Promoting Healthy Aging: Physical, Psychological, and Social Factors

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Abstract

Older adults experience changes during the normal aging process. Physical, psychological, and social changes are observed, and ways to promote healthy aging are available. Physical changes include the senses losing strength and the brain becoming smaller; psychological changes involve memories becoming less reliable, as well as depression and anxiety occurring; and social changes include isolation, relocation, and a decrease in wealth. Healthy aging, however, can be promoted by nutritious eating and exercise, practicing optimism, utilizing robotic animal therapy, staying involved in social activities, and participating in nutrition services. Lifestyles should be changed by adding more physical activity and consuming more nutrients. Public policy should also be changed to support healthy aging by creating programs to provide obtainable nutritious food to older adults.
**Introduction**

Aging is a natural occurrence in life, and it is becoming more common to reach older ages with the increase of life expectancy. In fact, in America, the population of people over the age of 85 is growing rapidly, and the number of Americans over the age of 65 has tripled since the year 1900 (“Older adults’ health and age related,” n.d.). From 2002 to 2012, the number of Americans over the age of 65 increased by 21 percent from 35.5 million to 43.1 million, and the number is expected near 80 million by 2040 (Lloyd & Wellman, 2015, p. 91). Also, the amount of those over the age of 65 with severe disabilities is expected to increase over 30% by 2040 as well (Lloyd & Wellman, 2015, p. 91).

Additionally, aging occurs differently in minorities from the way it does in white Americans. Minorities may experience chronic illnesses earlier than their white counterparts, and they have a greater risk for obesity and diabetes (“Older adults’ health and age related,” n.d.). It was also stated by the APA (“Older adults’ health and age related,” n.d.) that “Some of the factors contributing to poor mental health among minorities include poverty, segregated and disorganized communities, poor education, unemployment, stereotyping, discrimination, and poor healthcare.” This is due to the events that were significant in current older adults’ lives, such as the civil rights movement. Many older minorities grew up segregated by race and went without the same rights as white Americans; therefore, they were often not educated as well or given the same treatment and respect as white Americans. In the near future, there will be an increase of minorities in America, changing the racial demographics. The number of black Americans will rise, and they will make up eight to ten percent of the population over the age of 65 (“Older adults’ health and age related,” n.d.).
Physical Factors

In the process of normal aging, many physical changes take place, such as sensory impairment and the reduction of brain cells. However, several physical factors can be put into place to promote healthy aging, such as exercise and good nutrition. Aging may come with unwanted physical changes, but steps to help and counteract them are available and encouraged by health professionals.

Aging often affects the senses, mainly vision and hearing. In fact, according to the APA, 85 percent of the population over 75 years old are considered to have impaired hearing (“Older adults’ health and age related,” n.d.). Additionally, the APA found that vision impairment is common in old age, as well, and may affect the ability to read print and detect objects (“Older adults’ health and age related,” n.d.). Furthermore, according to David Myers (2007), the retina of a 65 year old takes in just one-third of the light that a 20 old would see (p. 174). This is due to the pupil becoming smaller, and the lens growing more opaque (Myers, 2007, p. 174).

In addition to changes in vision and hearing, the sense of smell decreases with age, as well. Boyce and Shone (2005, p. 1) found that within the population of people older than 80, 75 percent experience olfactory impairment. The reasoning for this phenomenon is thought to be a combination of the loss of sensory cells in the olfactory mucosa and apoptosis occurring at a faster rate than cell regeneration (Boyce & Shone, 2005, pp. 1-2). The loss of smell can contribute to Alzheimer’s disease and cognitive impairment (Boyce & Shone, 2005, p. 2). Eating disorders also become more common with olfactory impairment due to a lack of appetite, and
those who suffer from this have the potential to experience weight loss, poor nutrition, and a weak immune system (Boyce & Shone, 2005, p. 3).

Moreover, in the process of normal aging, humans experience a reduction of brain cells. In fact, by the age of 80, the brain shrinks by approximately five percent due to a decrease of brain cells; additionally, men’s brains tend to shrink at a faster rate than women’s (Myers, 2007, p. 175). Peters (2006) found that it is mainly the frontal cortex that decreases in size. There is also a possibility of white matter deteriorating with age due to the degeneration of the myelin sheath (Peters, 2006). Without the myelin sheath, nerve impulses decelerate.

Healthy aging can be promoted by maintaining a healthy diet and engaging in physical activities. Exercise has the effect of increasing oxygen and nutrient flow to the brain, promoting brain development as a result (Myers, 2007, p. 175). Physical activity may also help to defend the body against obesity and heart disease (Myers, 2007, p. 175), one of the leading causes of death in older adults (“Older adults’ health and age related,” n.d.). In fact, chronic conditions, depression, and cognitive impairment were all reduced with exercise (Chaudhury, Campo, Michael, & Mahmood, 2005, p. 104).

In addition to physical activity, a healthy diet should be followed to maintain good nutrition. Improving older adults’ diets provides many benefits, including managing health problems and boosting confidence levels. Changing diets cannot only control current health concerns, but also prevent future ailments before they occur. For example, after receiving worsening lab results, some patients look to change their diet rather than relying on medication to control their symptoms (Bardach, Shoenberg, & Howell, 2015, p. 25). Diabetes, heart disease,
and other conditions may be improved by consuming less sodium, fewer calories, and more vitamins.

**Psychological Changes**

In addition to physical changes, older adults also encounter psychological changes such as increased depression, anxiety, and memory loss. Measures can be taken to reduce the effects of aging such as practicing optimism and experiencing animal assisted interventions, including the use of the social robot, Paro.

First of all, older adults may suffer from mental illnesses such as depression and anxiety. For example, a study by Kogan et al. examined 62 older adults and found almost half to be depressed (2012, p. 893). Older adults who suffer from physical disabilities were four times more likely to develop depression than those without disabilities, and obese older adults are more likely to develop depression, as well (Kogan et al., 2012, p. 890). Moreover, anxiety disorders were found to affect six percent of older adults (“Older adults’ health and age related,” n.d.).

Furthermore, memory loss is also prevalent in old age, to an extent. It should be noted that severe memory loss in cases such as Alzheimer’s and dementia are not part of normal aging, though they are often seen in old age. Myers (2007) found that on average, younger adults tend to recall names and events better than older adults (p. 178). However, older adults performed just as well as their younger counterparts on recognition tests (Myers, 2007, p. 178). In addition, it was found that crystallized intelligence, or a compilation of knowledge and experiences from a lifetime, increased with age (Myers, 2007, p. 180). However, fluid intelligence, the intelligence measured by the speed and ability to solve logic problems, was found to decrease with age (Myers, 2007, p.180).
Additionally, while many psychological changes are part of normal aging, several ways to promote healthy aging are available. For example, animal assisted interventions can be used to calm agitated patients, decrease stress and anxiety, and benefit patients with post-traumatic stress disorder (Lane et al., 2016, pp. 292-293). However, the use of animal-oriented therapy comes with unwanted hazards, such as allergies, animal bites, and diseases transferred to the patients (Lane et al., 2016, p. 293). With this in mind, the Paro robot was produced to reduce the risks that animals bring, while still providing the same benefits for older adults. Paro resembles a baby seal and moves, makes sounds, and responds to sight, sound, balance, and touch (Lane et al., 2016, p. 293). Lane et al. (2016) stated that:

There is evidence that use of the Paro robot in both group and individual setting reduces depression (Shibata et al., 2004a), increases positive social interactions between residents (Kidd et al., 2006; Wada and Shibata, 2007), and improves cognitive functioning in demented elderly (Wada et al., 2006) as well as reduces behavioral and psychological symptoms of dementia (Marti, Bacigalupo, Giusti, Mennecozzi, & Shibata, 2006; cited in Broekens et al., 2009) (p. 294).

Paro is now used throughout several countries, including the United States since its U.S. Food and Drug Administration approval in 2009 (Lane et al., 2016, p. 293).

Another factor that can promote healthy psychological aging is practicing optimism. Wurm and Benyamini (2014) theorized that holding pessimistic stereotypes and expectations of aging would result in “worse cognitive, motor, and physiological function (Levy, 2003) and poorer self-rated health (SRH; Coudin & Alexopoulos)” (p. 832). In fact, negative expectations for those under the age of 49 increased the risk for heart related health conditions for the next 38
years (Wurm & Benyamini, 2014, p. 833). Nelson (2016) also found that “Negative stereotypes… have been demonstrated to cause real harm to the mental health of older persons, reduce their will to live, impair memory, and lead older persons to avoid preventive health behaviors” (p. 280). However, negative expectations may be beneficial when mixed with optimism; realistic views may be put into place, creating better coping skills (Wurm & Benyamini, 2014, p. 835). Furthermore, cognitive behavioral therapy can be used to alter the negative expectations of aging, and may be especially useful for older adults with depression or anxiety (Jest et al., 2016, p. 1165).

Social Factors

Older adults also experience social changes in addition to physical and psychological changes. In the process of normal aging, older adults may go through isolation, relocation, and a change in wealth. Becoming involved in social activities and participating in nutrition services can help to counteract the negative changes that they face.

Many older adults experience isolation after the death of someone close, such as a spouse, family member, or dear friend. In fact, almost half of those over the age of 85 live alone, and half of the women over the age of 65 have a deceased spouse (“Older adults’ health and age related,” n.d.). In addition, as older adults retire from their careers, they stop seeing their previous co-workers, therefore reducing the amount of people they usually see on a daily basis. The same can happen when older adults develop serious physical impairments that do not allow them to get out as often, even to places such as the grocery store or a relative’s house. Older adults may also experience relocation. As people become older, they often lose their ability to properly care for themselves and live on their own, so they may be moved to nursing homes or
other residential facilities to be cared for. This can influence one’s isolation because they are moved away from familiar people in their lives, such as neighbors. All in all, isolation can lead to a lower quality of life and depression, as well as a shorter lifespan (Cacioppo, Hawkley, Norman, & Berntson, 2011).

Another social factor involved in healthy aging is a change in wealth. After retirement, most older adults lose their main source of income and become reliant on Social Security. Furthermore, ten percent of older adults live in poverty (Walsh, Gibson, & Brown, 2016, p. 410). When relying primarily on Social Security, older adults only receive enough money for absolute necessities, so they may not be prepared for emergencies or unexpected expenses (Walsh, et al., 2016, p. 411). Walsh et al. (2016) also stated that older adults have “limited financial reserves, poor credit scores caused by unemployment, lack of insurance, and ineligibility for small business loans,” so they lack the needed resources to handle unexpected expenses, such as damage from natural disasters (p. 412).

However, there are various ways to promote healthy aging through social factors. One factor that can benefit older adults is becoming involved in more activities. Chaudhury et al. (2016) found that “Research has consistently shown that older adults’ engagement in social activities is associated with positive outcomes on a variety of health indicators, including, self-rated health, depression, dementia, cognitive functioning, and health behaviors” (p. 105). Spending time in public spaces, recreational centers, or religious organizations can all influence healthy aging by providing older adults with social activities.

Another factor that can promote healthy aging is the use of home nutrition services. Volunteers deliver food to older adults that may not be capable of making their own meals, as
well as providing social contact and performing “safety checks” around their home (Lloyd & Wellman, 2015, p. 94). These programs, like the Older Americans Act Nutrition or Meals on Wheels, benefit the elderly by decreasing their isolation and caring for unmet needs they may have. Similar programs create sites where they also provide older adults with meals and socialization, but are designed for those with fewer physical limitations than homebound older adults. In addition to the congregate meals and socialization, volunteer opportunities, classes, and activities to benefit older adults’ overall health are offered at the sites (Lloyd & Wellman, 2015, p. 94).

**Conclusion**

Individual lifestyle and behavioral changes play a key part in the well-being of older adults. Two main changes that yield high results are participating in physical activity and maintaining a healthy diet. Both of these factors create many benefits while exposing older adults to few negative effects.

The Center for Disease Control and Prevention suggests that adults 65 years or older receive at least 150 minutes of moderate aerobic exercise per week, in addition to at least two days of strength training (Chaudhury et al., 2005, p. 106). However, some older individuals are not able to exercise on their own, so physical therapy is recommended as an alternative. Exercise can be completed individually, in a class, or with a physical therapist; however, when done in a class or with other people, social interaction is promoted, adding one more benefit. In fact, an exercise program entitled *Be Well* found that exercising in a group setting enhanced the advantages of physical activity because friendships were formed over the 32 sessions the class
met (Kogan et al., 2012, p. 897). Additionally, in the course of the class, depression levels of the older adults subsided from 45.2 percent to 16.4 percent (Kogan et al., 2012, p. 893).

Diet was also found to be an important lifestyle factor in healthy aging. Nutritional changes are dependent on lifestyle choices. A patient in a study by Bardach et al. (2016) stated “nobody is going to look after you but you. And the older you get, the more you understand, that you have to look after yourself, there ain’t no pill,” displaying the importance of individual lifestyle choices (p. 24). However, diets can be difficult to follow and may not seem to be manageable. A more reasonable solution for older adults is to make subtle and gradual changes to their diet, such as salting their food less or decreasing red meat intake. Bardach et al. (2016) found that starting with small steps left older adults more encouraged and less overwhelmed during their lifestyle change (p. 28).

In addition to behavioral and lifestyle changes, public policy should also be adjusted to meet the needs of older adults. In order to improve nutrition and increase social interaction, federal food and nutrition programs should be redesigned to provide food to more clients in both the homebound and congregate setting. As of 2008, only nine percent of older adults who were considered food insecure received meals they required (Gergerich et al., 2015, p. 276). Many older adults that are eligible to receive home-delivered meals are placed on a waiting list and not given the help they need. Both home-delivered and congregate meals were found to help older adults eat healthier meals: 84 percent of older adults who received home-delivered meals and 75 percent of congregate meal participants admitted that the meals have helped them to eat healthier (Gergerich et al., 2015, p. 278).
Home-delivered and congregate meals also supported social interaction. 87 percent of participants that went to congregate sites went for the social interaction (Gergerich et al., 2015, p. 278). Fewer homebound participants reported an increase in their social interaction, however, some mentioned that they share the delivered meals with friends or neighbors (Gergerich et al., 2015, p. 279). Lloyd and Welland (2015) also found that home-delivered meal services provided some homebound older adults with the only social interaction they received throughout the week (p. 95). In addition, 92 percent of participants who receive delivered meals were able to stay in their home, rather than a nursing home, so they were able to keep a level of independence by receiving meals.

To conclude, more funding should be given to federally funded food and nutrition programs, like the program sponsored by the Older Americans Act and Meals on Wheels. Older adults benefit from these programs by receiving nutritious meals and increased social interaction. The programs allow older adults to maintain their level of independence, while still sustaining their health.
References


