### Access this article online

Quick Response Code:



Website: www.jehp.net

DOI:

10.4103/jehp.jehp 972 20

Department of Education and Health Promotion, School of Health, Iran University of Medical Sciences, Tehran, Iran, 

¹PhD Candidate of Health Education and Health Promotion, School of Health, Iran University of Medical Sciences, Tehran, Iran, ²Iranian Research Center on Aging, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

# Address for correspondence:

Mrs. Razieh Pirouzeh, PhD Candidate of Health Education and Health Promotion, School of Health, Iran University of Medical Sciences, Tehran, Iran.

E-mail: pirouzeh.r@iums. ac.ir

Received: 09-08-2020 Accepted: 14-09-2020 Published: 31-01-2022

# Perspectives on healthy aging in middle age: Evidence for health promotion interventions

Mahnaz Solhi, Razieh Pirouzeh<sup>1</sup>, Nasibeh Zanjari<sup>2</sup>

### **Abstract:**

**CONTEXT:** Understanding how middle-aged people perceive healthy aging and what they need to do to stay healthy as they age can help public policy planning to enhance the lifestyles of middle-aged and elderly people.

**AIMS:** The purpose of this study was to clarify the concept of healthy aging and strategies to achieve it from the perspective of middle-aged people in Tehran, Iran.

**SETTING AND DESIGN:** This qualitative study was performed on 21 middle-aged people aged 45–59 years of Tehran in 2019.

**SUBJECTS AND METHODS:** The data collection was carried out through semi-structured and in-depth interviews; the interviews were audiotaped, transcribed. Sampling was carried out gradually until data saturation through purposive sampling was achieved.

**STATISTICAL ANALYSIS USED:** Data collection and analysis were performed simultaneously. Data were analyzed using conventional content analysis. To establish the reliability and validity of findings, Graneheim and Landman criteria were considered.

**RESULTS:** The middle-aged perspective on healthy aging was included in four main themes: having good physical and mental health, having financial well-being, having social support. Strategies for achieving healthy aging were included in five themes: future financial planning, promoting physical health, promoting psychological health, maintaining and improving communication.

**CONCLUSION:** From the middle-aged perspective, healthy aging and strategies to achieve it are multidimensional. Planning for promotional interventions to have a healthy old age should be including all dimensions and done from the years before old age.

### **Keywords:**

Aging, health, middle aged

### Introduction

Population aging is a worldwide phenomenon and the key feature of the population in the 21st century. The absolute number of people aged 60 and older is projected to increase from 900 million in 2015 to 1.4 billion by 2030, to 2.1 billion by 2050, and 3.2 billion in 2100.[1] The number of elderly people in Iran, which was <1.2 million in 1956, has

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow\_reprints@wolterskluwer.com

increased six-fold, reaching >7.4 million in 2016. [2]

Compared to other countries, the rate of aging in the Iranian population shows that although the aging process of the Iranian population began with a delay compared to developed countries, due to the population explosion of the 1980s and the dramatic decline in fertility rates in the following decade, it has experienced extremely rapid growth in population aging and will be one of the fastest aging countries in the world.

**How to cite this article:** Solhi M, Pirouzeh R, Zanjari N. Perspectives on healthy aging in middle age: Evidence for health promotion interventions. J Edu Health Promot 2022;11:5.

This aging population growth process will require special planning and management in the future. [3]

Healthy aging is defined as a lifelong process of optimizing opportunities for improving and maintaining the health, physical, social and mental well-being, independence, quality of life, and enhancement of a successful life transition. [4] Healthy aging is a multidimensional concept that includes social, mental, and physical dimensions. [5]

The need to take measures with a focus on new evidence-based policies and strategies for healthy aging is one of the priorities being discussed in drafting the WHO's thirteenth work program for the years 2019–2023 to prepare for the "2020–2030 Healthy Aging decade." This requires time and effort, and thanks to the strong international support of "Healthy Aging" it was addressed in the WHO program with the statement of "Ensuring healthy aging is an emergency challenge for all states" and the main goal of public health is "not only long life but healthy life." [6]

Healthy aging is not only influenced by physiological, psychological, and environmental factors but also by culture. Because culture influences people's thoughts, beliefs, decisions, activities, and behaviors, the way people perceive the concept of healthy aging and its components vary from culture to culture.<sup>[7]</sup>

The healthy aging promotion provides more opportunities for older people in the community to play an important role in society and enjoy independence and a good life; it is never too late to change risky behaviors for health promotion.<sup>[8]</sup> Preparation for age-related changes is not restricted to old age itself, but should be a concern throughout life: middle-aged and even younger adults should also engage in preparation for changes that are expected to occur during later life.<sup>[9]</sup>

Most studies in the past about the concept of healthy aging focused on the standpoint of the elderly.[10-14] How we deal with the aging phenomenon of the population is influenced by the way we look at aging.[15] Understanding how middle-aged people understand health, as well as their feelings on the aging process and what they need to do to stay healthy, can help plan public policies to promote lifestyle in middle-aged people and the elderly.[8] Given the rapid increase of the aging population in Iran and the cultural and religious context of the country, knowing the views and opinions of middle-aged people as the future elderly about healthy aging can help promote healthy aging. Therefore, the present study was conducted to explain healthy aging and strategies to achieve it from the perspective of middle-aged people.

# **Subjects and Methods**

# Study design

In this qualitative study, content analysis of semi-structured guided interviews using targeted probes was used to provide insight into the perspective of healthy aging and strategies to achieve it in the middle-aged of Tehran, Iran.

# Participant selection

Individuals were selected in a multi-stage sampling process so that the city of Tehran was divided into four regions (north, south, north, east, and west) and from each region, two parks and a cultural center were randomly selected and middle-aged people as purposefully entered the study from these places.

Participants in this study were middle-aged people who were 45–59 years old, lived in a community-dwelling, no cognitive or mental disorders, and willing to participate in the study.

To select the participants with the most diversity, middle-aged people with different conditions were selected in terms of age, sex, level of education, occupation, marital status, place of residence, socioeconomic and cultural status. So that single and married men and women, people in employment, homemakers, and the retired were included in the study. Sampling was performed until saturation of the concept of healthy aging in middle-aged was achieved.

# Study participants

This study draws from interviews with 10 women and 11 men; the participants ranged in age from 45 to 59, around 76% of the sample were married [Table 1].

### Data collection

To collect information, the interviews were conducted in their parks and cultural centers. In-depth semi-structured interviews were conducted individually and face-to-face. The main research questions were "What is the concept of healthy aging fin your opinion? And how is healthy aging to be achieved." During each interview, follow-up questions were also used to clarify the concepts. Interviews lasted approximately 40 min each. Interviews were audio-recorded and then transcribed verbatim manually.

# **Analysis**

Content analysis was used in qualitative data analysis. The data collected was managed by coding and sorting into categories and themes. [16] The coding of conversational groups and semantic units was done first by the first author. Two authors independently read the data line by line and analyzed participants' answer codes for each

question. The codes were then grouped into categories. The subcategories that emerged were also weaved together to explain each category. Finally, the main groups that reveal the meanings of participants' views were divided into two general categories, describing healthy aging and strategies for achieving it in middle-aged people. In the data analysis process, codes, categories, and themes were compared. In cases of disagreement, decisions were clear, and discussions continued until consensus was reached.

### **Trustworthiness**

To determine the trustworthiness of the data, four criteria were used. [16] The credibility of the data was demonstrated through close interaction with participants, long involvement in the field, and notes in the field. Control by the participants and experts was also used as a technique to ensure the credibility of the analysis. To ensure the conformability of the data, comments, and assumptions were controlled to prevent their effect on data analysis and interpretation.

By providing a detailed description of the participants, the research process, the measures taken, and the research limitations, it was attempted to ensure the transferability of the research findings. The research dependability was obtained using similar results between the researcher and two experts involved in the data analysis process.

### **Ethical consideration**

Ethical approval was granted by the Iran University of Medical Sciences (Ethics codes: IR.IUMS.REC.1397.1043). All persons who participated in the research gave their informed consent before their inclusion in the study. Participants were assured that their details would not be included in the research report and that fiduciary information would be considered. In case of dissatisfaction, they also have the right to cancel the study.

### Results

The results of this study were divided into two general clusters: The view of the middle-aged concerning to healthy aging, and the strategies to achieve it. Clusters, themes, and sub-themes are shown in Table 2.

# The view of the middle-aged to healthy aging

The middle-aged perspective on healthy aging was included in four main themes: having good physical health, having good mental health, having financial well-being, having social support. The themes are interlinked and explain the middle-aged peoples' view of aging.

### Having good physical health

The most common health dimension is physical health, which can be more easily evaluated than other aspects

Table 1: Demographic characteristics of the middleaged participants participating (n=21)

Characteristic	Frequency (%)
Gender	
Man	11 (52)
Female	10 (48)
Age	
Under 50	11 (52)
50- 60	10 (48)
Marital status	
Married	16 (76)
Single	5 (24)
Education	
Under diploma	11 (52)
Diploma and upper	10 (48)
Status of employment	
Employee	16 (74)
Housewife	4 (14)
Retired	3 (12)

Table 2: Clusters, themes, and sub-themes of middleaged perspective for healthy aging

Clusters	Themes	Sub-themes
The view of the middle-	- Having good physical health	Lack of chronic disease
aged to healthy aging		Functional independence
	Having good mental health	Lack of mental discomfort
		Enjoying life
	Having financial well-being	Having adequate
		financial resources
		Having financial
		independence
	Having social support	Emotional support
		Instrumental support
Strategies for achieving healthy aging	Future financial planning	Savings
		Employment
	Promoting physical health	Healthy nutrition
		Exercise
	Promoting psychological health	Kindness
		Positive thinking
		Happiness
		Spiritual relationship
	Maintaining	Having a companion and
	and improving communication	not being alone
		Keeping people satisfied

of health. In the present study, participants reported being in good physical health having no chronic illnesses, and functional independence as one of the first signs of healthy aging.

# Lack of chronic disease

Aging is also a period when the elderly is exposed to potential threats such as the increased risk of chronic diseases. Many middle-aged people also considered the absence of chronic disease as healthy aging, as one participant said: "Being healthy means getting old and not having a disease, for example, not having hypertension, not

being fat or suffering from diabetes. Or very dangerous diseases such as cancer ..." (46-year-old woman).

# Functional independence

With the increase in age in the aging period, due to functional impairments, one's dependence on others for carrying out daily tasks increases. In this regard, participants in this study stated that being independent and being able to see to one's daily affairs and routine activities is an essential part of healthy aging. As one of the middle-aged women said: "A healthy elderly person is one that can afford to look after themselves and does not need the help of others.; can see to her things and be healthy as it' is hard to get old and need the help of your child." (52 years old).

# Having good mental health

The mental health of the elderly is as important as their physical health and has a significant effect on the health of the individual and society. Having good mental health, the middle-aged person falls into two categories of lack of mental discomfort and enjoyment of life.

### Lack of mental discomfort

From a middle-aged outlook, the lack of psychological problems such as depression, anxiety, and stress about life in old age indicates that this period is healthy as these problems are seen in most elderly people and can endanger one's health in old age.

"A healthy elderly person is one who has a healthy spirit and is not depressed. Depression itself brings sickness. When there is no anxiety and stress, well, elderly people are healthier" (48-year-old woman).

### Enjoying life

From a middle-aged perspective, a healthy elderly person is one who enjoys life and is happy. In this regard, a middle-aged person stated that:

"A healthy old man is someone who, although aged, is happy inside and is not sad and is still able to chat, laugh, and have fun." (56-year-old man).

### Having financial well-being

One of the biggest misfortunes facing the elderly, and perhaps the most important, is poverty. Middle-aged people consider capitalists as healthy and stated that having money is a basic need for one to be healthy. This concept consists of two sub-categories of having sufficient financial resources and having financial independence.

# Having adequate financial resources

Elderly people with adequate capital and savings during old age are certainly less likely to have financial problems and better healthcare.

"For elderly people to be healthy they need money, they need capital and savings; if you have money, every one's around you. When you have money, you have mental peace as well as a healthy body" (53-year-old man).

# Having financial independence

Middle-aged people believe that those who work and have financial independence have a healthier life in old age. One participant stated:

"An elderly person who makes a living and has an income and has no financial need for anyone is certainly healthier and has good spirits. I see some old men walking in the park aimlessly......" (50-year-old woman).

# Having social support

Social support plays a very important role in maintaining the health of the elderly in such a way that those with higher social support have a better health status. In the present study, social support was expressed in the form of emotional support from the family as well as instrumental support from those around the health components of aging.

# **Emotional support**

Aging can become a difficult time for some people due to illness and families can help ease many of these problems by providing a loving and nurturing environment at home. The example that follows is from a middle-aged man; "You know it's good to be old when you're healthy, not physically, but because of one's family support as it is the most important factor; to have a warm and affectionate family, considerate and loving" (55-year-old man).

### Instrumental support

Elderly people need the support of those around them. In this regard, one middle-aged person commented: "Health means not be alone during hardships in life when you get old; there is always someone to help or visit you now and then." (55-year-old woman).

### Strategies for achieving healthy aging

Many common problems in old age can be prevented. Appropriate solutions must be taken before reaching old age to ensure good health. Participants have identified several strategies for achieving healthy aging that is generally broken down into five sections: Future financial planning, promoting physical health, promoting psychological health, maintaining and improving communication are essential strategies for achieving healthy aging from the perspective of the middle-aged.

# Financial planning for the future

Participants place greater emphasis on economic factors and believe that "everything depends on the money,

even health, depends on money." Participants believe that having money is a prerequisite for health, and not having money is the biggest obstacle to good health and healthy aging.

### Savings

Middle-aged people believe that for aging to be an opportunity to rest, one must think about earning money and save for one's old age. One middle-aged man's opinion about saving for old age is as follows: "save money so that you have saved up enough for your old age and do not need anyone because you will not always be strong and young and have to have a source of income and capital." (45 years old).

# **Employment**

Middle-aged participants in the study cited having a job and a steady income will help to improve the quality of life in old age and put one's mind at rest. The following example reinforces this: "If you don't have an income, you won't have a good life, and you may not remain healthy, which will reduce your quality of life, if you have a good job, you'll have financial independence and motivation." (49-year-old woman).

# *Physical health promotion*

Middle-aged people in the present study stated that those who had more physical activity and a healthier nutritious diet when younger would certainly experience healthy aging.

### Healthy nutrition

Physical development and health are directly linked to healthy nutrition. Aging cannot be prevented, but it is possible to maintain good physical and mental health when aging by adhering to the principles of proper nutrition throughout life.

A 50-year-old woman commented: "Someone who is well fed from youth, although it may not be luxurious food but good enough, and consistent, nutritious, when they get old, will be healthier than others."

### Exercise

Middle-aged people believe that exercise has been a part of some elderly peoples' lives from their youth; they've kept their bodies active and healthy: "Exercise should be a priority in life for sure. There is no need for heavy exercise light exercise like walking is very effective for the health of the elderly." (47-year-old woman).

# Promoting psychological health

One of the most important issues faced by the elderly is psychological health problems. From a middle-aged perspective, promoting mental health through kindness, positive thinking, happiness, and spiritual connection are effective strategies for health in aging.

### Kindness

One of the most important consequences of being kind and spreading kindness in society is the effect it has on the overall health of the body in individuals. As one participant stated:

"Be kind to other human beings because we believe that the more kindness we show to other humans, the greater it will affect our mental health" (50-year-old man).

### Positive thinking

Positive thinking leads to a healthier lifestyle. Middle-aged people said that it is easier to solve problems and to endure problems when viewed with a positive outlook. You have to think about good things. A middle-aged man's point of view on this:

"If we strengthen our imagination and positive thinking as capable human beings and experience the positive aspects of our life in the universe, we will stay healthier." (47-year-old man).

# Happiness

Happiness is one of the positive emotions that are in opposition to negative emotions such as depression, anxiety, and despair. Happiness can play a protective role against mental health problems that are a particular challenge for the elderly; for example, a 56-year-old man stated:

"People must be happy and care for themselves. The more a man cares for himself and is happy, the better he feels. It's very good to be happy, it's very effective. Those who live happily, live longer."

### *Spiritual relationship*

Faith in God gives peace to man, and when he has peace, it will be easier to accept truths. Participants also believe that spirituality and religious practices can play a protective role in aging problems and challenges. One participant stated:

"Belief in God is very important to a person. He must believe that aging is not the end and death is not the end of life. Aging is a good opportunity for self-knowledge and ultimately knowing God." (56-year-old woman).

### *Maintaining and expanding communications*

Communication with those around in aging can lead to good mental health and in some cases, improve physical health, so maintaining and expanding relationships are of the essential strategies for achieving healthy aging.

### Having a companion and not being alone

Middle-aged people believe that being alone and not having a partner and spouse will be a big problem in their old age, and in this regard: "In old age, you should be accompanied by your loved one a, your companion and not be alone, being alone makes a man feel depressed and not care about his health neither his mental health nor his physical health." (48-year-old man).

# Keeping people satisfied

Participants believed that we should not push others away from us, as having relationships and maintaining them with those around during aging is effective on health. Keeping people satisfied by being kind to them and helping others can be a supporting factor for healthy aging. A 59-year-old woman says: "If you are kind, everyone will want to stay with you, but if you are sharp and bother others when you get old, everyone will leave you...."

### Discussion

The present study was conducted to explain the middle-aged view of healthy aging and strategies to achieve it. From the perspective of the middle-aged participants, healthy aging is reaching a state of having physical health, mental health, financial well-being, and social support. Strategies for achieving healthy aging reported from the perspective of middle-aged people are financial planning for the future, promoting physical health, promoting psychological health, and maintaining and improving communication in aging. The findings showed that healthy aging is more than a health dimension. In fact, from the perspective of middle-aged people, healthy aging, in addition to the physical, mental, and social aspects, also includes financial and spiritual dimensions.

A review of healthy aging from an elderly perspective by Tavares showed that healthy aging includes biological, psychological, spiritual, and social dimensions (in factors of social support and capacity for independent living. [17]

Therefore, healthy aging from the perspective of middle-aged people in the present study corresponds to the perspective of the elderly in studies in all dimensions, except for the financial aspect that has been emphasized in the present study in the Iranian middle-aged community. Middle-aged people in the present study also agree that having money and possessing wealth as a key aspect of healthy aging. Given the economic status of the country in recent years and the financial pressure on different segments of society, especially the elderly, it is clear that these factors have influenced middle age's perspective on healthy aging.

Lack of chronic illness is another dimension that, from the middle-age perspective, is one of the prominent definitions of healthy aging. In a qualitative study by Thanakwang *et al.*, from the perspective of elderly Thai people, the lack of serious chronic illness is the first definition of healthy aging. [7]

For middle-aged people, functional independence is essential for aging health in the present study. Functional independence in the ability to perform daily activities and has been examined in studies. Functional independence indicates good physical health and healthy aging. [7,18] A decrease in performance in old age can be prevented, and by adopting a healthy lifestyle, the elderly can achieve independence.

Another dimension in this study is having good mental health, which among the middle-aged subjects under study indicates that they were not depressed, not unhappy, and enjoy life. Old age is a period that would be highly desirable and enjoyable if it is of good quality. A positive psycho-emotional perspective is an essential part of having healthy aging and can be considered an optimistic perspective in both the mental and emotional aspects.<sup>[7]</sup>

The social support dimension from a middle-aged perspective on healthy aging is related to emotional attachment, especially from the family, and is also stated as important in instrumental support in this period. In studies by Waites and Onolemhemhen<sup>[19]</sup> and Stephens et al., [20] family relationships, especially good family relationships, are identified as elements of healthy aging. Social support in aging reduces everyday problems and can promote physical and mental health and can be effective as a support for health measures and social support in enhancing one's happiness, self-esteem, and self-confidence.[17] In the Chong study in China, support from family and friends was found to be positive from the perspective of the middle-aged and elderly.<sup>[21]</sup> In Iran, the main support for the elderly comes from the family. Given the rich Islamic and Iranian culture, the role of the institution of the family remains unbeaten and should be strengthened. Families can help ease many of the problems the elderly face by providing a loving, nurturing home environment.

Concerning the strategies of achieving healthy aging from the perspective of middle age in the present study, it was found that their viewpoints are closely related to the economic status of society. The middle-aged people in the present study emphasized the importance of money and wealth on healthy aging. A review of the dimensions of healthy aging shows that people in higher socioeconomic groups are more likely to have illness in old age. [22] Saving or using financial resources carefully to maintain financial security is one of the factors influencing positive aging from the perspective of Chinese elderly and middle-aged people. [21] The middle-aged people under study emphasized the importance of financial planning

for aging to have healthy aging. To achieve this, having savings and being in employment from a young age and before reaching retirement age must be part of a person's financial planning for the future.

Employment from a middle-aged perspective is a motivating factor in aging to improve the quality of life and health of individuals. Retirement comes with aging. Retirement can have a positive effect on people's health, for example, by reducing stress and increasing enjoyment of life. However, it can also have a negative effect, for example, by feeling one has no purpose and the reduction in social interactions. [23] In this study, retirement is a negative factor for elderly health, which highlights the importance of Iranian old people working to have good health.

Improving physical health is another effective strategy for achieving healthy aging from a middle-aged perspective, which is one of the most effective items in this area, that of exercise and healthy nutrition. From the perspective of Chinese middle-aged and elderly people in the Chong study, effective factors for positive aging include adopting a healthy lifestyle with a healthy diet and regular exercise. [21] Studies show that people who have more exercise and eat healthier are more likely to have healthy aging. [22,24] applying a healthy lifestyle in middle-aged seems essential for having a healthy aging period, and educational intervention can be effective. [25]

Promoting psychological health was another strategy for achieving healthy aging from the perspective of study participants, including kindness, positive attitude, happiness, and a spiritual relationship. Unfortunately, most people who reach old age have problems, including depression and anxiety. [26] To have healthy aging, these harmful conditions must be prevented, and appropriate strategies must be adopted to promote psychological health sooner, and the earlier it is possible, the better the results will be. A review of healthy aging studies has shown that having a positive attitude is one of the characteristics of healthy aging. [22]

In the present study, promoting spirituality and, indeed, the discussion of religiosity and beliefs, from the perspective of middle-aged people, is one of the psychological strategies to achieve healthy aging. Various studies have highlighted the importance of spirituality as having faith in God and spirituality has a supportive role in life's challenges and problems.<sup>[17]</sup> Other studies in Iran,<sup>[18,27-29]</sup> show that spiritual health in Iranian elderly people is one of the main dimensions of health in the aging period, which is related to the religious beliefs of the elderly and also Iranian elderly people view spirituality as an important part

of their lives and have expressed their relationship with God and prayer as facilitating peace of mind and problem-solving.

Maintaining and expanding relationships so as not to be alone, especially with a spouse, and attracting the satisfaction of others are other factors that important for healthy aging in this study. Loneliness is a common problem and a negative experience for the elderly. Researches have shown that the elderly will have better physical and psychological performance<sup>[30]</sup> if they do not feel alone.<sup>[28]</sup> In Iranian society, family and social support are an essential roles in achieving a healthier lifestyle for the elderly.<sup>[30]</sup>

This study has several limitations. First, the middle-aged participants in this study were healthy and had no serious disability or illness; therefore, it would not be possible to extend this study to all middle-aged Iranians. Second, this study was conducted only in the capital of Iran, so the people included in this study may not be representative of the Iranian population. Third, since this is a qualitative study, it is not possible to generalize the results. Therefore, further studies are suggested, with a quantitative approach and a larger sample, to extrapolate the data for the general population and guide the planning of public policies.

On a negative note, the participants were not very interested in talking about aging and had never thought about some of the questions and gave short speeches on the subject.

The positive point of the study was that people with social and economic diversity were selected from different parts of the city, and the objective and subjective definitions of healthy aging and strategies to achieve it were comprehensive.

### Conclusion

The present study showed that healthy aging as a multidimensional concept includes physical, mental, emotional, spiritual, economic, and social aspects. The definition of healthy aging in the study population is influenced by economic status, and special emphasis is placed on the role of financial factors on health. The spiritual dimension is one of the dimensions that is influenced by the religious and Islamic beliefs of Iran. In the present study, the concepts and definitions of healthy aging have been subjective discussions that are derived from the imagination of the middle-aged toward the elderly. Providing old-age people with a positive and future-oriented concept by health-care providers eliminates negative stereotypes about aging and stimulates people's interest in the aging process

and the tendency to plan for the future. Middle-aged people striving to prepare for all aspects of physical, mental, social, spiritual, and financial dimensions can lead to a better experience of aging. In addition to the personal preparation of middle-aged people, given the importance of the financial dimension in the community under study, support from the public sector is important to provide an appropriate context for the aging population.

To have healthy aging, policies such as providing appropriate health insurance for middle-aged people, providing financial planning counseling in the workplace before retirement, providing psychological counseling to adapt to health and retirement, providing public spaces for intergenerational participation of the elderly and middle-aged people can be effective.

# Acknowledgments

This study is part of doctoral research by the second author (RP) under the supervise ion of MS, with the ethics code of "IR.IUMS.REC.1397.1043", approved by the research and technology Deputy of Iran University of medical sciences. All persons who participated in the research gave their informed consent prior to their inclusion in the study. The authors would like to thank all the participants for their valuable contributions to this study.

### Financial support and sponsorship

The research was supported by grant No. 97-4-2-13667 from Iran University of Medical Sciences.

### **Conflicts of interest**

There are no conflicts of interest.

# References

- World Health Organization. Multisectoral Action for a Life Course Approach to Healthy Ageing: Draft Global Strategy and Plan of Action on Ageing and Health. Geneva, Switzerland: World Health Organization; 2016. p. 1-37.
- Statistical Centre of Iran (SCI). Population and Housing Censuses 2016. Available from: https://www.amar.org.ir/. [Last accessed on 2019 Apr 22].
- Zeinalhajlou AA, Amini A, Tabrizi JS. Consequences of population aging in Iran with emphasis on its increasing challenges on the health system (Literature Review). Depiction Health 2015;6:54-64.
- Cyarto EV, Dow B, Vrantsidis F, Meyer C. Promoting healthy ageing: Development of the Healthy Ageing Quiz. Australas J Ageing 2013;32:15-20.
- Park J, Park Y. A systematic review on factors influencing the healthy aging: A Korean perspective. J Aging Res Clin Practice 2018;7:3-8.
- Cucinotta D. Preparing for the decade of healthy aging (2020-2030): Prevention plus therapy? Acta Biomed 2018;89:145-7.
- 7. Thanakwang K, Soonthorndhada K, Mongkolprasoet J. Perspectives on healthy aging among Thai elderly: A qualitative study. Nurs Health Sci 2012;14:472-9.

- 8. Wang J, Lee CM, Chang CF, Jane SW, Chen MY. The development and psychometric testing of the geriatric health promotion scale. J Nurs Res 2015;23:56-64.
- Kornadt AE, Rothermund K. Preparation for old age in different life domains: Dimensions and age differences. Int J Behav Develop 2013;38:228-38.
- 10. Bowling A, Dieppe P. What is successful ageing and who should define it? BMJ 2005;331:1548-51.
- Manasatchakun P, Chotiga P, Hochwälder J, Roxberg Å, Sandborgh M, Asp M. Factors associated with healthy aging among older persons in Northeastern Thailand. J Cross Cult Gerontol 2016;31:369-84.
- 12. Meng X, D'Arcy C. Successful aging in Canada: Prevalence and predictors from a population-based sample of older adults. Gerontology 2014;60:65-72.
- Sowa A, Tobiasz-Adamczyk B, Topór-Mądry R, Poscia A, la Milia DI. Predictors of healthy ageing: Public health policy targets. BMC Health Serv Res 2016;16 Suppl 5:289.
- 14. Sato-Komata M, Hoshino A, Usui K, Katsura T. Concept of successful ageing among the community-dwelling oldest old in Japan. Br J Community Nurs 2015;20:586-92.
- 15. Mohammadi E, Allahyari T, Darvishpoor-Kakhki A, Aghabakhshi H, Saraei H. Context and causal conditions in active aging phenomenon: A qualitative study. J Qualitative Res Health Sci 2016;5:158-74.
- Graneheim UH, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today 2004;24:105-12.
- Tavares RE, Jesus MC, Machado DR, Braga VA, Tocantins FR, Merighi MA. Healthy aging from the perspective of the elderly: An integrative review. Rev Brasileira de Geriatria e Gerontol 2017;20:878-89.
- Zanjari N, Sharifian Sani M, Hosseini Chavoshi M, Rafiey H, Mohammadi Shahboulaghi F. Perceptions of successful ageing among Iranian elders: Insights from a qualitative study. Int J Aging Hum Dev 2016;83:381-401.
- Waites CE, Onolemhemhen DN. Perceptions of healthy aging among African-American and Ethiopian elders. Ageing Int 2014;39:369-84.
- Stephens C, Breheny M, Mansvelt J. Healthy ageing from the perspective of older people: A capability approach to resilience. Psychol Health 2015;30:715-31.
- 21. Chong AM, Ng SH, Woo J, Kwan AY. Positive ageing: The views of middle-aged and older adults in Hong Kong. Ageing Soc 2006;26:243-65.
- Lu W, Pikhart H, Sacker A. Domains and measurements of healthy aging in epidemiological studies: A review. Gerontologist 2019;59:e294-310.
- Hawash M, Khalil M. Factors affecting post-retirement satisfaction of community-dwelling older adults. Alexandria Sci Nurs J 2017;19:103-18.
- 24. Sun F, Norman IJ, While AE. Physical activity in older people: A systematic review. BMC Public Health 2013;13:449.
- Mahdipour N, Shahnazi H, Hassanzadeh A, Sharifirad G. The effect of educational intervention on health promoting lifestyle: Focusing on middle-aged women. J Educ Health Promot 2015;4:51.
- Najafi B, Arzaghi M, Fakhrzadeh H, Sharifi F, Shoaei S, Alizadeh M, et al. Mental health status and related factors in aged population: Urban health equity assessment and response tool (Urban-HEART) study in Tehran. Iran J Diabetes Metabol 2013;13:62-73.
- 27. Moeini M, Sharifi S, Zandiyeh Z. Does Islamic spiritual program lead to successful aging? A randomized clinical trial. J Educ Health Promot 2016;5:2.
- Imanzadeh A, Alipoor S. Examining the elderly women's experiences of loneliness: A phenomenological study. Aging Psychol 2017;3:31-43.

- Taghdisi MH, Doshmangir P, Dehdari T, Doshmangir L. Influencing factors on healthy lifestyle from viewpoint of ederly people: Qualitative study. Salmand: Iran J Ageing 2013;7:47-58.
- 30. Zanjani S, Tol A, Mohebbi B, Sadeghi R, Jalyani KN, Moradi A. Determinants of healthy lifestyle and its related factors among elderly people. J Educ Health Promot 2015;4:103.