### A comparative study to determine the factors affecting the development of health services in the municipalities of selected countries

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### Abstract

**Introduction**: The present research tries to determine the most important factors affecting the development of health services in municipalities through examining the health structure of the selected countries. Then, a suitable model for the development of health services in the municipalities of Iran is designed by using the opinions of experts in the health sector and municipalities in order to improve the health status of the society.

**Method**: The present study is a descriptive survey research, applied, retrospective and cross-sectional in terms of purpose, and was conducted qualitatively in terms of the implementation process. The methods to collect data include text review, review and content analysis of documents and interviews with experts. The statistical population of the research is academic experts in the field of health and treatment and senior managers of the municipality. The samples for interview were selected based on experience in the headquarters or university and municipality management positions. The data collection tools in this research include flash cards to collect library and internet information, interviews with experts and questionnaires to determine the necessary variables for the development of health services by municipalities. *SPSS.v21* software was used to measure the effectiveness of variables with regression statistics, and *MAXQDA*, *11* software was used to analyze interview data, and *Delphi* technique was used to determine the validity of the research model.

**Findings**: Among the investigated factors, the most important ones include government support policies, equal access to health services, appropriate equipment, political and social structure, integrated information system, the right to freely choose and access, government participation in providing financial resources, legal capacity, the integration of municipalities and the formation of the federation of municipalities, the strong role of non-governmental organizations, full insurance coverage and the strong role of private insurances play a role in the development of health services in municipalities. In the qualitative study section,4 issues, 17 indicators and 37 components were identified according to the interviews conducted regarding the determination of effective factors on the development of health services in municipalities, among which are contextual factors (economic, historical, political and institutional), stakeholders and main actors (bureaucrats, employees of health departments in the *Ministry of Health and Municipality* and people and patients) and process factors (including reforms in the existing processes including reforms in the structure of the health system, behavioral reforms, clarification of governance issues and using the experiences of successful countries) are the most important things in the field of health.

**Conclusion**: The results show that the development of health services by municipalities requires the explanation of the contextual factors (economic, historical, political and institutional), drawing the map of the main stakeholders and actors (bureaucrats, employees of health departments in the *Ministry of Health and municipalities* and the people and patients) and process factors (include reforms in the existing processes including reforms in the structure of the health system, behavioral reforms, clarification of governance issues and the use of the experiences of successful countries) in the field of health.

Keywords: comparative study, municipalities, health services, effective factors of health service development, interviews.

### Introduction

Health is one of the basic needs of people in a society and it plays an important role in improving the quality of their lives [1]. One of the manifestations of health in the present era is health in cities. The urban environment affects every aspect of health and well-being, for this purpose, municipalities have developed and planned to consider health in the city [2]. The structural analysis of the health system in different countries shows that municipalities play an important role in providing health services [3]. In the studies conducted, it is observed that health services in some countries such as Sweden, Finland, Norway, Netherlands and Denmark are designed in such a way that is equally accessible to all citizens regardless of social and economic status [4]. The health system in these countries is a two-layered organized system, the responsibility of providing health services is divided between the municipality and the government, and the municipalities are responsible for all primary health services [5], so that health promotion and prevention of diseases and diagnosis and treatment and rehabilitation are the duties of the municipality and the government is responsible for providing health and treatment services in specialized fields including physical and mental hospitals [6]. The results of studies show that although municipalities have heterogeneous features, but health care income plays a significant role in the performance of municipalities [7]. The survey of public opinion about the quality of public services in municipalities shows that health services, along with social services and educational services provided by the municipality, are the most important effective components in providing the quality of municipal services [8]. It is obvious that the provision of health services by municipalities is associated with problems. By examining the way of providing urban health services by municipalities, it is clear that weak communication between regional and local municipalities, lack of understanding of environmental health and lack of proper budget allocation are among the most important obstacles facing the health services by municipalities[9]. Also, two monitoring factors in municipal health care management and problems and weaknesses in health care monitoring have been stated as the most important obstacles to the development of health services in municipalities [7].

Considering that one of the most important functions of the municipalities as a "social institution" is to provide, protect and improve the health of the citizens, scattered efforts have been taken by the municipalities of Iran in order to develop the health service networks fairly in the urban area, especially in the suburbs. The existence of codified systems of urban services and more stable financial resources that are provided based on people's participation, as well as the connection of the city council to the municipality, which supervises its performance and reflects the demands of the people in the health sector, are considered as an proper opportunity for improving the health of citizens through municipalities [10]. The present research aimed to improve the health services system under the title of "comparative study of the role of municipalities in providing health services through studying the structure of the health system of selected countries" examines the role and position of municipalities in providing health services and taking advantage of the experiences of these countries in providing these services by municipalities to pave the way for managers and practitioners of Iran's health system to improve the health service delivery system.

### Method

This study is a review study that was conducted in a systematic way in 1397. The articles were found through searching in electronic resources based on the keywords *Municipality, Selected Countries Provide, Health Services,Effective Factors Development, Comparative Model*, and by combining these keywords in databases, *google scholar, popmed proquest, springe, SID, scopus*. The search period for articles was unlimited. The number of 50 related articles were found. Since the research community included countries where municipalities played a major role in providing health services, articles that were closely related to the study objectives were selected and the rest of the articles were excluded from the study. Finally, 7 countries were selected for study. The countries of Sweden, Denmark, Norway, Finland, the Netherlands were selected based on the obvious role of municipalities in their health structure, Turkey due to the similarity of its health structure with Iran and the prominent presence of municipalities in providing health services, and finally the country of Iran, and the data related to the health systems of these countries were tabulated, described and compared according to the latest statistics of the *World Bank* and the *World Health Organization* based on <u>Walt Gibson</u> model.

### Results

The studied countries include 7 countries: *Sweden, Norway, Denmark, Finland, Netherlands, Turkey and Iran.* The political system of *Sweden, Denmark, Norway and the Netherlands* is a constitutional monarchy. The political system of Finland is a socialist republic, Turkey is a republic, and Iran is an Islamic republic. Health care in all countries is defined at the level of the *Ministry of Health*. Health services are provided by municipalities in all health systems, including the insurance system, the national health medicine system, and systems with health insurance funds. In all the studied countries, the *Ministry of Health* is in charge of the health sector, and the government supervises the process of health and treatment and formulation of policies.

Table 1: The feature of the studied countries

Row	Country	Political System	Health System	Stewardship	References
1	Sweden	Constitutional monarchy	National Health System	Ministry of Health and Social Affairs	[11]
2	Denmark	Constitutional monarchy	National Health System	Ministry of Health	[12]
3	Norway	Constitutional monarchy Parliamentary	National Health Insurance	Ministry of Health	[13]
4	Finland	Socialist Republic	National Health System	Ministry of Health and Social Affairs	[14]
5	Netherlands	Constitutional monarchy	Consolidated Insurance System	Ministry of Health, Welfare and Sports	[15]
6	Turkey	Republic	National Health System	Ministry of Health	[16]
7	Iran	Islamic Republic	National Health System	Ministry of Health and Medical Education	[17]

The Netherlands has the highest amount (\$899 billion) and Finland the lowest amount (\$252 billion) in terms of the gross domestic product (GDP) index. But if this index is compared based on the purchasing power parity index (PPP), it can be seen that Norway has the highest amount (\$61,414) and Iran has the lowest amount (20,841). The ratio of the health sector to the GDP of Sweden has the highest share (11%) and Turkey has the lowest share (4.1%) among the studied countries. Norway has the highest share (85.4%) and Iran has the lowest share (53.4%) in terms of the ratio of the government's general expenses in the health sector to the total expenses in the health sector (Table.2). In the out-of-pocket ratio index, Iran has the highest rank with 39.7% and the Netherlands has the lowest rank with 12.3%. The share of insurance system in covering health expenses is the highest in Turkey with 56.3%, Iran is in the following rank with 26.9%. There is no insurance system in Sweden and Denmark. Regarding the index of private sector expenses ratio in health to total expenses in the health sector, Iran has an active presence with 46.6% and Sweden has the lowest share among the countries studied with 14.6%. Table. 2 shows the comparative comparison of macroeconomic indicators of health.

Table 2: Macroeconomic indicators of health									
Indicators	Unit	Norwa y	Swede n	Denmar k	Netherlan ds	Finlan d	Turkey	Iran	Refer ences
GDP (in terms of purchasing power parity index)	billion dollars	324	505	296	899	247	2141	1691	WB
Per capita GDP (in terms of purchasing power parity index)	Dollar	61414	50208	51364	52503	44866	26519	2084 1	WB
The health sector's share of GDP	Percenta ge	10	11	10.3	10.7	9.4	4.1	7.6	WB
Per capita Health expenditure	Dollar	7464	5600	5497	4746	4005	455	366	WB
Per capita Health expenditure (in terms of purchasing power parity index)	Dollar	6222	5299	5083	5313	3996	996	1262	WB
Public health expenditure to total health expenditure	Percenta ge	85.4	83.7	84.1	80.70%	77.4	78.1	53.4	WB
Out of packet	Percenta ge	17.5	15.2	15.8	12.30%	19.9	16.9	39.7	WB
Share of social security Insurance in health expenditure	Percenta ge	11	0	0	19.40%	13.3	56.3	26.9	WHO
Share of Voluntary Health Insurance in health expenditure	Percenta ge	0	0.6	201	5.90%	2.6	0	4.3	WHO

Per capita government spending on health	Dollar	6374	4685	4626	3831	3101	355	195	WHO
Percapitagovernmentspendingon health (in terms ofpurchasingpowerparity index)	Dollar	5313	4433	4277	4288	3094	788	674	WHO
Private sector health expenditure to total health expenditure	Percenta ge	14.6	16.3	15.9	19.30%	22.6	21.9	46.6	WB

Table.3 shows macro health indicators of the selected countries. In terms of life expectancy, Norway is the highest with 82.5 years and Iran is the lowest with 78 years. In the mortality index of children under one year and under 5 years of age, Iran has the worst situation among the studied countries with 21.8 and 14.9, respectively, Turkey is in the next place with a slight difference, and Finland has the best situation with 1.9 and 2.3 deaths per thousand live births. The number of doctors and nurses and the number of hospital beds are also important indicators of health, in which Norway with 4.8 doctors and 17.7 nurses per 1000 population has the best status among the studied countries. Finland with 3.9 beds per 1000 people has the most beds and Iran has the lowest with 1.5 beds. Table.3 shows the comparative comparison of macro health care indicators of the studied countries.

Table 3: Macro indicators of health care in the studied countries.

Indicators	Unit	Norway	Sweden	Denmark	Netherlands	Finland	Turkey	Iran
Life expectancy at birth	Year	324	505	296	899	247	2141	1691
Child mortality rate under one year	In thousands	61414	50208	51364	52503	44866	26519	20841
Child mortality rate under 5 years	In thousands	10	11	10.3	10.7	9.4	4.1	7.6
Average annual population growth	In thousands	7464	5600	5497	4746	4005	455	366
Number of doctors	In thousands	6222	5299	5083	5313	3996	996	1262
Number of Nurces	In thousands	85.4	83.7	84.1	80.70%	77.4	78.1	53.4
Number of Beds	In thousands	17.5	15.2	15.8	12.30%	19.9	16.9	39.7
Adult Literacy Rates	Total population	11	0	0	19.40%	13.3	56.3	26.9

Source: World Health Organization (2018), World Bank, Organization for Economic Co-operation and Development (2017)

#### Norway

The municipality and voluntary organizations play an important role in providing welfare services and health care, and the role of the government is limited. The beginning of the 20th century was characterized by the increase of public responsibility regarding health issues at the government and municipality level. Hospitals were built especially in urban areas with the increase in population and industrialization. These belonged to voluntary organizations, churches, municipalities or the government. Health insurance plans have been developed based on private plans. The municipal health services law in 1982 placed the responsibility of all primary care services on the municipality, since then, the municipality's responsibilities have included environmental health services, nursing homes (since 1988), and caring people with severe disabilities (since 1992). Municipalities have assumed more financial responsibility for the discharge of patients from hospitals since 2012 [18].

#### Sweden

In 1992, the Swedish government carried out a major reform (ADEL) that gave the main responsibility for elderly care and financial incentives to reduce costs to municipalities. More than half of the municipalities in Sweden assumed the responsibility of providing home health services, which was previously the responsibility of the county council, but in that time, theywere providing the service themselves. In 1995, the municipality became responsible for providing mental health services for long-term psychiatric patients. In 1970, the city council in Sweden took over the responsibility for outpatient services in public hospitals as part of the Seven Crown Reform. In this plan, patients were asked to pay Seven Crown to the city council for each outpatient consultation, and the city council was directly covered by the health insurance authorities for the rest of the cost. During 1980, according to the constitutional amendments of 1974, the responsibility of all health services was transferred to the city council. Since 1980, the public vaccination program became one of the duties of the municipalities [17].

#### Denmark

In Denmark, health services can be characterized as an almost decentralized system, with responsibility for primary and secondary cares at the local level. However, a re-centralization process is underway, in which the number of regions has been reduced from 14 to 5 and municipalities from 275 to 98. The health system has been organized based on three administrative levels such as state, regional and local. Planning and legislation areconducted at the state and local level. The government oversees the system and also financial performance, and the municipality is responsible for disease prevention and health promotion[4].

### Netherlands

In the Netherlands, the government is not responsible for providing health care. Private health providers are responsible for preparing these services, and the government is responsible for providing access and monitoring the quality of these services. In the Dutch health care system, preventive care is mainly provided through public health services. Disease prevention and health promotion are under the responsibility of municipalities. There are about 29 municipal health services, which are provided by 443 municipalities throughout the Netherlands [16].

#### Finland

Since 1870, municipalities have been the main responders for providing health, social and educational services (except university education) in Finland, and currently health care is based on the national health service system. These services are completed through the private sector. About 415 municipalities are responsible for organizing the health care system. They can provide services in their affiliated institutions or cooperate in a corporate form with the board of directors of municipalities to provide health services or purchase services from the private sector. According to the law, all municipalities are required to maintain health centers to provide basic health care services, either by themselves or jointly through the local federation of municipalities. Doctors in health centers are usually considered as municipal employees and they are paid by the municipality. In Finland, national political and administrative systems are more or less centralized. Foreign relations, tax collection and legal institutions and some similar issues are considered government activities, while welfare services are usually left to municipalities [19].

#### Turkey

In recent years, preventive, therapeutic and rehabilitation health services have become very important in Turkey. As the most important responsibility for achieving this purpose belongs to the Ministry of Health, the support and cooperation of other institutions and organizations in the form of a multi-sectoral approach is inevitable. Municipalities are undoubtedly the most important of these institutions and organizations. In addition to existing services, municipalities have provided more services to promote health. Healthy cities projects are the best example of these efforts. Therefore, we should have policies to promote health and encourage citizens to cooperate with local administrators and health administrators to create healthy and healthier cities. The municipality has various responsibilities, including environmental health, economic development, and urban transportation. In Turkey, municipalities can increase their income from economic activities as well as imposing special taxes. When the health reform plan in Turkey officially started since 2003, a special emphasis was placed on empowering municipalities and assigning special roles in the field of health by the central government [20].

#### Iran

The health system in Iran is organized in three levels: country, province and city, which provide health services in three levels: primary health care, specialized and super-specialized medical and rehabilitation services. Homes and health centers, rural and urban health centers and general and specialized hospitals provide these services. Although Iran's health system has been accompanied by progress in the past three decades, it still faces challenges in the areas of quality, efficiency and justice [21]. In Iran, the municipalities of big cities like Tehran and Tabriz have seriously entered the health category. Since 1370, Tehran Municipality has specially addressed the issue of health by holding the Healthy City Symposium at the University of Tehran, and since the early of 1385, it has taken steps to create a new structure called the

General Health Department of Tehran under the supervision of the deputy of social and cultural affairs of the municipality. Based on this structure, all the 22 regions of Tehran municipality have regional health department and at each stage, they have to set up a place called the neighborhood health house. For example, Tehran Municipality, in line with its strategic plan and in order to integrate health services in the city and its fair development, established the Tehran City Health Steering Committee with the presence of experts and started a project entitled " the development of basic health services in big cities based on the social components of health" with the participation of Iran University of Medical Sciences and Health Services, leading to the establishment of an initiative called the Health Management Center of Region 9 in 1389 [10] Table. 4 shows the role of municipalities in providing health services in the studied countries.

	Table 4: The role of municipalities in providing health services	
Country	Roles	References
Sweden	1- Services are providing for maternity and child, 2- The shareholder of corporate hospitals, 3- The owner of 10 hospitals, 4. Care for elderly and disabled 5. The administration of primary care centres and almost all hospitals, 6. Health education in schools, 7. Water health, 8. Nursing services at home, 9. Rehabilitation services, 10. Professional health services, 11. Health schools, 12. Environmental health	[11] [17]
Denmark	<ol> <li>Disease Prevention and Health Promotion, 2- Child Care, 3- Nursing Services at Home, 4- Drug and Alcohol Treatment, 5- Dental Care for Children and Disabled,</li> <li>6- Social Psychiatric Services, 7. Care for the elderly, 8. Rehabilitation 9. Health schools, 10. Nursing homes, 11. Environmental health, 12. Most hospitals belong to municipalities, 13. Health education, 14. Environmental health, 15. Social services include welfare payments(Disability Insurance and Retirement Grants),</li> </ol>	[4] [22] [12]
Norway	1-Nursing home services, 2- Long-term care, 3- Oral hygiene for children and other target groups, 4. Mental health, 5- Providing medicine for hospitals, 6- Emergency services, 7- Rehabilitation, 8. Organising primary care 9. Environmental health, 10. Elderly care services, 11. Financing of first-line medicines for hospitals and nursing homes, 12. planning for health infrastructure, 13. Purchasing services from Hospitals, 14. Implementing regulations in non-sanitary areas (e.g. housing, training or employment), 15. Organising and providing LTC.	[23] [18]
Finland	1. Managing and organising specialised hospitals; 2. Managing and organising and municipal financing hospitals; 3. Children's care; 4- Caring for pregnant women, 5- Vaccination of children, 6- Oral health for children and target groups, 7- Providing dental services for all residents, 8. Purchase health care services (primary health services or specialised health services) from other municipalities, other hospital departments, private providers or third-party providers 9. Setting up ambulance services 10. Providing health services in elementary schools, colleges and high schools	[14] [19]
Netherlands	1- Prevention of diseases, promoting health and protecting health 2- 29 health services 3. Youth care institutions 5- Home care services	[24] [17]
Turkey	1. Environmental health, 2. Health food, 3. Health services in the home, 4. Medical services through medical centres and outpatient clinics, 5. Oral health services, 6. Medical screening services, 7. Ambulance services for Patient, 8 training / counseling services, 9-funeral services 10-home health services 11- laboratory services 12- emergency services (integrated with 112 emergency health services of the Ministry of Health) 13- providing services by counseling and training center Istanbul (İSADEM) and the Istanbul Disability Center (İSEM), 14- Medical Centers, 15- Nursing Care Services, 16- Preventive Education / Prevention 17- Health and Safety Job, 18th Centers of Psychiatry	[20] [25]

#### Table 4: The role of municipalities in providing health services

	1- Holding Healthy City Symposium at Tehran University (1991), 2- Tehran	
	Municipality since the beginning of 2006 creates a new structure called Tehran	
	Health Office under the supervision of the Deputy Social and Cultural Affairs of	
	the Municipality. Based on this, all of the 22 municipalities of Tehran have a	[10]
I <b>ra</b> n	regional health office and in each period should be set up a place for the	
	metropolises of Tehran, Tabriz, Isfahan, Mashhad, etc. 5. Promoting a health-	[=0]
	oriented lifestyle among citizens. 5. Generating knowledge and information on	
	health and social factors.	

The health system in most of the studied countries is based on taxation, and municipalities can receive the income of their health departments from taxation. In addition to taxes, the financial resources of health services are completed by the government and the users of the services. Local councils are responsible for planning and developing the health system based on the needs of the applicants. In addition to local councils, private sectors, medical sectors and health sectors also play a role in health planning. At the level of the ministry, general rules are specified and implemented. Based on Walt Gibson model, the effective factors in the development of health services vary in the form of content, contextual, process factors and stakeholder in different countries, and their effects on the development of health services are briefly mentioned in Table. 5.

Country	factors	factors affecting	References	
	Content factors	The government's support policies - Sweden's administrative structure is decentralized and the organization of health services is based on city councils and municipalities - the existence of three principles of human rights, the principle of need and the principle of cost effectiveness in the provision of health services, - equal access to health services, - programs, - political and social structure, - financing health services through taxes, government grants and franchises, - general policies Sweden's health system,		
Sweden	Sweder Background 100% factors providi and the	- The role of taxes in financing health services, - The health system of Sweden is based on taxation, - The right to freely choose and access, - 100% universal insurance coverage, - Government participation in providing financial resources, - Legal capacity, - Full insurance coverage and the strong role of private insurance, - the structure of the health system based on the citizens' welfare perspective	[11] [17]	
	process factors	- Information monitoring and management, - Decentralized governance structure and organization of health services based on city councils and municipalities, - Referral system - Information monitoring and management, - Legal reforms, - Information monitoring and management	-	
	Beneficiaries	Municipality, - citizens, - education, - non-governmental organizations, - policy makers, - public health sector managers, - private sector providers, - councils	-	
Denmark	Content factors	1- Disease Prevention and Health Promotion, 2- Child Care, 3- Nursing Services at Home, 4- Drug and Alcohol Treatment, 5- Dental Care for Children and Disabled, 6- Social Psychiatric Services, 7. Care for the elderly, 8. Rehabilitation 9. Health schools, 10. Nursing homes, 11. Environmental health, 12. Most hospitals belong to municipalities, 13. Health education, 14. Environmental health, 15. Social services include welfare payments(Disability Insurance and Retirement Grants),	[4] [22]	
	Background factors	The role of tax in financing health services - the right to choose freely and equal access to services - 100% universal insurance coverage, - government participation in providing financial resources - legal capacity and - the essential role of tax in providing health services by municipalities (81%)	. [12]	

Table 5: The role of municipalities in providing health services

Norway Contr facto Back facto proce Bene Finland Contr facto Back facto Contr facto Back facto Contr f		information and - legal reforms Municipality, - citizens, - non-governmental organizations - policy makers - health sector managers - private sector providers and councils and municipalities Supportive policies of the government, - everyone's access to basic health services provided by municipalities, - municipalities have a large amount of freedom in the field of organizing health services. There is no direct	
Finland Factor Finland Contr Finland Contr Finland Contr Factor Finland Contr Factor Fa		Supportive policies of the government, - everyone's access to basic health services provided by municipalities, - municipalities have a large amount of freedom in the field of organizing health services. There is no direct	
Norway factor proce Bene Finland Contr factor Back factor Bene Contr factor Bene		line of command and control from the central authorities to the municipalities, - the health care system is semi-decentralized and the municipalities are responsible for planning the health related infrastructure., - the municipalities are free to invest in the private sector and - Political, social and economic structure	
Finland Contr Finland Contr Back factor Bene Contr factor Bene	kground ors	Provision of health services through taxation and state aid - The right to freely choose and access services, - Legal capacity - Norway is a parliamentary democracy divided into three different administrative levels: the government, states and municipalities.	[23] [18]
Finland Contr factor Back factor proce Bene Contr factor	ess factors	Monitoring and management of information - structure is a decentralized agency and organization of health services based on city councils and municipalities, - referral system - monitoring and management of information, - structural reforms (Public Health Law of 2011, which is one of the key components of coordination reforms)	. [ ]
Finland Factor	eficiaries	Municipalities and councils, - the people, - the strong role of non- governmental organizations in providing health services, - public health sector managers, - private sector providers, - the Ministry of Health, - the Ministry of Labor and - the Ministry of Foreign Affairs and Regional Development	
Finland factor proce Bene Contr factor		The government's support policies, - integrated information system and - the authority of municipalities in designing how to provide health services - all citizens are covered by social security and - increasing the independence of municipalities	
Bene Contr facto	kground ors	- Financing the health system on a financial basis, - The right to freely choose and access, - Merger of municipalities and forming a federation of municipalities - Government participation in providing financial resources (government subsidy system) and - European Union policies	[14] [19]
Conte facto	ess factors	Legal protection, - electronic health record for all citizens, - advanced information technology, - referral system and - information monitoring and management	-
factor	eficiaries	Municipality, - citizens - non-governmental organizations- policy makers, - health department managers and - development of government organizations	
		Government support policies, - equal access to health services, - relative independence of municipalities in planning for health services, - suitable equipment with government supervision and - political and social structure	
Back Netherlands factor	kground ors	The role of taxes in financing health services, the right to freely choose and access, - 100% universal insurance coverage, - Government participation in providing financial resources and - Legal capacity.	[24] [17]
proce	ess factors	Information monitoring and management is a decentralized governance structure and the organization of health services based on city councils and municipalities, - referral system, - information monitoring and management, - legal reforms and - purchase of services from the private sector.	_

Beneficiaries	Municipality, citizens, non-governmental organizations, policy makers, health sector managers, private sector providers, councils and municipalities.	
Content factors	Government support policies, - Centralized health and treatment system, - Equal access to health services, - Political and social structure, - Great attention to health education, - Each geographical region has a municipality and mayors and city council members, along with members The provincial council and village heads are elected in local elections.	
Background factors	Implementation of universal insurance plan, - participation of the government in providing financial resources, - legal capacity, - accumulation of insurance fund, - convergence of the parliament and the government and the determination of the recipients, - health services are provided by the government, social security and the private sector.	[20] [25]
process factors Beneficiaries	The Ministry of Health at the central level is responsible for policy making and providing healthcare services, - monitoring and managing information, - reforming the health system and - balancing the price of services in the public and private sector.	-
	Municipality, - Citizens, - Policymakers, - Bureaucrats, - Health Department Managers, - Medical Association, Dentists Association and Turkish Pharmacists Association	-
	Content factors Background factors process factors	Beneficiarieshealthsectormanagers,privatesectorproviders,councilsandContent factorsGovernment support policies, - Centralized health and treatment system, - Equal access to health services, - Political and social structure, - Great attention to health education, - Each geographical region has a municipality and mayors and city council members, along with members The provincial council and village heads are elected in local elections.Background factorsImplementation of universal insurance plan, - participation of the government in providing financial resources, - legal capacity, - accumulation of insurance fund, - convergence of the parliament and the government and the determination of the recipients, - health services are provided by the government, social security and the private sector.process factorsThe Ministry of Health at the central level is responsible for policy making and providing healthcare services, - monitoring and managing information, - reforming the health system and - balancing the price of services in the public and private sector.BeneficiariesMunicipality, - Citizens, - Policymakers, - Bureaucrats, - Health Department Managers, - Medical Association, Dentists Association and

### Discussion

In various systems, including the insurance system, the national health medicine system, and the health insurance fund, the health department is under the responsibility of the Ministry of Health, and the government supervises the process of health and treatment and formulation of policies, and also the provision of the health services at lower levels is conducted by municipalities. Today, health indicators and health economy are considered as important factors in the development of countries and can be effective in raising the level of development indicators. In this study, it is observed that the Netherlands spends more of its gross product on health than the Scandinavian countries and among the studied countries, Turkey has the lowest share. In the public expenditure of the government in the health sector to the total expenditure, Norway has the largest share in this sector, which has a direct impact on other indicators, including out-of-pocket payments. This amount in Iran has the highest share in the studied countries by a large margin. Another important indicator is the number of nurses and doctors, so Iran and Turkey have the lowest rank among the studied countries, which shows the imbalance in this sector. Life expectancy, the death rate of children under one year and under five years of age are important development indicators and have the advantage of being directly comparable between populations. It can be seen in these indicators that there is a big difference between developed and developing countries. As it was observed in this study, in countries where municipalities play an essential role in providing health services, this study shows that in addition to construction activities and paying attention to urban development, municipalities also play a role in the field of health. In the study, it was observed that the health services of the countries of Sweden, Finland, Norway, Netherlands and Denmark are designed in such a way that they are equally accessible to all citizens regardless of their social and economic status, and the health system in these countries is anorganized two-layer system where the responsibility of providing health services is divided between the municipality and the government, and the municipalities are responsible for all basic health services, among which the infrastructure of the health system, the form of government, the degree of concentration and the council system are considered to be effective factors in providing health services. The results of this study are consistent with most similar studies; the results of Oliveira & Passador's studies in 2016 show that although municipalities have heterogeneous characteristics, health care income has an effective role in the performance of municipalities. In 2012, Gita investigated public opinion about the quality of public services in municipalities and concluded that health services, along with social services and educational services provided by the municipality, are the most important effective components in providing the quality of municipal services, which is based on a model of public service quality development in Lithuanian municipalities. Also, in 2011, Chapi, by examining urban health services provided by municipalities in South Africa, considered the relationship between regional and local municipalities, the lack of understanding of environmental health and the lack of proper budget allocation as the most important obstacles facing health services. Oliveira et.al in 2016, by analyzing the health care monitoring methods of the local government and its relationship with nursing, concluded that two monitoring factors in municipal health care management and the problems and weaknesses in municipal health care monitoring are the most important obstacles to the development of health services in municipalities. One of the most important characteristics of successful countries in the field of health is the participation of the majority of public sectors and non-governmental organizations in providing and financing the

health system and reducing the amount of direct people's out-of-pockets payment. During the studies conducted by Schiötz 2006, Berg 2003, Jhanson 2005, they pointed out the important role of the municipality and voluntary organizations in providing welfare services and health care. Masoudi Asl&Behbahani announced in a study in 1394 that more than half of the municipalities in Sweden have taken over the responsibility of providing health services at home, which was previously the responsibility of the county council, and provide the service themselves. The health system in that country is based on taxation, and local levels and municipalities can receive the income of their health departments from taxing the people. Christiansen&Vrangbæk in 2018 stated in a study that the Danish health system is a relatively decentralized system and the responsibility of primary and secondary care is established at the level of regions and municipalities, and municipalities can establish health centers to provide health services to citizens. In Finland, since 1870, municipalities have been the main responders for providing health, social and educational services (except for university education), and currently health care is based on the national health service system [19]. In the Netherlands, the government is not responsible for providing health care. Private health providers are responsible for preparing these services, and the government is responsible for providing access and monitoring the quality of these services. In the Dutch health care system, preventive care is mainly provided through public health services. Disease prevention and health promotion are under the responsibility of municipalities [16]. In Turkey, each geographical region has a municipality, and mayors and members of local councils, along with members of provincial councils and villagers, are elected by direct vote of the people in local elections [20]. Tatar et.al, during a study that examined the health structure of Turkey in 2011, announced that since 2003, when the health reform plan in Turkey officially began, a special emphasis was placed on empowering municipalities and assigning special roles in the field of health by the central government and the municipalities that played an important role in providing healthcare services also focused on maintaining and promoting health. The recent reforms of Iran's health system are evaluated with the focus on achieving universal health coverage, increasing justice and reducing out-of-pocket payments, in line with the policies of the country's health system announced by the Supreme Leader, as well as the macro policies of the system with the focus on improving health services for the people and sustainability of the achievements in the country.

#### Conclusion

The results show that the health care system in the selected countries is an organized two-layer system, whose responsibility is clearly divided between the municipality and the Ministry of Health. Municipalities are responsible for primary health services and increasing the responsibility of municipalities in the field of health and welfare of citizens leads to the improvement of the health of the society. In most of the studied countries, the health system is a relatively decentralized system and responsibility for primary and secondary cares is established at the local and municipal levels. The comparison of the studied countries shows the role of the social, economic and cultural structures governing the health system, which drives the entry of public institutions such as municipalities in the field of health, and the more these laws are related to the social, economic and cultural structure, the more successful they will be.

The results show that the development of health services by municipalities requires explaining the contextual factors (economic, historical, political and institutional), drawing a map of beneficiaries and main actors (bureaucrats, employees of health departments in the Ministry of Health and municipalities, people and patients). and process factors (such as reforms in the existing processes, including reforms in the structure of the health system, behavioral reforms, clarification of governance issues and the use of the experiences of successful countries) in the field of health.

Regarding the economic index of Iran's health system, like other countries in the world, it is facing an upward trend in the costs and expenses of the health sector, and these costs are still increasing day by day. It is predicted that this upward trend in the future will also have a negative impact on the health system under the influence of inflation and economic stagnation caused by sanctions in the country, so that the country's health system has faced a sharp increase in costs, therefore, an approach should be adopted so that the dependence of the health sector should be reduced to the government budget.

Regarding the political factors, the components of the council system governing in the management of municipalities and the lack of prioritization of the health sector for the country's politicians were discussed. Most of the interviewees considered the joint of the city Islamic council to the municipality, which supervises its performance and reflects the demands of the people in the health sector, as a good opportunity to improve the health of citizens through the municipalities. Regarding the historical index, the implementation component of the health system reform plan and the historical role of municipalities in providing health services are discussed.

Regarding the institutional index of low efficiency and productivity components of governmental health and treatment centers, the low quality of services provided and the change in the pattern of diseases in the society were discussed. The low efficiency and productivity of governmental health and treatment centers was confirmed by most of the interviewees of the Ministries of Health and Medical Education and municipalities. Also, experts in the field of health and treatment and municipalities agreed on the low quality of services of government medical centers.

Regarding the key actors in the field of health, that is, politicians and bureaucrats, it was intended to create a common sense and seek support, and most of the interviewees in the two organizations under investigation believed that politicians and bureaucrats are among the most important actors in the field of policy making having executive and decision-making powers.

The results show the nature of the political system, the relationship between policymakers and executive officials, and the approach of making reforms in the development of health services by municipalities.

The results show that examining and studying the experiences of successful countries in the field of health services and examining the speed and size of change and determining the degree of decision-making play a significant role in the development of health services by municipalities.

Most of the experts of the municipalities organization considered the lack of familiarity of the policy makers and managers with the concepts and functions of this sector and the resistance created in the future due to the nature of the health sector as the reasons for the municipalities not entering the health sector. In the index of governance issues, four components have been proposed including changing the content of the mission and goals, capacity for implementation, consistency and internal coherence of reforms and determining the ownership structure.

The results show that the mission of municipalities does not necessarily change by entering the health sector. In addition to the existing services, municipalities provide more services to promote health. Healthy cities projects are the best example of these efforts. Municipalities have a decentralized governance structure, and in this structure, if municipalities enter to provide health services, the organization of health services will be based on city councils and municipalities, and municipalities will have relative independence in planning and designing health services.

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