Identifying strategies for dealing with the aging population from the perspective of health system experts: A qualitative study

Rahele Samouei, Mahmoud Keyvanara

Abstract:

BACKGROUND AND AIM: Given the growing trend of aging and the limited resources of the health system, the lack of long-term prior government planning, and reduced growth of the productive force of society, identifying strategies for planning and action to deal with future aging is very important. In this regard, the study was conducted to identify strategies for dealing with the aging population from the perspective of health system experts.

METHODS: The qualitative content analysis study was performed on 29 Iranian male and female experts in the aging and health scope from Isfahan, Tehran, Tabriz, and Babol who purposefully participated in the semi-structured interview. Data were classified by qualitative content analysis.

RESULTS: Two concepts emerged according to the participated experts’ opinions, regarding the strategies of the Iranian health system in dealing with future aging: “executive policy” strategies, including “design, planning and implementation,” “evaluation and standardization,” “strengthening demand-driven” and “modeling national and international experiences,” “preventive policies” strategy, which includes “Focus on prevention,” “Focus on values and competencies,” “Educational empowerment,” “Knowledge-based empowerment,” “Empowerment of age-related groups,” “Economic empowerment,” and “Social support.”

CONCLUSION: The diversity and breadth of the mentioned strategies indicate the necessity of comprehensive readiness and adaptation of health services to the elderly conditions and characteristics. Purposeful planning and timely implementation of programs and policies to better address the health system with future aging will be possible by using practical strategies.

Keywords: Aging, health system, Iran, qualitative, strategy

Introduction

Population aging is the result of development.[1] It is expected that by 2050, 21% of the world’s population will be elderly.[2] During these years, the oldest populations belong to developed countries; While the highest rate of population aging will be in developing and less developed countries.[1,3] In other words, aging is currently experienced and planned for in Western countries, but Asian countries have not faced aging for more than a decade and a half.[4] According to population studies in Iran, people’s life expectancy has increased by about 35 years in the last 55 years due to reduced fertility and mortality, better medical and health care, and overall improvement in quality of life.[4-6] Although this is a successful achievement, it is associated with significant challenges.

Considering that health is the most important factor for survival and peace in society, providing health is one of the most...
essentials economic, social, and health responsibilities.\cite{7}

Throughout the 20\textsuperscript{th} century, we have seen health play an important role in adding years to life, and in the 21\textsuperscript{st} century, it can play a key role in adding life to the years of life.\cite{8}

The growth of the elderly population is an important event, both for health care providers and for family members and the community in which the elderly live.\cite{7} Because by increasing the number of elderly and the resulting population change, it is necessary to adapt and coordinate the social and health care system.\cite{9} Therefore, in order to increase the capacity of the health system and improve the effectiveness of services and care for an effective encounter with the aging phenomenon, it is necessary to policy and formulates effective policies and strategies in prevention, treatment, and rehabilitation area.\cite{7}

In this regard, in a country like Iran, which has less time to plan and act to deal with the elderly population,\cite{10} the responsiveness of the health system and health management is very important. Understanding the necessity of optimal use of the country’s capital and efficient service, the health system is as main and most responsible accountable system. Accordingly, it is necessary that this system prioritize health policies and programs in dealing with the phenomenon of aging with awareness, readiness, and purposefulness. Regarding aging in health area, some studies have been conducted in different countries and some shortcomings have been suggested.\cite{11-17}

In this regard, to complete and the information in the context and social structure of Iran, a qualitative study was conducted focusing on the experience and knowledge of experts. These experts had relevant work experience and knowledge in this system and they provided the possibility of achieving practical concepts based on facts existing community. Therefore, the study was aimed to “explain the strategies of the Iranian health system in the face of future aging.”

**Materials and Methods**

**Study design and setting**

This was a qualitative study that was conducted by content analysis method.

**Study participants and sampling**

Participants were purposefully selected by the greatest diversity among Iranian experts in health and aging area who are working in organizations and centers related to aging such as medical sciences universities, health deputy and health centers, hospitals, research institutes, related research centers, and psychological counseling centers in the fields of geriatrics, psychology, social medicine, nursing, medicine, health and social welfare, health policy, health services management and health economics. Due to the fact that in qualitative studies the goal is not generalizability, sample adequacy was achieved by data saturation in 27 interviews and the study was finalized with 29 interviews.

**Data collection tool and technique**

The questions were formulated according to the objectives of the study in the form of semi-structured interviews and two preliminary interviews were conducted to make the necessary corrections needed. Participants were invited to study via the researcher’s telephone. To facilitate the participation of the interviewees, interview sessions were held at the place they suggested. Due to the prevalence of Covid-19 disease, participants who were outside the Isfahan province were able to choose online or telephone interviews. At the beginning of the session, the purpose of the study was repeated. Permission to record an oral interview was then obtained. Interview times ranged from 21 min to 65 min. Each interview was implemented after completing.

The data obtained from the interviews were analyzed using qualitative content analysis. The interviews were carefully heard and implemented and they were read carefully. Semantic units and codes were extracted in accordance with the purpose of the study from each sentence. Then, the similar codes were placed in independent subcategories in terms of content, and according to the same method, the main categories were abstracted from the aggregation of subcategories with a similar concept. The main categories with a similar theme appeared in the form of a concept.

Lincoln and Goba criteria were used to assess the validity of the study. In order to increase the credibility, in-depth interviews were conducted on the most diverse samples, as well as peer review by a peer researcher. To improve the dependability in this study, the path of execution, analysis, coding, and classification of data was clearly and in detail explained. To ensure confirmability, study documents and details were recorded and maintained at all stages of the study. Regarding transferability, by introducing the steps of the study and the characteristics of the study population, it was possible for others to follow the research path.

**Ethical consideration**

Participants were assured that their information would remain confidential. Permission to record the meeting and the possibility of the need for more interview sessions and cooperation in verifying the extracted codes
of their interview was informed. Interviewees were told that they had the right to withdraw from the interview process at any time if they did not want to continue. Furthermore, due to the concurrence of this study with the COVID-19 pandemic, interviews with participants outside the province were conducted as virtually, and provincial interviews were conducted in accordance with health guidelines and physical distance.

**Results**

Nineteen males and 10 females with an average work experience of 21.94 years participated in the study. The experts’ major of participating in this interview was Aging and Health (3 person), Geriatric Nursing (1 person), Psychology (4 person), Health and Social Welfare (2 person), Health Policy (1 person), Health Services Management (2 person), Health Economics (2 person), Health Education and Health Promotion (1 person), Medical education (1 person), medicine (6 person), medical specialty (4 person), family management (1 person), and midwifery (1 person). In terms of educational levels, the situation was as follows: Medical specialty (4 persons), general practitioner (6 persons), PhD.(17 persons), and master’s degree (2 persons). These participants were from medical sciences universities, welfare organization, health deputy, food and drug deputy, research institutes and research centers, counseling centers in Isfahan, Tehran, Tabriz and Babol.

470 codes were extracted from the interviews. In the process of aggregation of 30 sub-categories, 8 main classes and 2 concepts were formed, which are presented in Table 1.

According to the data in Table 1, in identifying the strategies of the Iranian health system in the face of future aging in the field of executive policies, the main category of “design, planning and implementation” emerged from the aggregation of 7 sub-categories. Participant 7 talks about the “policy requirements” strategy are as follows:

“If the health system is in charge, it should work in such a way that society setting is towards people become old, healthy. We need to work on 75% of SDH.”

In the area of executive policy, each main category includes “based on evaluation and standardization,” “strengthening demand-driven” and “modeling national and international experiences” emerged from the integration of two sub-categories. Participants 12 commented on the “Successful International Experiences” strategy:

“The Scandinavian countries are leaders in the field of aging and are called the paradise of aging. They have

| Concepts                  | Main categories                              | Sub categories                                      |
|---------------------------|----------------------------------------------|----------------------------------------------------|
| Executive policies        | Design, planning and implementation          | Policy requirements                                 |
|                           |                                              | Changing the health system’s view and approach to aging |
|                           |                                              | Required plans and actions                          |
|                           |                                              | National organizational documents and plans         |
|                           |                                              | Adaptation of architecture and urban space         |
|                           |                                              | Strategies for attracting and allocating resources |
|                           |                                              | Considerations for providing services to the elderly|
|                           | Evaluation and standardization               | Documentation and accreditation                     |
|                           |                                              | Monitoring and evaluation                           |
|                           | Strengthen central demand                    | Government demands from related organizations      |
|                           |                                              | Demanding the elderly from the government          |
|                           | Modeling national and international experiences | Managing unsuccessful national experiences         |
|                           |                                              | The pattern of successful international experiences|
| Preventive policies       | Focus on prevention                          | Preventive medical care                             |
|                           |                                              | Focus on youth and middle age                      |
|                           | Focus on values and competencies             | Value creation in the health system                |
|                           |                                              | Value creation in society                           |
| Educational empowerment   |                                              | Value creation in the elderly                       |
|                           |                                              | Academic education                                  |
|                           |                                              | Health providers education                          |
|                           |                                              | Community education                                 |
|                           |                                              | Elderly education                                  |
| Knowledge-based empowerment|                                              | Applying technology                                 |
|                           |                                              | Research-oriented                                   |
|                           |                                              | Thoughtful behavior of researchers and scientists   |
| Empowering age-related groups |                                              | The role of the family                              |
|                           |                                              | Support for the elderly                             |
|                           |                                              | Elderly emotional psychological support             |
|                           |                                              | Strengthen self-confidence in society               |
|                           |                                              | Strengthen empathetic behaviors in society          |
| Economic empowerment      |                                              | occupational empowerment of the elderly             |
|                           |                                              | Financial welfare empowerment                       |
|                           |                                              | Insurance                                           |
| Social support            |                                              | Support plans                                      |
|                           |                                              | Recreational welfare programs                      |
|                           |                                              | Mobility and entertainment                         |
|                           |                                              | Involvement of the elderly in affairs               |
|                           |                                              | Social protection and security                      |
|                           |                                              | Economic support and security                       |

Table 1: Strategies of the Iranian health system in dealing with future aging from the experts’ perspective
works in the economy and raises and overtakes the salaries of the elderly, next year, another country will work on aging entertainment and the relevant index will rise, and this is one of their honors.”

In the area of preventive policies, the main category, “focus on prevention,” emerged from the aggregation of two subcategories and the other main category, “focus on values and competencies,” emerged from the aggregation of three subcategories.

Number 17 participant’s opinion on the “value creation in society” strategy is as follows:

“Our difference with other countries is that when they talk about old age, they never talk about a sick person with a disability. For example, 70% of the special scholarships that organizations consider for entrepreneurship are given to people over 70 years old. “Because it is said that these individuals have experienced businesses before, but we have a sick look...”

The main category of “educational empowerment” emerged from the aggregation of four sub-categories and the main category of “knowledge-based empowerment” emerged from the aggregation of three sub-categories. Number 1 Participant talks about the strategy of “thinking thoughtfully of researchers and scientists” as follows:

“If we see Nobel winners... these people even express the events of their lives in simple language. They are in the context of society. They themselves ask for comments and speeches. They are close to everyone in the community and they do not enter into political support at all. Because they want to advise the body in the future, they do not want to have a political appearance.”

The main category, “empowerment of age-related groups,” emerged from the aggregation of five sub-categories. Participant Number 19 states the following about the “role of the family” strategy:

“Older people lose their spouses somewhere and are left alone. In larger families, mental health is better than in smaller ones. Grandchildren fill their emotional void with grandparents and the elderly feel valued for being with them. In these houses, there is a definition of bigger and smaller positions and boundaries are kept.”

The main category of “economic empowerment” emerged from the aggregation of three subcategories and the main category of “social support” emerged from the aggregation of six subcategories. Participant number 23 comments on the strategy of “support projects” are as follows:

“... We can create an environment for sitting together in neighborhoods. In this way, the lonely elderly and those whose spouse has died get to know each other and instead of being afraid and lonely, they can own a family and take care of each other. Of course, this plan is immature and has no trustee. “It should be left to organizations which are well planned and followed.”

Discussion

Based on the findings of this study in Table 1, “design, planning and implementation” was identified as one of the strategies of the Iranian health system in dealing with future aging. These results are coordinated with the findings of other studies in terms of policy requirements, the health system’s change view to aging, action on implementing plans, adaptation and the architecture of the urban space, the absorption and allocation of resources, and the provision of age-appropriate and early care to the elderly.

Considering the political requirements by formulating a strategic and long-term plan can prepare the health system to change its view and approach towards aging. This will provide space for the implementation of practical plans and necessary actions in the aging area. In this regard, announcing the documents, formulation the attached projects, forming councils and working groups, and pilot performances can have a scientific basis and are appropriate to the needs of the society. Depending on the setup and deployment, attracting and allocating resources to priorities and allocating the right budget can be done in different ways and allocated appropriately; besides that, providing optimal services and adapting to the needs of the elderly community requires the use of purposeful strategies.

The findings of this study showed that “evaluation and standardization” and “strengthening demand-driven” are among the strategies of the Iranian health system in dealing with future aging. These results are consistent with the findings of a study in terms of monitoring and validation.

Authorities monitoring and the use of new assessment and accreditation metrics related to aging characteristics by the ministry can be effective in improving the treatment of future aging; In this regard, the government’s demands from the organizations involved in determined goals, conducted plans and future plans, as well as the elderly demands and society from the government play a role in achieving strategic goals.

“Modeling national and international experiences” was identified as one of the strategies of the Iranian health system in dealing with future aging.
All countries have had positive and negative experiences and effective or inefficient achievements in the face of phenomena, changes, or crises. Governments are expected to consciously and without prejudice identify and manage ineffective policies and programs. For example, decisions that have been made at different times about population and births, have been implemented with the knowledge that the decisions are proportionate. However, these actions must always be criticized without prejudice and the experiences gained in future decisions.

In the model of international experiences, it is the leading countries that have implemented projects, and because their achievements have been measured, it can be focused at least as a pilot or proposal by other countries. Some international projects in the aging area include paying salary to children in order to support their parents as a job in Japan, working two years after retirement instead of the first two years of employment, designing joint buildings in Japan which includes recreational services for the elderly and Library and school for students, providing better services in the Nordic countries for providing specialized services in the elderly house, highlighting some facilities for the elderly such as some seats on the bus in the Nordic countries, strengthening the culture of belonging to the community in Japan, awareness the elderly and society in relation to each other’s rights in Japan, the adequacy of the 7-layer health system of Sweden, Finland, Norway, and Denmark in response to any level of aging needs, index of age and acceptance of disease burden by insurance in the Scandinavian countries, culture building for the elderly and educational programs in the media in the Scandinavian countries, pursuit of non-reduction of the death rate of the elderly at home by the Japanese government, proximity to kindergartens and nursing homes in Japan, program planning for child care by the elderly in Germany. Each of these projects can be reviewed, at least in the country.

Another strategy for the Iranian health system in facing with future aging was “focus on prevention.” These results are consistent with the findings of a study on preventive care.\(^{[13,14,21]}\)

Matching services to the needs of the elderly, providing services to delay disabilities and limitations, developing a package of elderly services based on problems and needs, planning to improve the physical, social and psychological health of the elderly are examples of preventive care in old age. If prevention programs focus on youth and middle age, they will lead to the success of future prevention programs and healthy aging. This program includes: Prioritizing the problems of middle-aged people to enter better old age and planning from middle age, controlling risk factors from adolescence, youth and middle age, and strengthening a healthy lifestyle in the younger generation.

Based on the findings of this study, “focus on values and competencies” was identified as one of the strategies of the Iranian health system in dealing with future aging. These results are consistent with the findings of other studies in terms of value creation in the health system,\(^{[9,10]}\) value creation in society.\(^{[9,10]}\)

Culture-building in entering the phenomenon of aging causes a positive and valuable belief in the whole society towards the elderly and providing services to them; In particular, value creation in the health system leads the system to be proud to bring people to old age. In this situation, the service providers show their support and commitment to work in this scope. In addition, the younger generation will accept the elderly as social parents in the society and will be friends with the elderly. This leads to the creation of value in the elderly person to experience life with dignity.

According to the findings of this study, “educational empowerment” and “knowledge-based empowerment” were identified as strategies of the Iranian health system in dealing with future aging. These results are consistent with the findings of other studies in terms of medical staff training,\(^{[8,11]}\) community and elderly education,\(^{[10]}\) technology application,\(^{[24]}\) and research oriented.\(^{[23]}\)

Education is considered in various scopes including academics, medical staff, society, and the elderly themselves. At the university, scientific and approved paths and trends are identified and introduced, which can be the basis for the performance of medical staff and promote a good model in society. In such a way that the whole community, which includes both caregivers and the elderly themselves, becomes familiar with how to deal with the aging period. Also identify the requirements, necessities, and considerations of the aging period such as a healthy lifestyle, self-care. Applying technology and virtual training in these cases can be helpful. Among the groups that are attributed to society are researchers and thinkers whose important mission is to simply express guidelines and scientific evidence. These guides should be understood and used by everyone. In this way, they become closer to the people, and the words and advice are more accepted by the people.

Finding showed that “empowerment of age-related groups” and “economic empowerment” were identified as strategies of the Iranian health system in dealing with future aging. These results are consistent with the findings of other studies in terms of elderly support,\(^{[19]}\) occupational and financial and Welfare empowerment of the elderly,\(^{[10]}\) and insurance.\(^{[18,19]}\)

Family and caregivers are among the main groups related to the elderly who have the responsibility of support and
care. The family and caregivers must be empowered in such a way that while caring unconditionally, lovingly, and responsibly for the elderly, they can maintain the peace and quality of family life with proper planning. The Chain helping others, asking each other how they are, telling good deeds, making others happy, rejoicing in the happiness of others, and many positive behaviors are strengthened by promoting self-confidence and empathetic behaviors in society; in this way, elders gain more value and sense of belonging. Other factors influencing the formation of a sense of usefulness are creating a skill-based work environment, involving the elderly in financial empowerment programs and schemes taking into account the extent of ability with the participation of insurance companies, and improving insurance laws. These cases play a significant role in the empowerment and safety of the elderly.

We found that, “psychosocial support” is one of the strategies of the Iranian health system in dealing with future aging. These results are consistent with the findings of other studies in terms of support plans,[19] welfare programs, recreation and entertainment,[20] social support,[13] and economic support.[10]

Notice to the elderly welfare issues and planning for leisure time with the participation of the elderly and caregivers can be considered as support plans and purposeful planning. In this regard, the security of programs and adaptation of neighborhoods and environments for the presence of the elderly requires systematic and calculated plan. Involvement of the elderly in recreational welfare programs and entertainment and dynamic advice should be in such a way that no cost is imposed on the elderly and the elderly experience the conditions without worries and self-sufficiency.

The most important limitation of the study was how to conduct interviews during the Covid-19 pandemic. Some participants did not accept the terms of the face-to-face interview despite following health protocols. These interviews were conducted online and on social media.

**Conclusion**

The solutions proposed in the study indicate a wide and diverse range of policies, programs, and actions required by the health system in the aging scope. These strategies focus on both the actions needed in the current situation and future prevention programs. Organizations, agencies, policymakers, and planners related to the aging area, can be a step forward in identifying the needs of the aging health for future planning by using the results of this study and similar studies.

**Acknowledgment**

We would like to thank all experts and faculty members who participated in the interviews and helped us in this study.

**Financial support and sponsorship**

This study is the result of postdoctoral research No. 98028273, and was conducted with the support of Iran National Science Foundation: INSF. Tehran, Iran.

**Conflicts of interest**

There are no conflicts of interest.

**References**

1. WHO (World Health Organization). Global Health and Ageing. Geneva, Switzerland: World Health Organization; 2011.
2. Khodamoradi A, Hassanipour S, Daryabeigi Khothesara R, Ahmadi B. The trend of population aging and planning of health services for the elderly: A review study. J Torbat Heydariyeh Univ Med Sci 2018;6:81-95.
3. WHO (World Health Organization). Global Consultation on Integrated Care for Older People (ICOPE) – The Path to Universal Health Coverage: Report of Consultation Meeting. Berlin, Germany Switzerland: World Health Organization, Course DoAaL; 2018.
4. Singh B, Kiran U. Recreational activities for senior citizens. IOSR J Human Soc Sci 2014;19:24-30.
5. SCo I (Statistical Center of Iran); 2017. Available from: SCo I (Statistical Center of Iran); 2017. Available from: https://www.amar.org.ir/english. [Last accessed on 2022 Mar 13.]
6. Darabi R, Tarkashvand M. Socio-economic consequences of population aging. Soc Sci 2012;1:17-28.
7. Ahmadi Timurlui A. Analyzing the Health Policies of the Elderly in the Country and Providing a Model. PhD Thesis in Health Policy, Iran University of Medical Sciences; 2014.
8. De Biasi A, Wolfe M, Carmody J, Fulmer T, Auerbach J. Creating an age-friendly public health system. Innov Aging 2020;4(1):igz044.
9. Thinley S. Health and care of an ageing population: Alignment of health and social systems to address the need. J Health Manage 2021;23(1):109-18.
10. Gholipour Z, Farahani MM, Riahi L, Hajinabi K. Priorities of active aging policy in Iran. Depiction Health 2020;11:52-61.
11. Mudge AM, Young A, McRae P, Graham F, Whiting E, Hubbard RE. Qualitative analysis of challenges and enablers to providing age friendly hospital care in an Australian health system. BMC Geriatr 2021;21:147.
12. Barry S, Fhallúin MN, Thomas S, Harnett PJ, Burke S. Implementing integrated care in practice – Learning from MDTs driving the integrated care programme for older persons in Ireland. Int J Integr Care 2021;21:15.
13. Chen Z, Yu J, Song Y, Chui D. Aging Beijing: Challenges and strategies of health care for the elderly. Ageing Res Rev 2010;9 Suppl 1:S2-5.
14. Azad Armaki T, Koosheshi M, Parvaei S. Critical approach to commodification of health and exclusion of the poor elderly. Q Soc Stud Res Iran 2021;10:175-212.
15. Nascimento RC, Álvares J, Guerra Junior AA, Gomes IC, Silveira MR, Costa EA, et al. Polypharmacy: A reality in the primary health care of the Brazilian Unified Health System. Rev Saude Publ 2017;51 Suppl 2:19s.
16. Reynolds K, Medved M, Mackenzie CS, Funk LM, Koven L. Older adults’ narratives of seeking mental health treatment: Making
sense of mental health challenges and “muddling through” to care. Qual Health Res 2020;30:1517-28.
17. Dwolatzky T, Brodsky J, Azaiza F, Clarfield AM, Jacobs JM, Litwin H. Coming of age: Health-care challenges of an ageing population in Israel. Lancet 2017;389:2542-50.
18. Feng Z, Ginskaya E, Chen H, Gong S, Qiu Y, Xu J, et al. Long-term care system for older adults in China: Policy landscape, challenges, and future prospects. Lancet 2020;396:1362-72.
19. Han Y, He Y, Lyu J, Yu C, Bian M, Lee L. Aging in China: Perspectives on Public Health. Global Health Journal. 2020;1;4(1):11-7.
20. Imani A, Dastgiri S, Azizi Zinal Hajlu A. Population aging and disease burden (review study). J Health Image 2015;6:54-61.
21. Sivakumar PT, Harbishettar V, Antony S, Thirumoorthy A. Creating age friendly health systems in India: Challenges and opportunities. J Geriatr Care Res 2018;5:1-2.
22. Russell M, Ardalan A. The future of aging and the cost of health services: A warning for the health system. Iran J Aging 2007;2:300-5.
23. Voumard R, Rubli Truchard E, Benaroyo L, Borasio GD, Büla C, Jox RJ. Geriatric palliative care: A view of its concept, challenges and strategies. BMC Geriatr 2018;18:220.
24. Buyl R, Beogo I, Fobelets M, Deletroz C, Van Landuyt P, Dequanter S, et al. e-Health interventions for healthy aging: A systematic review. Syst Rev 2020;9:128.