

# A review study of the providing elderly care services in different countries

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## ABSTRACT

**Background:** Population aging leads to change of population structure and increase care needs. Lack of proper planning in this field will lead to occur increasing problems. In this paper, the review of the elderly care plans at various levels in some European and Asian countries, comparing these countries with Iran with the goal of using their experiences to enhance elderly plans have been done. **Methods:** This research was a review study of library documents and resources and systematic search. Data were collected using the resources, databases, scientific databases and websites of the Ministry of Health and Welfare of the studied countries. **Results:** Based on this research in the studied countries, the care services of the elderly is based on the important principle of coordination between different organs of the country, followed by the creation of LTC insurance and provision of health and social services for the elderly and mainly the type of home care. In Iran country, providing appropriate services and cares for the elderly with existing plans and policies is not possible and the need to provide appropriate service packages based on the different systems of successful countries and applying the experiences of these countries is essential. **Conclusion:** Given the current status of the Iranian elderly population in terms of policies and plans and the types and methods of providing services, quality, access and financial resources allocated to this age group, compared to the studied countries, there is a well and integrated plan is essential.

**Keywords:** Aging, elderly care, elderly services, support services

## Introduction

In the 21<sup>st</sup> century, with the development of the economy and the rise of the medical knowledge, the population aging has become a global trend.<sup>[1]</sup> Worldwide, the total population of the elderly is growing at a faster rate than other age groups.<sup>[2]</sup> Studies have shown that, in spite of efforts, the services available in

the international community are inadequate.<sup>[3]</sup> Also studies have shown that without the support, intervention, and planning and policies-making of governments, the quality of life of the elderly is severely impaired. Nowadays, developed countries by investing in this age group have been able to reduce the problems on these people, but despite the fact that a large percentage of their GDP, sometimes even above 4% (the Netherlands 4.2% of GDP) spends the care of this age group, still considered inadequate. In Iran, the ratio of the elderly is lower than in the developed countries, but proper planning and policy-making is needed to improve the current situation and

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Received: 27-06-2021

Revised: 16-09-2021

Accepted: 10-11-2021

Published: 16-02-2022

### Access this article online

#### Quick Response Code:



Website:  
www.jfmpc.com

DOI:  
10.4103/jfmpc.jfmpc\_1277\_21

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**How to cite this article:** Asadzadeh M, Maher A, Jafari M, Mohammadzadeh KA, Hosseini SM. A review study of the providing elderly care services in different countries. J Family Med Prim Care 2022;11:458-65.

prevent future problems as a result of the rapid increase in the elderly. Therefore, in order to model the leading and successful countries in the elderly care plans from European and Asian countries, this study was carried out by purposeful selection considering specific issues. In order to be able to design and deliver a good service package for the elderly by choosing the best policy items between different policies and tastes while matching Iranian culture and politics. Therefore, it was selected and studied from European countries such as Germany, Italy, Austria, Sweden, Netherlands, Norway and Asian countries such as Turkey and Japan.

## Methods

This study, designed to enhance existing policies and plans for the care of the elderly in the country by reviewing library documents and resources and systematic search, were selected and reviewed the policies and plans of the eight developed countries of the world in terms of elderly experience. The study lasted approximately 7 months. In order to select papers or texts, practice criterion was the plans and policies of these countries in the care of the elderly.

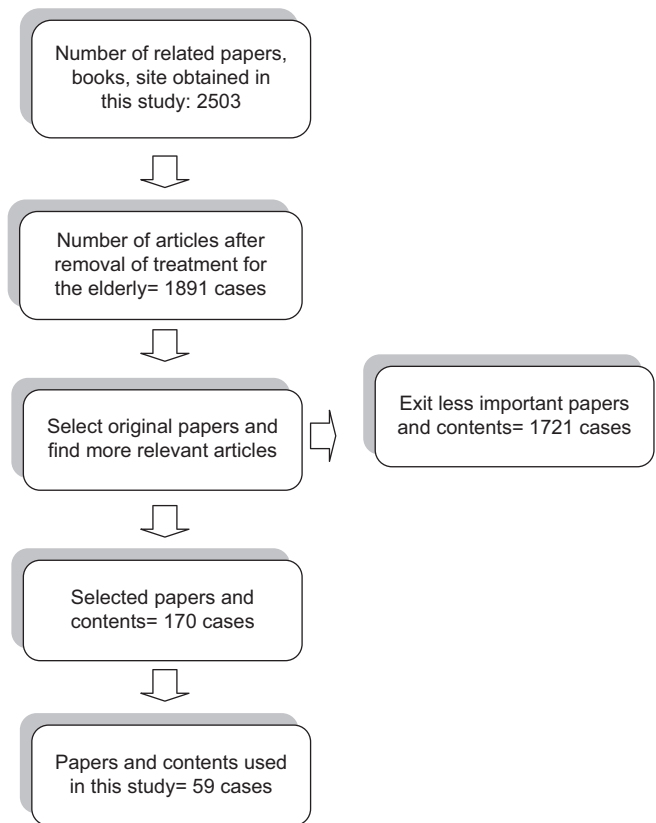
The study attempts to use relevant and new papers (published in the last 5 years or at most 10 years) or directly from the updated content of the Ministry's website of elderly care. Searching for papers in important databases with different search engines such as PubMed, Google Scholar, Science Direct, as well as papers published on the OECD site or books and papers published on the website of the Ministry of Health or other Ministries of the studied countries, the World Health Organization, with various keywords such as elderly care, elderly care plan, elderly care policies, elderly care methods, home care, comprehensive care, LTC, elderly day care, elderly social and health care, elderly home, elderly nursing home were done. A total of 2503 papers were found as a result of searching the sites and databases which duplicate papers and papers detailing treatment, chronic illness, psychosis and motor problems or similar and unrelated interventions were eliminated. Finally, 170 authoritative papers were selected and much of the literature on these papers was studied, and finally 59 site content and papers were used [Figure 1].

## Results

### Germany

The SLCI<sup>1</sup> in Germany has distinctive features that make it different from other types of social insurance. First, people in need of care are divided into three levels, according to which the levels of cash benefits (pensions) or benefits of their kind are offered. The first level of care is assigned to patients in need of primary care, the second level of care to patients who are in desperate need of care, and the third level is assigned to those who need more serious care.<sup>[4]</sup>

<sup>1</sup>Statutory Long-term Care Insurance system



**Figure 1:** Steps Study of Resources and Documentation

In Germany, LTC is provided at home and among the studied countries is Austria, with 54% of home care being the highest. 45% of LTC in Germany is inpatient. By increasing the elderly, the rate of growth in the cost of care in the world is increasing, and the rate of growth in the cost of LTC in the studied countries is compared in [Table 1]. The growth rate of LTC in Germany from 2005 to 2017 was reached to 3.3%, which has the moderate growth in comparison with studied countries and it has grown slightly compared to the OECD countries (4.6%).<sup>[5]</sup>

### Italy

In Italy, the population aged 65 and over in 2015 accounts was about 21.8% of the total population and is expected to reach 34.6% by growth of 12.6% in 2050, which among the studied countries, Italy has the highest growth in the elderly. Of course, Turkey will have a population over 65 years old by growth of 12.7% to Italy in 2050 compared to Italy in 2015.<sup>[6,7]</sup> Health Promotion for Older People (HIPOP) is an important issue in Italy, strategies, plans and projects are nationally coordinated and planned mainly by the Ministry of Health in the National Health Service, but important decisions, budgeting and resources are also provided by the government, the Ministry of Labor and Social Policy and the Ministry of Internal Affairs.<sup>[8]</sup>

The Ministry of Labor and Social Policy currently manages the social policy (with regional governments) under the National Fund Act, while the Ministry of Internal Affairs, through an

action plan for social cohesion, administers and promotes the national plan for health care services for dependent and independent elderly. The Ministry of Health has a supervisory role that includes establishing the basic principles and objectives of the health system through a national health plan or a state/ regional health care agreement about healthcare and identifying the main benefits of health care packages nationwide. The organizations involved in promoting the health of the elderly are outlined below.<sup>[8]</sup>

### Japan

Japan's public health insurance system was launched in 1961 and was determined by mandatory dependency, free access, low cost and coverage with premium and public subsidy.

Initially, the correlation rate was similar for all, while the ratio of elderly in need of medical care was only 5.7%. Thereafter, medical costs for the elderly were free of charge due to social pressure based on increasing population with rapid economic growth from 1973 onwards. However, the recession led to the imposition of a 10-year limit on free medical care for the elderly. All people aged 70-75 are now required to pay 20% of the amount, and those over 75 must pay 10%. Although Japan

has the highest life expectancy in the world, national medical costs are steadily increasing as birth rates decline and the elderly population increases. As a result, the Japanese government is working to find the funding needed to guarantee an effective health care policy for the elderly.<sup>[9]</sup>

Since that year, all Japanese citizens have been covered by social services insurance to access affordable medical care. In addition, a LTC insurance system was introduced in 2000 as the number of elderly people in need of LTC increased. Through this system, everyone could benefit from LTC at minimal cost. Therefore, the economic framework needed to integrate long-term medical care was created.<sup>[10]</sup> Perceived health status of people over 65 years and over is the lowest for Turkey at 19.7%, for Norway at 66.7% at the highest level and for Japan at 25.4%. [Table 2] indicates this fact.

By comparing the health share of GDP and the perceived health status of Japan and other studied countries in Norway, Sweden and the Netherlands is more successful.

### Netherlands

Citizens 65 years and over make up 17.8% of the Netherlands' 16.8 million population. It is projected to increase to 23% by

**Table 1: Comparison of the studied countries in terms of some important indices of elderly care at different levels of the health system**

Percentage of health and social carers	Number of health and social carers	Percentage of nurses at home and in institutions	Number of nurses in homes and institutions	Number of nursing and caring staff per 100 elderly over 65 years (2016)	Total number of nursing and caring staff (2016)	Percentage of staff by location of providing service for every 100 elderly over 65 years (2015)		Copuntry Name
						Home	Institution	
4.9	1735186	1	309074	5.9	2028341	4.5	1.4	Japan
2.1		4.1		2				Italy
2.4	428484	2.8	464607	5.2	864082	1.9	3.2	Germany
		4.1		4.1	66751	1.5	2.6	Austria
5.5	178000	1.9	61000	7.6	247000	3.2	4.8	Netherlands
11.6	229862	0.7	15662	12.3	240909	12.4		Sweden
8.7	75753	4	35251	12.7	108653	12.8		Norway
								Tuekey
								Iran

**Table 2: Comparison of the studied countries in terms of some important indices of elderly care at different levels of the health system**

Annual growth rate of insurance and government care costs from 2005-2015%	Growth trend of total hospital and institutions beds %	Elderly hospitalization		Government and insurance costs for LTC by type of service%			Copuntry Name
		Hospital	Institution	Others	Home care	Hospitalization	
4.5	-6.99	10	24.3	16	15	68	Japan
Indeterm inate	3.30	0.7	18.5	31	18	51	Italy
3.3	5.1	0	54.4	1	54	45	Germany
2.8	1.01	3.5	42.1	1	57	42	Austria
2.9	Indeterm inate	2.7	84.7	3	11	86	Netherlands
2	-23.52	0.9	65.5	6	31	64	Sweden
4.2	-11.7	0	48.8	0	48	52	Norway
Indeterm inate	Indeterminate	0	8	Indeterminate	Indeterminate	Indeterminate	Tuekey
							Iran

2025.<sup>[11]</sup> In the Netherlands, the age of use of the elderly care service is set at 65 years and over, with the increase in life span. However, if a person has a disability or chronic disability, he/she can benefit from these services from 55 years. In the Netherlands, deductions from workers' wages are made by the government for pension and health expenses. In addition, each person must pay a premium to a private company; otherwise, the government will impose individual sanctions. While the basic health service framework is set by the government, services are actually provided by private insurance companies and municipalities. Only 4.4% of the social services funding is based on tax, while 74.8% is based on insurance. In the Netherlands, municipalities play an important role in the services provided to the elderly. The main focus of service provision is to serve the home for elderly care. However, service providers differ in their strengths and weaknesses.<sup>[11]</sup>

In 2010, the Netherlands had the highest percentage of LTC recipients and the highest density of carers per 1000 people (nearly 19 carers or 1.9%). This amount (in 2015) was 8 per 100 elderly over 65 years old, or 80 per 1000 elderly for LTC in institutions and homes [Table 3]. Netherlands government has had to change its care system as the cost of LTC increases as the population of elderly in need of LTC expands.<sup>[12]</sup>

### Norway

As in other European countries in Norway, the ratio of the elderly has increased with the sharp decline in fertility and increased life expectancy, which is a potential burden on society and a major public health challenge. Compared to Norway and other European studied countries, there are fewer elderly people compared to Norway. However, the population ages at different rates. For example, the ratio of Norwegians aged 65 and over in 2015 was 16.1% [see Table 2].<sup>[13]</sup> The number of elderly in Norway is projected to reach 23.6% by the growth of 7.5% in 2050. From 2006 to 2015 it has increased by 8.4% and it is expected that in 2033 for the first time, the number of elderly people in Norway will be higher than youth and children.<sup>[13]</sup>

Norway's health and social care systems have been able to significantly provide their elderly with preventive field, primary

care, chronic disease management, elderly care and formal LTC, and these services are continuously increasing. Norway costs more to care for its elderly than any other country than in developed or developing countries.<sup>[14]</sup>

Providing health care in Norway is based on a decentralized model. Municipalities (Primary Health Services) are responsible for home care services, nursing homes for the elderly or disabled, local hospitals, family doctors, health services for mothers, children and adolescents, midwives, physiotherapists, occupational therapists and emergency services. The Government (Secondary Health Care) manages the owners of the area's public hospitals, university hospitals and ambulance services through regional health authorities [Figure 2].<sup>[14]</sup>

### Sweden

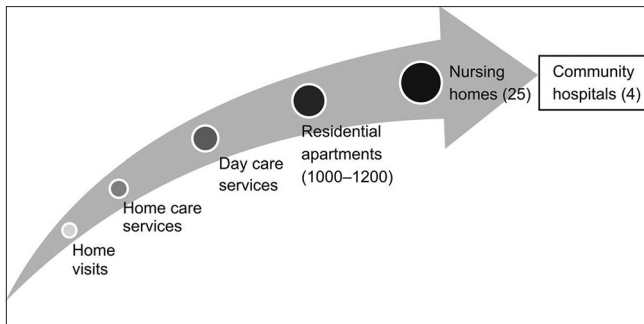
The population aged 65 and over in Sweden is currently 19.5% and is expected to reach 20 to 25% of the total population in 2030, and this percentage will double for the population 80 and over by 2040, and will make up 10% of the population. Currently, 11% of GDP is spent on health costs in Sweden.<sup>[15]</sup> There are 4.1 doctors in Sweden per 1000 people. 19% of the population 65 and over receive social services, and 60% provide home care services, and 23% include housekeeping and so on. The service is public, but the private sector also participates. In Sweden, hospital care, primary care, psychiatry and the municipality have formed a joint organization.

According to studies in 2025, Sweden will take better advantage of the opportunities offered by digitalization and e-Health in the world to make it easier for people to develop and strengthen good and equal health and well-being and to increase their independence and participation in social life.<sup>[16]</sup>

Providing elderly care and health care in Sweden is the responsibility of the public sector. The municipality is responsible for elderly care and health care, and city councils are responsible for hospital and primary care. Most of the costs are covered by local or national taxes. Costs received by service users cover about 4% of elderly care and 3% of medical services (Association of

**Table 3: Comparison of the studied countries in terms of some important indices of elderly care at different levels of the health system**

Index titles	Share of LTC recipients by age, 2015 (or nearest year)%			Home LTC		Informally home care			Dementia per 1000 elderly		Elderly influenza vaccination	
	0-64	65-79	80+	2005	2015	Daily	Weekly	Total	2017	2037	2005	2015
Japan	3.4	30.2	66.3						23.3	38.4	49	50
Italy	19.5	26.6	53.9	64	69	7.4	8.1	15.5	20.2	28.8	36	36.5
Germany	26.8	22.8	50.4	61	74	3.7	6.7	10.4	18.1	25.1	61	49.1
Austria	34.1	20.9	45.0	68	71				15.1	21.9	43.9	27
Netherlands	31.2	23.9	44.8	65	71	5.2	11.6	16.8	22.5	33.7	77	66.8
Sweden						6.8	4.2	11	22.5	33.7	66.64	48.65
Norway						7.6	8	15.6	8	15.1	36.1	20.3
Tuekey											9.9	9
Iran												



**Figure 2:** Models of social and health care for elderly in Norway. *Indian journal of gerontology*

specialists and local areas of Sweden, 2006). A care director is appointed by the municipal social welfare committee to assess the needs of the elderly.<sup>[19]</sup>

Elderly care management and planning is divided between three authorities including central government, city councils and local authorities. Each unit has different roles, but the most important one is for the Swedish welfare system. They are directly elected by political representatives and have the right to finance their taxes and expenses within the framework of social service laws.<sup>[17]</sup>

## Turkey

Turkey's population is younger than European countries. However, the aging population is on the rise. In Turkey, due to the aging population, health costs and long-term service needs have increased rapidly.<sup>[18]</sup> Elderly care services are provided by the Ministry of Family and Social Policies in accordance with the following regulations:

Regulations for Private Nursing Homes and Nursing Home Care Centers of Elderly: The purpose of this regulation is to determine the process and principles of permits, standards of service, status of individuals, operating conditions, costs, supervision and closure of nursing homes and nursing home care centers for elderly by specific legal entities, which in these regulations, the elderly is defined as an individual with at least 55 years of age and a social need for physical or mental support. While the age limit for admission to the Ministry of Health's official Nursing and Rehabilitation Care Centers is 60 years, it has been set to 55 years in private nursing care. Alongside these regulations, another is such as the Rules of Establishment Principle and the Establishment of Nursing Homes, which open within government agencies, or the Compensation for Disabled and Elderly in Social Services Organization monthly allowances paid at no charge to ministry social service agencies, according to the eligibility criteria for care services provided by organizations, they receive free ministry social services.<sup>[19,20]</sup>

## Austria

In general, Austria's LTC system is a combination of cash benefits and providing self-service. The main section of the plan is the

pension payment of federal and state LTC. So, compared to other European countries, cash benefits are the most important. Of course, they have a common point with Germany. Cash benefits can be used to purchase formal care services from public or private providers or to repay informal care. In addition, the provinces are required to provide facilities in institutions, day and night care and home care services. But if the recipient's income (including care allowance) and assets are insufficient to cover the costs of these services, the social welfare plan will cover this difference.<sup>[21,22]</sup>

The need to care and protect older people is no longer an exception and has become a central issue in Austrian social policy. Not only those in need of care, but also their families and caring relatives need support because they carry a heavy burden and a very valuable share in society. Caring for someone at home is undoubtedly a big challenge for everyone involved, depending on their health, life and family conditions, care conditions vary. In addition, the financial and the housing situations also play an important role.<sup>[23]</sup>

## Iran

According to the results of the general population and housing censuses in 2016, the ratio of the population is 65 years and over is 6.1% of the population of Iran. The Ministry of Health and Medical Education is responsible for the elderly's policies across the country, providing policy-making for the health and well-being of the elderly, approving plans for the elderly in executive agencies, and coordinating executive agencies to organize elderly affairs and implementing defined plans are some of its activities.<sup>[24]</sup>

Another of the elderly carers is the Iranian Welfare Organization, including services provided by the Iranian Welfare Organization currently available to the elderly nationally include providing educational and rehabilitation services to the disabled, the elderly, chronic psychosis patients and people with autism spectrum disorder.<sup>[25]</sup> This organization also provides measures to adapt the urban and residential environment for the disabled and the elderly. Complementary insurance for the elderly and the needy for covered by another organization is by the organization is tasks of this organization. Considering the continuous and non-continuous assistance to the families of the needy people, according to the country's Welfare Organization estimates, more than 420000 elderly and disabled people in need have been covered by the organization's continuous services.<sup>[25]</sup>

According to the country's welfare organization data, there are currently 272 institutions covering the elderly nationwide, nearly 21% of which are in Tehran and the rest in other provinces.

Another service provider for the elderly and disabled is the Imam Khomeini Relief Committee. From Imam Khomeini Relief Committee services, the provision of insurance and health services is for the needy people, which is one of the main plan

of this committee due to the importance of the issue and the urgent need of the deprived people in society.<sup>[25]</sup>

### Discussion

The purpose of this research was to identify the main policies, methods and plans for elderly care in the studied countries in order to apply their experiences to improve the health status of the elderly in Iran. The results obtained in this study showed that, unlike numerous plans and policies in most of the studied countries, in Iran, the Ministry of Health or other authorities do not have a coherent macroeconomic plan for the elderly or they do not have the specific cohesion and integrity. A study by Maleki *et al.* on the situation of the elderly in Iran showed that national policy-making of elderly care in Iran is essential and the main carers of the elderly, the Ministry of Health and Welfare, are at conflict together and do not interact, and each of them introduces themselves as the main carer in this field. In most of the studied countries, the carers are coordinated and united, and one of the principal carers in these countries is the mayor. In terms of the integration of social services and medical services, municipalities in different regions are very effective in providing services. In the Netherlands the government decentralizes care centers and

holds municipalities responsible. This decentralization is expected to lead to a better value for benefits, as municipalities operate locally and are assumed to have more insight than necessary. When the government decentralized some of the care facilities, decentralization was associated with budget cuts.<sup>[26]</sup>

Most people, whether elderly or non-elderly, tend to receive all kinds of services at home and in the family. In response to people's desire for home LTC services, many OECD countries have implemented plans and benefits to support home care, especially for older people. In most countries, the available trend information, the ratio of LTC recipients aged 65 and over has increased at home over the last ten years, and this increase is significant for most studied countries, including Sweden.<sup>[27,28]</sup> The home LTC will reduce hospitalization for the elderly and reduce family and government surplus costs. In Iran, this care is provided only informally and in the traditional way by the elders' first-degree families, and the families receive no ration or support in this regard.

In European countries, the mechanism for financing the provision of services to the elderly through public tax, indirect tax, specified taxes, social security contributions, private insurance participation, pocket-sick pay and other funds such as NGO

**Table 4: Comparison of studied countries financially for implementation of elderly care plans**

Iran	Turkey	Norway	Sweden	Netherlands	Austria	Germany	Italy	Japan
-Financing Source: Public budget -The first need addressed by the elderly was the financial need and then the need for health care services. -Elderly people living in areas covered by Tehran University of Medical Sciences with multiple diseases consider financial problems as the main problem in 38% of cases and physical problems in 18% of cases. -According to studies, 15% of referrals to specialist doctors, 34% of outpatient care in hospitals account for 89% of institution beds, which 60% of the cost of medical care is spent by this age group.	Financing Source in Turkey is through tax on salaries and public taxes.	-2.4% of Norway's GDP is spent on LTC, which 2% is for the public health sector -Financing Source: -National and local taxes -Pay out of pocket: 14% -Use technology assistive devices to help the elderly and disabled -There is very little cash payout in Norway and most services are the provided kind. It costs 8.7 billion euros for LTC	Most of the costs are covered by local or national taxes. - Pay out of pocket for social care: 4% and pay out of pocket for medical care: 3% - In 2008, about 90 billion krona, about 3% of Sweden's GDP, was spent on care, of which 56 billion was for nursing homes. - There are 2600 nursing homes, 10% of which are private. - 6% of the elderly are in nursing homes which is higher compared to the Netherlands, Norway and Germany.	-In addition to social insurance, people must pay a premium to a private company. - 4.4% of the budget is based on tax and 74.8% is based on premiums. -The organizational structure of Netherlands nursing homes is that 95% of services are provided by the private sector - The cost of producing and providing services and formalization in the Netherlands is very high.	-In 2008, 24% of the population over the age of 65 years received LTCs at home. -In 2009, 5.3% of the population (435,000 people) received cash allowances. -About 0.9% of the population (70,000 people) were cared at the institution, and 1.4% were cared at home. -About 3% (250,000 people) had informal care at home	- 1.1% of German GDP is spent on LTC. -Germany, like Japan, Korea, the Netherlands and Luxembourg, provides universal LTC through a dedicated social insurance system with a separate credit channel. Participation is mandatory for everyone covered by the public health insurance plan.	-Financing is a combination of national and regional partnerships - Italy's public costs on LTC is about 0.6% of GDP (2014) -The paid amount of cash service was about 472 Euro per month and a total of 12.6 billion Euro in 2010.	-The government is responsible for financing the care of the elderly through insurance and tax. -Stakeholders: Government at national level, provinces or states and municipalities - Financing: -Insurance -Taxes -Pay out of pocket: 10% Costs range from 500 to 3500 Euro per month for society-based care It costs 70 to 160% more than the Germany - It does not buy unprofessional services.

funding or the EU or various budgetary factors such as the federal, regional or local government, insurance companies, EU institutions, NGOs or private institutions have been combined in different ways [Table 4]. In most European countries and studied countries, public tax is the main source of finance.<sup>[23,29]</sup> In Iran, these resources are provided through public funds by allocating them to various organs and institutions. In this regard, there is a need to plan for tax and insurance to provide sustainable financing, as in most of the studied countries. To this end, it is necessary to integrate and coordinate health and social services.

The services must be provided nationwide, even in rural and remote areas. In Norway, there are no formal rules for the time of service and the waiting period for a person to access care services. Services are provided when needed and the need is determined by healthcare personnel in consultation with the user and their families. But generally health care personnel are committed to providing responsible services. They do not reduce the user needs.<sup>[30]</sup>

Due to the different costs by different organizations in the country, the services provided at the country level are still insufficient and desirable for this age group. One of the differences that our country has with the studied countries is the lack of dedicated funding and the lack of coherence and coordination among various agencies in providing services to the elderly. Lack of coordination among the elderly service providers, while increasing the cost, reduces the quality of services. By proper planning at the national level and the provision of appropriate care packages for elderly, the coordination and coherence among carers be enhanced and added to the quality and quantity of care services for elderly.

### Acknowledgements

This study is part of the first author's PhD dissertation in Iran, School of Management and Social Sciences, North Tehran Branch, Islamic Azad University. The authors would like to make special thanks to all those involved and who helped improve the manuscript.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

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