resources for this group will increase as well. Staying informed about these programs places the health care provider in an optimal position to provide the best care possible. ^{AJLM}

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