



Article Preventing the need for nursing home admittance

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Copyright: © 2023 by the authors. Published by SEA Open Research. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). **Abstract:** This article explores several key strategies in order to reach the goal of enabling home care for as long as possible for the elderly. Some of these strategies include: preventing falls and injuries, providing preventative medical care, promoting exercise and physical activity, ensuring proper nutrition, fostering social and familial support, and promoting financial preparedness. The research confirms that these strategies are effective in allowing elderly individuals to live out the remaining years of their lives in their own homes and avoid nursing care. Consistent medical examinations, regular treatment and physical activities allow for healthy and independent living. Fall prevention can improve the health and independence of elderly individuals because falls are a major cause of injury and death. Social support by family members, friends and professionals also contribute significantly to the mental and physical health of these individuals. In addition, improving and maintaining cognitive capabilities and emotional regulation have shown to have a strong connection to the overall health and wellbeing of the elderly.

Keywords: preventing the need for nursing homes, promoting medical car, cognitive and physical activities, preventing falls and injury, social support, promoting financial preparedness;

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INTRODUCTION

The aging population is growing rapidly, and with it, the number of elderly people who need nursing home care. Nursing home care can be expensive and isolating, and it can be difficult for elderly people to adjust to a new environment. There are a number of things that can be done to help elderly people stay in their homes and avoid nursing home care. One of the most important things that elderly people can do to stay healthy and independent is to stay active. Exercise can help to improve physical strength, balance, and coordination, which can all help to prevent falls and other injuries. Exercise can also help to improve mental health and mood, which can be important for maintaining a sense of well-being. In addition to staying active, elderly people should also make sure to eat a healthy diet. A healthy diet can help to maintain a healthy weight, which can reduce the risk of falls and other health problems. A healthy diet can also help to improve energy levels and mental health. In addition to staying active and eating a healthy diet, elderly people should also get regular medical checkups. Regular checkups can help to identify and treat health problems early, which can help to prevent them from becoming more serious. Elderly people can also benefit from social support and family support. Falls are a major cause of injury and death in elderly people. They can result in fractures, head injuries, and other serious health problems which often leads to the need for admittance into a nursing home. It is therefore important to adjust the home of elderly individuals in order to reduce the risk of falls and injuries. This can include removing clutter, installing grab bars, and using non-slip flooring and footwear.

Social support can come from friends, neighbors, church members, or other community groups. Family support can come from children, grandchildren, siblings, and other relatives. Social support and family support can help elderly people in a number of ways. They can provide companionship, help with domestic chores, and emotional support. They can also help elderly people stay connected to their community and feel a sense of belonging which can reduce stress, improve mental health, and increase life satisfaction. Feeling part of a society and family prevents loneliness and isolation, which can be harmful to elderly people's health and lead to mental health issues. Elderly people should also make sure to have a plan in place in case they do need long-term care. This plan should include a list of potential caregivers, as well as a budget for care. It is also important to have a plan in place for dealing with financial and legal issues.

PREVENTION OF FALLS AND INJURIES

Falls and injuries are significant health concerns among the elderly population, leading to adverse outcomes such as fractures, reduced independence, and increased healthcare utilization, such as admittance into a nursing home due to need for fulltime care. However, there are various strategies for preventing falls and injuries in the elderly, drawing insights from multiple sources.

Falls are found to be a common occurrence, especially among individuals over the age of 65, and are often multifactorial in nature. Risk factors include advanced age, muscle weakness, gait and balance disturbances, chronic diseases, polypharmacy, and environmental hazards (Rubenstein, 2006).

Stuck et al. (2002) found that home visits can be an effective strategy for preventing nursing home admissions and functional decline in the elderly. The analysis revealed that home visits reduced the risk of nursing home admission by approximately 20% and resulted in improved functional abilities. Factors such as frequency, duration, and individualized approaches were identified as important in maximizing the positive impact of home visits.

Beswick et al. (2008) examined complex interventions to improve physical function and maintain independent living in the elderly. The study highlighted the effectiveness of various home hazard modifications including removing or securing loose rugs, improving lighting, installing handrails, and addressing other environmental hazards. The study found that home hazard modification, when incorporated as part of a complex intervention, demonstrated positive effects in reducing falls and improving physical function among the elderly. The modifications also address common age-related challenges, such as decreased strength and balance, by providing necessary support and reducing physical barriers (Gill et al., 2002). Moreover, the modifications contribute to the overall well-being and quality of life of the elderly individuals, as they feel more secure and empowered within their own homes. (Gill et al., 2002) found that the programs aimed at home hazard modification were successful in reducing disability and improving physical function among the participants.

However, as the elderly are not always informed or educated on ways to modify their homes to decrease their risk, it is important to collaborate among healthcare professionals, patient education, and individualized care plans to prevent falls in the home care setting (Berland et al., 2012).

Falls and injuries in the elderly can have severe consequences, but evidence-based strategies can

help prevent these incidents. Home visits, complex interventions, multidimensional programs, and healthcare settings' preventive strategies are all valuable approaches. These interventions emphasize the importance of risk assessment and environmental modifications. By implementing these strategies, healthcare professionals can work towards reducing falls and injuries, promoting the safety and well-being of the elderly population.

PREVENTATIVE HEALTH CARE

Preventative health care is of utmost importance in promoting the well-being and longevity of the elderly population. As individuals age, it becomes crucial to implement strategies and interventions that can prevent or delay age-related diseases and functional decline. This section explores various aspects of preventative health care for the elderly, including the need for research on aging and agingrelated diseases, the role of healthcare robots in home settings, the influence of self-perceptions of aging on preventive health behaviors, and the management of preventive health care on a global scale. By examining these factors, we can gain valuable insights into how to effectively promote and implement preventive measures that enhance the overall health and quality of life for older individuals.

Bahador et al. (2002) reviewed the management of preventive health care for the elderly worldwide, highlighting the importance of comprehensive geriatric assessments, tailored interventions, health education, and multidisciplinary approaches in promoting preventive care, as well as the need for collaborative efforts among healthcare professionals, caregivers, and policymakers to optimize preventive health care delivery for the elderly.

Jin et al. (2015) emphasizes the critical need to promote research on aging and aging-related diseases to improve the health and longevity of the elderly population, as well as to gain a deeper understanding of the biological processes of aging. By exploring the mechanisms underlying aging, researchers can develop interventions that target specific age-related diseases and conditions. This research can lead to the discovery of innovative preventive strategies that not only enhance the quality of life for older individuals but also contribute to their overall health and well-being. For example, Llewellyn et al. (2010) investigated the relationship between vitamin D levels and the risk of cognitive decline in elderly individuals. The researchers examined data from a large sample of

older adults and found that lower levels of vitamin D were associated with an increased risk of cognitive decline. The study highlighted the potential role of vitamin D in maintaining cognitive function in older individuals and emphasized the importance of ensuring adequate vitamin D levels as a preventive measure against cognitive decline.

By addressing the complexities of aging and focusing on interventions that prevent or delay agerelated diseases, professionals and caregivers can work towards improving the health outcomes and improving the quality of life of the elderly population.

Tazkarji et al. (2016) also emphasizes the importance of addressing age-related risk factors, including chronic diseases, functional decline, and cognitive impairment. This preventative approach involves regular screenings, immunizations, medication reviews, falls prevention strategies, and promoting social engagement. By implementing this comprehensive approach, healthcare providers can effectively prevent and manage health issues in the elderly population.

In doing so, the elderly will become less dependent on full-time nursing care facilities.

The use of new technologies can also be beneficial for the elderly, making some of the services of nurses obsolete. Robinson et al. (2014) explores the role of healthcare robots for older people at home, which offer various benefits in preventative health care, such as reminding individuals to take medications, monitoring vital signs, providing exercise guidance, and facilitating social interaction. The use of healthcare robots can improve health outcomes, promote adherence to preventive behaviors, and enhance overall well-being in elderly individuals, without the need for part time or full time care.

Furthermore, individuals with higher health literacy are more likely to engage in preventive behaviors, have better health outcomes, and effectively utilize healthcare services. It underscores the importance of improving health literacy among the elderly to promote preventive care and overall well-being (Cho et al.,2008). Therefore, health care professionals and caregivers must use opportunities to inform and educate their patients regarding preventative health measures and healthy lifestyle, encouraging them to continue or adopt a healthy lifestyle and take control over their health.

Another aspect of preventative health measures is based on self-perception. It has been found that positive self-perceptions of aging are associated with engaging in healthier behaviors, such as engaging in physical activity, eating a balanced diet, and participating in regular health screenings (Levy & Myers, 2004). Fostering positive self-perceptions can motivate older individuals to prioritize preventive health care and adopt healthier lifestyles. Therefore, a focus on maintaining physical and mental health contributes to one's ability to live independently and remain healthy for longer.

The utilization of preventive services, such as health check-ups and vaccinations, has been associated with improved survival rates (Nakanishi et al., 1997). This association underscores the significance of accessible and comprehensive preventive health services in prolonging the lives of older individuals. This study underscores the vital role of accessible and comprehensive preventive health services in prolonging the lives of older individuals. By prioritizing and implementing preventive measures, healthcare systems can actively contribute to enhancing the health outcomes and overall wellbeing of the elderly population, leading to increased longevity and improved quality of life.

Preventative health care plays a critical role in promoting the health and well-being of the elderly population. Through research, technological advancements, positive self-perceptions of aging, comprehensive management strategies, and improved health literacy, effective preventive care can be provided to older individuals. By implementing preventive measures, healthcare professionals and caregivers can help the elderly enhance the quality of life and increase the longevity of the elderly, ensuring that they age with dignity and maintain optimal health.

EXERCISE

Regular exercise plays a crucial role in promoting the health and well-being of the elderly population. Numerous studies have investigated the benefits of exercise for older individuals, providing valuable insights into exercise training guidelines, research findings, and clinical practices.

Evans (1999) provides exercise training guidelines specifically tailored to the elderly population, emphasizing the importance of regular physical activity in preventing age-related decline in muscle strength, endurance, and overall physical function. The guidelines highlight the need for a combination of aerobic, strength, and flexibility exercises to address the various aspects of fitness. Incorporating exercises that enhance balance and coordination is also recommended to reduce the risk of falls, a significant concern among older individuals.

Frankel et al. (2006) further explore the research and clinical practices surrounding exercise in the elderly, emphasizing the positive impact of exercise on cardiovascular health, musculoskeletal function, and psychological well-being. Regular exercise has been found to improve cardiovascular fitness, reduce the risk of chronic diseases such as heart disease and diabetes, and enhance bone density and muscle strength. Exercise interventions have also shown promising results in improving cognitive function and reducing the risk of cognitive decline. Individualized exercise programs must consider the older adults' health status, preferences, and limitations. Additionally, the role of healthcare professional is crucial in prescribing and supervising exercise regimens to ensure safety and effectiveness

depending on the individual's specific situation. Mazzeo and Tanaka (2001) delve into the specifics of exercise prescription for the elderly, outlining current recommendations based on the individual's health status, fitness level, and personal goals, but also taking into account their chronic conditions, musculoskeletal limitations, and preferences. Individualized program guidelines should be based on various factors such as frequency, intensity, type, and duration of exercises, considering both aerobic and resistance training. It also addresses the significance of warm-up and cool-down exercises, and proper hydration. stretching, These recommendations aim to optimize the benefits of exercise while minimizing the risk of injury and overexertion.

Nelson et al. (2004) conducted a study on the effects of multidimensional home-based exercise on functional performance in the elderly. The researchers found that a comprehensive exercise program involving various components, such as strength training, balance exercises, and aerobic activity, significantly improved functional performance in older individuals. The intervention led to enhanced mobility, increased muscle strength, improved balance and coordination, and a higher level of independence in activities of daily living, highlighting the positive impact of regular exercise on functional abilities, emphasizing the potential for exercise programs to enhance the overall quality of life for the elderly.

In conclusion, exercise offers a multitude of benefits for the elderly population. By following exercise training guidelines tailored to older individuals, considering individualized exercise prescriptions, and incorporating multidimensional programs, older experience improvements adults can in cardiovascular health, musculoskeletal function, cognitive function, and overall well-being. Regular exercise plays a crucial role in promoting healthy aging, maintaining functional independence, and enhancing the overall quality of life for older individuals. It is imperative for healthcare professionals, caregivers, and society as a whole to recognize the importance of exercise in the elderly population and to provide support and resources to promote physical activity among older adults.

NUTRITION

Proper nutrition is a crucial aspect of maintaining health and well-being, particularly in the elderly population. Adequate nutrition plays a significant role in preventing the need for elderly individuals to be admitted to nursing homes. The Nutrition Screening Initiative conducted by Posner et al. (1993) emphasizes the association between nutrition and health risks in the elderly. Malnutrition or inadequate nutrient intake can lead to a range of health issues, including decreased physical functioning, impaired immune response, and increased susceptibility to chronic diseases. Addressing nutritional deficiencies and promoting a well-balanced diet can mitigate these risks and improve overall health outcomes, thereby reducing the likelihood of nursing home admission.

González-Gross et al. (2001) discusses the impact of nutrition on cognitive impairment in the elderly. Adequate nutrient intake, particularly key nutrients like omega-3 fatty acids, antioxidants, and B vitamins, has been linked to better cognitive function and a reduced risk of cognitive decline and dementia. By providing proper nutrition and ensuring an optimal intake of essential nutrients, it is possible to support cognitive health and potentially delay the onset of cognitive impairments, helping seniors maintain their independence and avoid nursing home care.

Moreover, the immune system plays a crucial role in protecting the elderly from infections and agerelated diseases. Lesourd and Mazari (1999) stress the significance of nutrition in maintaining immune function in older adults. Adequate protein intake, vitamins (particularly vitamins C, D, and E), and minerals (such as zinc and selenium) are essential for supporting immune response and reducing the risk of infections. By optimizing nutrition, it is possible to enhance immune function, lower the incidence of illnesses, and ultimately reduce the need for nursing home admission.

The gut microbiome, consisting of trillions of microorganisms residing in the gastrointestinal tract, plays a vital role in maintaining health. Salazar et al. (2017) emphasize the relationship between nutrition, the gut microbiome, and health in the elderly. Proper nutrition, including a diverse range of dietary fiber, prebiotics, and probiotics, can promote a healthy gut microbiome composition. A balanced gut

microbiome contributes to improved digestion, absorption of nutrients, and immune function. By fostering a healthy gut microbiome through appropriate nutrition, the risk of gastrointestinal disorders and related health complications can be reduced, potentially preventing the need for nursing home care.

As nutrition plays a significant role in preventing the elderly from being admitted to nursing homes, it is crucial to address nutritional deficiencies and promote a well-balanced diet that can contribute to maintaining independence, preventing cognitive decline, reducing the risk of infections, and enhancing overall well-being. By recognizing the importance of nutrition, healthcare professionals and policymakers can actively work toward preventing nursing home admission and ensuring the well-being of the elderly.

SOCIAL INTERACTION AND SOCIAL SUPPORT

Social interaction and social support both play a crucial role in the well-being and quality of life of elderly individuals. Numerous studies have explored the benefits of social interaction and the use of assistive technology in facilitating and enhancing social engagement among the elderly.

Blazer (1982) investigated the relationship between social support and mortality in an elderly community population and found that social support, including emotional support, instrumental support, and social integration, was associated with lower mortality rates among older individuals, supporting the positive impact of social support on health outcomes and highlight the importance of social relationships and networks in promoting longevity and overall well-being in the elderly population. In addition, Brito and Pavarini (2012) found similar results, maintaining that social support to be positively correlated with functional capacity, indicating that individuals with stronger social support networks exhibited better functional abilities. These findings highlight the significance of social relationships and support in promoting independence, functional performance, and overall well-being in older adults, particularly those with cognitive impairments.

In addition to face-to-face social interaction, Embarak et al. (2021) affirm the importance of assistive technology in enabling older adults to stay connected with their social networks, participate in online communities, and engage in social activities. Assistive technologies, such as social media platforms and communication tools, can enhance social interaction, reduce social isolation, and provide emotional support for the elderly. By utilizing these technologies, older adults can maintain relationships, access information and resources, and enhance their overall social wellbeing.

Coradeschi et al. (2014) discuss the GiraffPlus system, which is designed to monitor activities, physiological parameters, and promote social interaction for the elderly. The system combines robotic technology with a range of sensors to provide support and facilitate social interaction in the daily lives of older adults. The potential benefits of such systems are improving the social engagement and well-being of older individuals, enabling them to maintain social connections, receive assistance, which enhances their overall quality of life. Kidd et al. (2006) focus on the use of a sociable robot to encourage social interaction among the elderly. The study demonstrates how a robot companion can facilitate social engagement, provide emotional support, and alleviate feelings of loneliness and social isolation in older individuals. The authors highlight the potential of robotic technology in promoting social interaction and improving the overall well-being of the elderly population.

Social interaction and support have substantial benefits for the well-being and quality of life of elderly individuals. The use of assistive technology, such as social media platforms, communication tools, and robotic companions, can enhance social engagement, reduce social isolation, and provide emotional support for older adults. Social support has been linked to lower mortality rates and improved functional capacity among the elderly. It is crucial for society to recognize the importance of fostering social connections, promoting social interaction, and providing adequate support systems for older adults to enhance their overall well-being and maintain a fulfilling and satisfying social life. As a result of maintaining a higher quality of living, the elderly will be at lower risk for needing nursing home facility care, as they will be more independent, happier, and healthier.

FAMILY SUPPORT

In addition to general social and communal networks, research suggests that strong family support can play a crucial role in preventing the need for institutionalization. Johnson and Catalano (1983) emphasizes the importance of emotional and social support provided by family members to impaired elderly individuals. The presence of supportive family relationships can significantly impact the psychological well-being of older adults. Emotional support from loving relatives, such as listening, understanding, and empathizing, helps seniors cope with feelings of loneliness and depression, promoting a positive outlook on life. Participation in family activities fosters a sense of belonging, reducing the risk of social isolation and its associated health implications (Thompson & Heller, 1990).

Family support also plays a crucial role in meeting the daily care needs of the elderly, thereby reducing the likelihood of institutionalization (Sangl, 1985) asserts that the family support system is a key factor in maintaining the independence and functional abilities of older adults. Family members often provide instrumental support by assisting with activities of daily living (ADLs) such as bathing, dressing, and meal preparation. This form of assistance enables seniors to remain in their familiar home environment, promoting a sense of autonomy and dignity.

Moreover, family support contributes significantly to the overall quality of life for the elderly (Kim & Kim, 2003) as it was found that higher levels of family support were associated with increased life satisfaction and subjective well-being among older adults. Regular contact, communication, and involvement in decision-making processes allow elderly individuals to feel valued, respected, and included within their families. The emotional bonds formed through family support can foster a sense of purpose and happiness, thereby improving the overall quality of life for older adults. This extends to benefits on mental health of the elderly by reducing the risk of depression and related health problems. By educating family members about the emotional and psychological needs of older adults, they can provide appropriate support and identify early signs of mental health issues. This proactive approach can help prevent the exacerbation of mental health concerns, ultimately reducing the need for institutional care (Irelli, 1990).

The existing body of research supports the notion that family support plays a vital role in preventing the elderly from being admitted to nursing homes. By strengthening family support systems, policymakers, healthcare professionals, and society as a whole can create an environment that enables older adults to age in place, maintaining their independence and dignity.

FINANCIAL PREPAREDNESS FOR RETIREMENT AND OLD AGE

As individuals age, the need for long-term care becomes a pressing concern. Nursing home care is often associated with significant costs and can place financial burdens on elderly individuals and their families. This paper examines the importance of saving for old age as a means to prevent the necessity of nursing home care.

Ross and Wright (1998) note the challenges associated with financing long-term care for elderly individuals. The cost of nursing home care can be substantial, and relying solely on public assistance or insurance may not cover all the expenses. Saving for old age allows individuals to accumulate resources to support their care needs, providing a financial buffer that can help prevent the need for nursing home admission. By proactively saving, elderly individuals can have greater control over their care options and maintain their independence.

De Nardi et al. (2009) note that increased life expectancy means that individuals may need to finance a longer period of retirement and potential care needs. Saving for old age becomes crucial to bridge the financial gap and secure resources for future care. By accumulating savings, elderly individuals can access private care services or hire in-home assistance, enabling them to age in place and avoid nursing home admission.

Studies have examined the impact of health insurance coverage on savings behavior and the need for nursing home care. Gruber and Yelowitz (1999) and Chou et al. (2003) suggest that the presence of public health insurance programs can affect individuals' savings decisions. With appropriate health insurance coverage, individuals may feel more financially secure, reducing the need for precautionary savings to cover potential healthcare expenses. Adequate savings can then be allocated toward old-age care needs, reducing reliance on nursing home care. Additionally, the availability of private health insurance and medical savings accounts can further support financial preparedness for old age. Private health insurance and medical savings accounts play a prominent role in providing additional coverage and financial protection (Maynard & Dixon, 2002). These savings vehicles can help individuals accumulate resources specifically designated for healthcare expenses, including long-term care. By building up such accounts, elderly individuals can have greater financial flexibility, reducing the likelihood of nursing home admission.

The relationship between health insurance coverage and precautionary savings is a crucial consideration.

Starr-McCluer (1996) suggests that health insurance can act as a form of savings, as it reduces the need for individuals to set aside significant precautionary savings to cover healthcare costs. By having health insurance coverage, elderly individuals can allocate more of their resources toward long-term care savings, providing a safety net to prevent the need for nursing home care.

Saving for old age plays a vital role in preventing elderly individuals from requiring nursing home care. Adequate savings enable individuals to access a range of care options, including in-home assistance and private care services, ultimately allowing them to maintain their independence and age in place. Moreover, savings provide financial security and flexibility, reducing the financial burden on families and society. Policymakers and individuals should recognize the importance of financial preparedness, supporting initiatives and strategies that encourage saving for old age.

CONCLUSIONS

Preventing the need for nursing home care among the elderly requires a comprehensive approach that addresses multiple factors affecting their health and well-being. This paper has explored several key strategies for achieving this goal, including preventing falls and injuries, providing preventative medical care, promoting exercise and physical activity, ensuring proper nutrition, fostering social support, encouraging family support, and promoting financial preparedness.

Preventing falls and injuries is crucial to maintaining the independence of older adults. Implementing safety measures in the home environment, such as removing hazards and installing grab bars, can significantly reduce the risk of falls. Regular medical check-ups and screenings can identify potential health issues early on, allowing for timely intervention and preventing the progression of conditions that may lead to nursing home care.

Exercise plays a pivotal role in maintaining physical and mental well-being in the elderly. Regular physical activity, tailored to individual abilities and preferences, can improve strength, balance, and flexibility, reducing the risk of falls and maintaining overall health.

Proper nutrition is essential for supporting the overall health and well-being of the elderly. Providing access to nutritious meals and promoting healthy eating habits can help prevent malnutrition and related health issues, contributing to the prevention of nursing home care. Social support, including connections with friends, community engagement, and participation in social activities, is vital for the mental and emotional wellbeing of older adults. Social isolation is a risk factor for nursing home admission, making it crucial to promote social interactions and foster a sense of belonging and connectedness.

Family support plays a significant role in preventing nursing home care. Emotional and instrumental support provided by family members can enhance the quality of life and well-being of the elderly, while also assisting with daily care needs, allowing them to remain in their familiar home environment. Financial preparedness is essential for addressing the financial challenges associated with aging and preventing the need for nursing home care. Saving for old age, having appropriate health insurance coverage, and exploring options like medical savings accounts can provide financial security, ensuring access to necessary care and support services.

In conclusion, preventing the need for nursing home care requires a multifaceted approach that encompasses fall prevention, preventative medical care, exercise, nutrition, social support, family support, and financial preparedness. By implementing and promoting these strategies, individuals, healthcare professionals, and policymakers can work together to ensure that the elderly can age in place, maintain their independence, and enjoy a high quality of life in their later years.

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