Published online 2024 February 3.

Research Article



Healthy Aging from the Perspective of Older Adults: A Descriptive Qualitative Study

Tayebeh Saki¹, Fatemeh Rashidi ⁶, Mehdi Mamene ⁶, Hamed Azadi ⁴ and Arman Azadi ⁶,

Received 2023 September 23; Revised 2023 December 30; Accepted 2024 January 06.

Abstract

Background: Healthy aging is an important concept developed by the World Health Organization with the aim of enhancing the health of older adults, highlighting the positive aspects of aging, and reinforcing their social roles.

Objectives: Since the concept of healthy aging can be interpreted differently by older adults in various societies, this study aimed to explore the perspectives of Iranian older adults regarding healthy aging.

Methods: A qualitative descriptive design and content analysis was employed to gather data from 15 purposively selected community-dwelling older adults aged over 60 years in Ilam and Khuzestan provinces, Iran. Semi-structured interviews were conducted and analyzed following Graneheim and Lundman's (2004) content analysis guide.

Results: Five main themes and 16 subthemes emerged. These 5 main themes include social participation, mental health, a healthy lifestyle, maintenance of functional ability, and adequacy of economic status.

Conclusions: Based on the results, healthy aging is a multidimensional concept. It is recommended that health policy-makers and providers of elderly healthcare services take these factors into account when planning and delivering services aimed at promoting the health of older adults.

Keywords: Aging, Healthy Aging, Qualitative Research

1. Background

Today, aging is no longer an exceptional stage of life attainable by only a few individuals but rather an anticipated phase that many people experience (1, 2). The aging population is not confined to a specific country or region; it is a global phenomenon that can be considered a human achievement resulting from a prolonged process of adaptation driven by improvements in medicine, economics, and society (3, 4). With the rapid increase in the elderly population, the issues of their health and welfare in society are taking on new and broader dimensions (5).

In Iran, the proportion of individuals aged 60 and older compared to the overall population is expected to reach 10% by 2022, while the population growth rate has reached its lowest level in the past 25 years, at 0.7% (6). Consequently, there will be a significant and rapid increase in both the percentage and absolute number of

elderly individuals within Iran's population in the coming decades (7). It is projected that by 2050, this age group's share of the country's population will exceed 20%, totaling over 20 million people (8). As a result, there will be a growing population of elderly individuals experiencing physical limitations and disabilities, which will necessitate a greater demand for healthcare professionals and resources to adequately address their healthcare needs (4, 9, 10).

Old age has traditionally been associated with the onset of various health conditions, disabilities, dependency, and the imposition of a societal burden (7). However, in modern societies, these perceptions and traditional negative expectations have evolved, and the definition of old age has shifted to emphasize individuals' potential to optimize opportunities and experiences in life (11).

The understanding and experience of aging have transitioned from the concept of mere survival in the

¹Student Research Committee, Department of Nursing, Faculty of Nursing and Midwifery, Ilam University of Medical Sciences, Ilam, Iran

²Department of Medical-Surgical Nursing, Faculty of Nursing and Midwifery, Iran University of Medical Sciences, Tehran, Iran

³Department of Nursing, Faculty of Nursing and Midwifery, Ilam University of Medical Sciences, Ilam, Iran

⁴Department of Anesthesiology, School of Allied Medical Science, Ilam University of Medical Sciences, Ilam, Iran

Corresponding author: Department of Nursing, Faculty of Nursing and Midwifery, Ilam University of Medical Sciences, Ilam, Iran. Email: azadi.arman@gmail.com

twentieth century to ensuring the quality of life for older individuals in the twenty-first century (5). The new and positive view of aging is described as healthy, successful, optimal, productive, active, and positive, among other attributes (12). While modern medicine has significantly improved human health and extended the average lifespan, the absence of appropriate planning for early preventive measures related to age-related issues presents a significant societal challenge (1). Promoting health and preventing chronic diseases in the elderly necessitates the management of health conditions, the adoption of healthy habits and behaviors, active community engagement, and the utilization of preventive services (13). In this context, the concept of "healthy aging" has emerged and expanded.

The World Health Organization (WHO) defines healthy aging as the process of developing and maintaining functional abilities that enable well-being in older age. These functional abilities encompass the capacity to meet basic needs, make informed decisions, maintain mobility, establish and sustain relationships, and engage in social activities. According to the WHO, these functional abilities are shaped by the interaction between intrinsic capacity and environmental factors. Intrinsic capacity encompasses an individual's mental and physical capabilities, while environmental factors encompass home, community, and social relationships (14).

However, beyond the comprehensive definition provided by the WHO, it is crucial to gather scientific evidence regarding the perceptions and perspectives of older adults on healthy aging, as they play a pivotal role in this context (3, 13, 15). This understanding helps provide additional evidence to support interventions and care-related activities aimed at promoting the health of older adults. An extensive review of the available literature reveals that only a limited number of studies have investigated the perspectives of Iranian older adults on the concept of healthy aging. By employing qualitative methods to explore older adults' perspectives on healthy aging, researchers can gain a deeper understanding of the complexities and subjective experiences of aging, contributing to the development of more populationand person-centered approaches to promoting health and well-being in older adults.

2. Objectives

The primary aim of this study was to explore the perspectives of Iranian older adults concerning the concept of healthy aging.

3. Methods

This qualitative descriptive study was conducted between November 2021 and May 2022. The study participants consisted of 15 elderly individuals aged 60 years or above, residing in Shush Daniyal, Khuzestan Province, and the city of Ilam in Ilam Province. Participants were selected through convenience sampling from local retirement centers in these cities. The inclusion criteria were as follows: (1) Alertness and the ability to communicate verbally; (2) age of at least 60 years; (3) proficiency in speaking Persian; (4) current residence in their homes in the specified cities for a minimum of 12 months; and (5) consent to participate in the study. Interviews were conducted in safe and quiet settings, with interview locations chosen based on participants' preferences.

Data were collected through face-to-face, in-depth, semi-structured interviews lasting between 45 and 60 minutes. Interviews were recorded after obtaining verbal consent and transcribed verbatim for subsequent analysis. Field notes were also taken to capture non-verbal aspects of the interviews.

The interview guide was developed following a comprehensive review of the existing literature and included the following main questions: "How do you define healthy aging?"; "Which factors do you consider essential for healthy aging?"; "To what extent do you perceive yourself as a healthy older individual?"; and "What suggestions do you have for promoting healthy aging?"

All participants took part in a single interview session except for 2 individuals who underwent 2 rounds of interviews. After conducting 12 interviews, no new themes were emerging, and after an additional 3 interviews, we determined that saturation had been reached for the study's objectives. Data collected during the study were recorded in the participants' native language using audio recording techniques and then transcribed into Persian. The coding process involved identifying and categorizing recurring patterns and themes based on the actual experiences of the participants, utilizing the content analysis guide developed by Graneheim and Lundman (16).

3.1. Rigor

Several measures were employed to enhance the rigor of our findings. The researcher verbally explained the derived codes and categories to the participants to validate their accuracy and seek their perspectives. Data credibility was established by 2 professionals in the field of qualitative nursing research, and peer reviewers also conducted

a rigorous evaluation. Additionally, the researchers maintained an audit trail, which included a systematic compilation of materials and documentation reviewed by an independent auditor to verify and validate the methodology used.

3.2. Ethical Considerations

This study received approval from the Ethics Committee of Ilam University of Medical Sciences (IR.MEDILAM.REC.1399.318). Participants provided informed consent for voluntary participation in the study, with assurances of privacy, confidentiality, and autonomy to openly express their views

4. Results

The study comprised 15 participants, including 9 males and 6 females. Among them, 9 were elderly residents of Khuzestan Province, comprising 5 males and 4 females, while the remaining 6 were elderly residents of Ilam Province, consisting of 4 males and 2 females. In terms of educational attainment, 3 participants had less than a high school education, 4 had completed high school, 2 had pursued post-secondary education, 4 held bachelor's degrees, and 2 had obtained postgraduate degrees. Based on the analysis of data obtained from 17 interviews, a total of 5 themes and 16 subthemes were extracted. The themes include social involvement, mental health, a healthy lifestyle, maintenance of functional ability, and economic sufficiency (Table 1).

Table 1. Emerging Themes and Subthemes from the Interview Data	
Themes	Subthemes
Social participation	Voluntary activities, social connections, religious participation
Mental health	Hopefulness, feeling of tranquility, self-worth
Healthy lifestyle	Healthy diet, sports and physical activities, avoiding drugs and tobacco, having a healthy weight, rest and recreation
Maintenance of functional abilities	Cognitive strength, activities of daily living, physical disability
Adequacy of economic status	Income insufficiency, high cost of living

4.1. Social Participation

Most elderly participants mentioned social participation as an integral aspect of healthy aging, encompassing voluntary activities, social connections, and religious engagement. According to the elderly,

social participation contributes to their active presence in the community, enhances their mental, social, and spiritual abilities, and mitigates feelings of loneliness and isolation. The first subtheme is voluntary activities, which, according to the elderly, entail assisting others, imparting knowledge and technical skills, and aiding in childcare, providing them with a sense of fulfillment. One participant shared, "There was a boy who worked as a laborer on a relative's agricultural land. Due to financial constraints, he did not attend school. I taught him how to read and write in Persian and supported him in going to school. I was very happy when I saw his progress" (Participant 13, a 65-year-old man).

The second subtheme is social connections, which encompass interactions with friends and coworkers, social networking, and family gatherings. The elderly noted that having ample free time allowed them to have more meaningful interactions and relationships with family, friends, and relatives, as well as make new friends. One participant commented, "Communication has indeed decreased in recent years, and the younger generation is less interested in family gatherings, possibly due to the busyness of modern life. Nevertheless, we try to maintain these relationships so that they, too, learn to do so" (Participant 10, a 74-year-old woman).

Another subtheme of social participation is religious engagement, which includes participation in pilgrimage tours, religious events, and religious classes. According to the participants, taking part in religious ceremonies has not only spiritual impacts but also fosters a heightened sense of social presence. One participant expressed, "I make an effort to attend religious programs. Participating in such programs helps prevent depression and alleviates life's worries and tensions to a large extent" (Participant 6, a 66-year-old woman).

4.2. Mental Health

According to most elderly individuals, mental health holds a paramount position in their overall well-being. This encompasses having hope and a sense of purpose in life, experiencing tranquility and happiness, and maintaining a positive self-worth. The first subtheme of mental health is hopefulness, which involves having hope in life and optimism for the future. As one elderly participant expressed, "Hope keeps a person alive. Hope means that I strive for life and health, and I try to instill hope in others as well. Above all, I taught my children to be optimistic about the future and to have faith in God" (Participant 2, a 73-year-old man).

The second subtheme is the feeling of tranquility, which encompasses concepts such as being in high spirits, contentment in life, vitality, and freedom from stress. "I

always try to keep my spirits high, and I am not tied down by material possessions. I find contentment in what I have. Despite the challenges, focusing on my blessings and being grateful brings me peace" (Participant 5, a 64-year-old man).

The feeling of self-worth is the final subtheme of mental health, encompassing values such as self-satisfaction, being helpful, having a sense of purpose in life, and contributing to others. Elderly individuals derive this sense of worthiness from both their self-assessment and feedback from others. "Just being able to accomplish my tasks gives me a sense of inner satisfaction. I feel that I can still be of service to my community and family, which motivates me" (Participant 6, a 66-year-old woman).

4.3. Healthy Lifestyle

Most elderly individuals mentioned lifestyle factors as crucial determinants of healthy aging. These factors include maintaining a healthy diet, engaging in physical activity, avoiding tobacco and drugs, managing weight, and ensuring adequate rest and recreation. The first subtheme of a healthy lifestyle is adhering to a nutritious diet. According to their beliefs, the diet of older adults often lacks quality, leading to adverse consequences for their physical and mental well-being. Many of them expressed difficulty in accessing quality food due to chemical use in food production and the high cost of quality nutrition. Nevertheless, they make efforts to maintain a healthy diet as much as possible. "Proper nutrition is essential for good health. Everything has become so expensive that we would need ten times the budget to afford the food they advertise on the Additionally, even if the ingredients are available, preparing food can be challenging for elderly people like me, and someone should help us with it" (Participant 11, a 71-year-old woman).

One of the other subthemes of a healthy lifestyle is engaging in sports and physical activities, such as regular walking, participating in sports programs, and performing daily activities. "I go to the yard or neighborhood park at 6 or 6:30 in the morning and do stretching exercises for an hour. Then I take a shower and have breakfast with my wife, and I feel energetic until the end of the day" (Participant 2, a 73-year-old man).

The third subtheme is avoiding drugs and tobacco. Most older individuals believe that smoking leads to a wide range of ailments and is dangerous at any age. Refraining from drug and tobacco use and quitting in old age are seen as promoting healthy aging. "I used to smoke when I was younger, but I quit smoking at the age of 40 due to heart disease, and I felt better afterward. If we want to

have healthy elderly people, we should also have a plan to help them quit smoking and using hookah" (Participant 3, a 71-year-old man).

The fourth subtheme that the elderly mentioned as part of a healthy lifestyle was maintaining a proper weight. According to their beliefs, obesity and overweight are associated with elderly diseases, and older individuals should manage their weight as they age. "Obesity is the root cause of many diseases, including heart disease, stroke, and diabetes, and it only gets worse with age. I make an effort to control my weight as best as I can because I tend to gain weight, and my blood sugar levels occasionally rise" (Participant 11, a 71-year-old woman).

The last subtheme related to a healthy lifestyle is rest and recreation. This includes getting enough sleep, spending time with friends and family, engaging in artistic and recreational activities, and singing together. "Whenever we gather with friends or family, if I have the time and patience, I sing local songs for them, and we have a great time together" (Participant 1, a 62-year-old man).

4.4. Maintenance of Functional Abilities

This theme comprises 3 subthemes: Cognitive strength, daily activities, and physical disability. According to the perspectives of the elderly, as people age, their memory and physical capabilities gradually decline, making it more challenging for them to acquire new skills and perform everyday tasks.

The first subtheme is cognitive strength, which emphasizes the importance of maintaining mental agility and learning throughout life. Some participants expressed a strong desire to learn new things, while others sought to enhance their existing skills. One participant shared, "I make every effort to study and learn new things. Learning, in my opinion, knows no age limit. Sometimes I'm amazed at how much I can still learn" (Participant 1, a 62-year-old man).

The second subtheme involves performing activities of daily living and handling essential household tasks. The elderly mentioned that by engaging in daily activities, they feel capable and strive to be as self-sufficient as possible. One participant mentioned, "I cook for myself and do housework. I handle my shopping, which is a form of physical activity. Additionally, I socialize with people, engage in conversations, and stay aware of what's happening around me" (Participant 14, a 65-year-old woman).

Physical disability is the third subtheme under maintenance of functional abilities. According to the elderly, various health conditions and physical limitations have restricted their physical capabilities, sometimes necessitating assistance and support from family members. Nonetheless, they make concerted efforts to maintain their independence as much as possible. One participant emphasized, "Despite facing numerous physical challenges, I strive to be as independent as possible and perform many tasks on my own. Being able to do things independently despite obstacles holds significant value in my perspective" (Participant 2, a 73-year-old man).

4.5. Adequacy of Economic Status

This concept encompasses 2 subthemes: Income insufficiency and the high cost of living. Many older individuals believe that one of the primary challenges of old age is financial problems, which can affect their self-esteem and overall health.

Income insufficiency is the first subtheme mentioned by the elderly. Due to economic challenges within society, their retirement income and monthly pensions often prove insufficient during retirement. This can lead some older individuals to consider taking on a second job after retiring. Additionally, some elderly individuals find themselves financially supporting their unemployed adult children. (Participant 12, a 65-year-old man) voiced these concerns.

The high cost of living represents the second subtheme. According to the elderly, the rising costs of everyday necessities and housing rent pose significant financial challenges. Their retirement benefits and limited income are often insufficient to cover living expenses, medical bills, and healthcare costs. One participant lamented, "The high cost of living has become unbearable, and I'm struggling to get by on a meager retirement pension. I have rent to pay, groceries to buy, and medical bills to cover. I've had to give up on some things" (Participant 15, a 65-year-old man).

5. Discussion

This research provides valuable insights into how older adults perceive healthy aging. Healthy aging, as described by the elderly, encompasses 5 descriptive themes: Social participation, mental health, a healthy lifestyle, maintenance of functional abilities, and economic sufficiency. Social participation emerged as a critical aspect of healthy aging, with elderly individuals emphasizing its importance.

Elderly social participation is considered a central component of age-friendly cities, successful aging, social capital, and overall elder health (17). Encouraging community engagement and establishing social support networks can enhance mental well-being and improve

health outcomes among older adults. Achieving this can be accomplished through initiatives such as senior centers, community programs, volunteer opportunities, and intergenerational activities (3). Creating age-friendly environments entails ensuring that cities, communities, and public spaces are accessible and inclusive for older adults. This involves providing safe transportation options, walkable neighborhoods, accessible housing, and age-appropriate recreational and cultural activities (7, 18).

Several qualitative studies have sought to understand the experiences of elderly individuals regarding social participation (5, 9, 13, 18). Consistent with our findings, some previous studies have revealed that elderly social participation includes elements such as volunteer work, employment, cultural and social activities, and intergenerational interactions.

In a study by Solhi et al. on the perspective of middle-aged individuals regarding healthy aging, improving social relationships was identified as one of the underlying factors (9). Participants, particularly those who were lonely or socially isolated, emphasized the importance of social relationships as a means of preserving health in old age. According to existing literature, loneliness and limited social participation significantly increase the risk of disability, premature death, dementia, and other health issues among older adults (19, 20). Therefore, maintaining social connections with family and friends and receiving support from them are considered essential components of healthy aging, particularly in cultures like Iran.

Mental health emerges as the second prominent theme revealed in the analysis. Elderly participants in this study emphasized the significance of mental health as a crucial component of elderly well-being, with implications for other dimensions of health. Subthemes within mental health include hope, tranquility, and self-worth. The elderly individuals believe that maintaining hope, relying on their faith, experiencing inner peace, fostering high spirits, and cultivating happiness protect them from depression and mental health issues. This perspective aligns with the findings of a study by Tkatch et al. (13).

Additionally, Solhi et al.'s study indicated that middle-aged individuals also considered mental health as one of the components of healthy aging (9). Van Leeuwen et al. noted that a sense of peace and a lack of worries and concerns are determinants of quality of life in older individuals (21).

The third theme concerning the perceptions of older adults regarding healthy aging is lifestyle. Encouraging healthy lifestyle choices can significantly impact the process of healthy aging. This study identified several key aspects of lifestyle that older individuals deemed essential,

including dietary habits, physical activity, refraining from smoking and drug use, maintaining a healthy weight, and paying attention to rest and recreation. Consistent with our findings, Kaveh Farsani's study identified adopting a healthy lifestyle as a significant factor contributing to the process of healthy aging (15). A study by Visser et al. demonstrated that older adults who maintained a healthy lifestyle exhibited lower levels of decline in various areas, such as walking speed, depressive symptoms, cognitive function, and social connectivity (22). However, sustaining a healthy lifestyle in old age necessitates early planning and training, which should ideally begin in earlier stages of life, including childhood. In addition to adhering to a healthy diet, the financial and physical ability of older adults to access or prepare quality food is of great importance. Furthermore, participants mentioned the lack of suitable facilities and the cost associated with some sports as obstacles to elderly physical activity.

The fourth theme, "maintenance of functional abilities," is related to the perceptions of older adults Cognitive strength, daily regarding healthy aging. activities, and physical disabilities constitute subthemes associated with the functional abilities of older adults. According to the elderly participants, as they age, functional abilities gradually decline, with cognitive capacity diminishing, daily activities becoming more challenging, and various diseases, including chronic illnesses, affecting physical capacities. functional abilities enables older adults to enjoy life with their families and friends while preserving their independence. This perspective aligns with the observations made by Tkatch et al., who also noted that maintaining function and independence are major criteria for successful aging (13). The fear of losing independence is a significant concern for older adults and can impact their pursuit of healthy aging. For instance, in a study by Savage et al. conducted in Canada, maintaining health and physical abilities was highlighted as one of the main needs of older adults (23). Similarly, in the study by Manasatchakun et al. conducted in Thailand, family members and relatives described healthy aging as being independent, able to perform daily activities, not becoming a burden, and maintaining cognitive abilities, which is consistent with the findings of this study (18).

The adequacy of the economic situation serves as the final theme related to the understanding of healthy aging among older adults. According to the elderly participants, financial matters are fundamental to achieving the goals of healthy aging. Many elderly individuals express that their monthly retirement pensions do not cover their basic needs due to the cost of living and inflation in the country. Finding new employment opportunities suitable for their

abilities can be challenging. In some instances, due to the widespread unemployment crisis in the country, elderly individuals may find themselves financially responsible for their unemployed adult children. Medical expenses and issues related to health insurance further complicate the financial situation of the elderly. These economic challenges also have ramifications on other dimensions of elderly health. Studies conducted within the country have reported similar findings. For example, in Ayoubi-Mahani et al.'s study, economic structural issues were identified as barriers to healthy and active aging (3). Financial independence was also cited by participants in Kaveh Farsani's study as one of the important factors affecting healthy aging (15).

Despite its strengths, this study has certain limitations. First, the study focused on elderly residents of the community and did not include elderly residents of nursing homes, elderly patients, or those hospitalized. Consequently, the perspectives of these groups on healthy aging may differ from what the participants in this study articulated. Second, the research was conducted in the urban areas of Ilam and Shush Daniyal, located in the southwestern region of Iran, and only included residents of these cities. Thus, the perspectives of elderly residents in other areas, such as rural regions, may differ. Given the multidimensional nature of healthy aging and its various aspects, further studies are recommended to comprehensively understand the perceptions of the elderly regarding this concept. This will facilitate the development of interventions aimed at promoting healthy aging.

5.1. Conclusions

This study provided older adults with the opportunity to discuss their understanding of healthy aging. According to the study, older adults described healthy aging as an interrelated combination of factors, including social involvement, mental health, a healthy lifestyle, the maintenance of functional ability, and economic sufficiency. Although the elderly have a good understanding of the importance of healthy aging, many obstacles and challenges hinder the attainment of healthy aging goals. Many of these barriers are not related to the healthy behaviors of the elderly themselves but rather to social, economic, and cultural issues in society.

Footnotes

Authors' Contribution: TS, AA, and HA were involved in conceptualizing the study design and contributed to data collection. TS, AA, FR, and MM analyzed the data. All

the authors were involved in manuscript writing and gave final approval to the manuscript.

Conflict of Interests: The researchers declare no conflicts of interest.

Data Availability: The dataset presented in the study is available upon request from the corresponding author during or after submission.

Ethical Approval: This study was approved by the Ethics Committee of Ilam University of Medical Sciences (IR.MEDILAM.REC.1399.318).

Funding/Support: There was no financial support for the current study.

Informed Consent: Participants provided informed consent for voluntary participation in the study.

References

- Ismail Z, Ahmad WIW, Hamjah SH, Astina IK. The Impact of Population Ageing: A Review. Iran J Public Health. 2021;50(12):2451-60.
 [PubMed ID: 36317043]. [PubMed Central ID: PMC9577145]. https://doi.org/10.18502/ijph.v50i12.7927.
- Shams Ghahfarokhi M. Rising living alone among the elderly in Iran: prevalence and associated factors. BMC Geriatr. 2022;22(1):622. [PubMed ID: 35883051]. [PubMed Central ID: PMC9327280]. https://doi.org/10.1186/s12877-022-03309-8.
- 3. Ayoubi-Mahani S, Eghbali-Babadi M, Farajzadegan Z, Keshvari M, Farokhzadian J. Active aging needs from the perspectives of older adults and geriatric experts: a qualitative study. Front Public Health. 2023;11:1121761. [PubMed ID: 37397742]. [PubMed Central ID: PMC10311094]. https://doi.org/10.3389/fpubh.2023.1121761.
- Mohammadi M, Ghanbari MA, Ilkhani M, Soltanpoor R, Khadem Z, Porrahimi A. [Referral status and demographic characteristics of elderly patients in emergency departments in Sabzevar]. *Journal of Geriatric Nursing*. 2017;3(4):102-11. Persian.
- Tavares RE, Jesus MCPD, Machado DR, Braga VAS, Tocantins FR, Merighi MAB. Healthy aging from the perspective of the elderly: an integrative review. Revista Brasileira de Geriatria e Gerontologia. 2017;20(6):878-89. https://doi.org/10.1590/1981-22562017020.170091.
- Doshmangir I., Khabiri R, Gordeev VS. Policies to address the impact of an ageing population in Iran. *Lancet*. 2023;401(10382):1078. [PubMed ID: 37003695]. https://doi.org/10.1016/S0140-6736(23)00179-4
- Saberzadeh V, Emamgholipour Sefiddashti S, Safaei Lari M. Examining active aging among Iranian provinces: a TOPSIS analysis. BMC Public Health. 2022;22(1):764. [PubMed ID: 35428220]. [PubMed Central ID: PMC9012042]. https://doi.org/10.1186/s12889-022-13040-z.
- 8. Goharinezhad S, Maleki M, Baradaran HR, Ravaghi H. Futures of elderly care in Iran: A protocol with scenario approach. *Medical journal of the Islamic Republic of Iran*. 2016;**30**:416.
- 9. Solhi M, Pirouzeh R, Zanjari N. Middle-aged preparation for healthy aging: a qualitative study. *BMC Public Health*. 2022;**22**(1):274. [PubMed ID: 35144582]. [PubMed Central ID: PMC8832661]. https://doi.org/10.1186/s12889-022-12715-x.
- Bastami M, Azadi A. Effects of a Multicomponent Program on Fall Incidence, Fear of Falling, and Quality of Life among Older Adult Nursing Home Residents. Ann Geriatr Med Res. 2020;24(4):252-8.

- [PubMed ID: 33171549]. [PubMed Central ID: PMC7781964]. https://doi.org/10.4235/agmr.20.0044.
- Mohammadi E, Allahyari T, Darvishpoor Kakhaki A, Saraei H, Fereshtehnejad SM. Analysis of Being Active Based on Older Adults' Experience: A Qualitative Study of Active Aging Strategies. Salmand. 2017;11(4):504-17. https://doi.org/10.21859/sija-1104504.
- Foroughan M, Mohammadi Shahbolaghi F. Perception of healthy lifestyle among Iranian elders: A qualitative research. *Iranian Journal* of Ageing. 2016;10(4):132–9.
- Tkatch R, Musich S, MacLeod S, Kraemer S, Hawkins K, Wicker ER, et al. A qualitative study to examine older adults' perceptions of health: Keys to aging successfully. Geriatr Nurs. 2017;38(6):485–90. [PubMed ID: 28341064]. https://doi.org/10.1016/j.gerinurse.2017.02.009.
- Rudnicka E, Napierala P, Podfigurna A, Meczekalski B, Smolarczyk R, Grymowicz M. The World Health Organization (WHO) approach to healthy ageing. *Maturitas*. 2020;139:6-11. [PubMed ID: 32747042]. [PubMed Central ID: PMC7250103]. https://doi.org/10.1016/j.maturitas. 2020.05.018.
- Kaveh Farsani Z. Evaluation of Healthy Aging Themes from the Perspectives of the Elderly: A Qualitative Study. *Journal* of Kermanshah University of Medical Sciences. 2022;26(2). https: //doi.org/10.5812/jkums-123750.
- Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today*. 2004;24(2):105-12.
 [PubMed ID: 14769454]. https://doi.org/10.1016/j.nedt.2003.10.001.
- Aroogh MD, Shahboulaghi FM. Social participation of older adults: A concept analysis. International journal of community based nursing and midwifery. 2020;8(1):55.
- Manasatchakun P, Roxberg A, Asp M. Conceptions of Healthy Aging Held by Relatives of Older Persons in Isan-Thai Culture: A Phenomenographic Study. J Aging Res. 2018;2018;3734645.
 [PubMed ID: 29593905]. [PubMed Central ID: PMC5821976]. https://doi.org/10.1155/2018/3734645.
- Donovan NJ, Blazer D. Social Isolation and Loneliness in Older Adults: Review and Commentary of a National Academies Report. Am J Geriatr Psychiatry. 2020;28(12):1233-44. [PubMed ID: 32919873]. [PubMed Central ID: PMC7437541]. https://doi.org/10.1016/j.jagp.2020. 08.005.
- Newman-Norlund RD, Newman-Norlund SE, Sayers S, McLain AC, Riccardi N, Fridriksson J. Effects of social isolation on quality of life in elderly adults. PLoS One. 2022;17(11). e0276590. [PubMed ID: 36327259]. [PubMed Central ID: PMC9632793]. https://doi.org/10.1371/journal. pone.0276590.
- van Leeuwen KM, van Loon MS, van Nes FA, Bosmans JE, de Vet HCW, Ket JCF, et al. What does quality of life mean to older adults? A thematic synthesis. PLoS One. 2019;14(3). e0213263. [PubMed ID: 30849098]. [PubMed Central ID: PMC6407786]. https://doi.org/10.1371/journal.pone.0213263.
- Visser M, Wijnhoven HAH, Comijs HC, Thomese F, Twisk JWR, Deeg DJH. A Healthy Lifestyle in Old Age and Prospective Change in Four Domains of Functioning. J Aging Health. 2019;31(7):1297–314. [PubMed ID: 29809092]. [PubMed Central ID: PMC7322976]. https://doi.org/10.1177/0898264318774430.
- Savage RD, Hardacre K, Bashi AM, Bronskill SE, Faulkner C, Grieve J, et al. Perspectives on ageing: a qualitative study of the expectations, priorities, needs and values of older people from two Canadian provinces. *Age Ageing*. 2021;50(5):1811–9. [PubMed ID: 34228777]. [PubMed Central ID: PMC8522684]. https://doi.org/10.1093/ageing/afab136.