## Patients' Rights Charter: A Review of Studies in Iran

Ameneh Seyed Farajollah<sup>1\*</sup>, Hesam Somayeh<sup>2</sup>, Shaghayegh Vahdat<sup>2</sup>, Hamidreza Ardalan<sup>2</sup> <sup>1</sup> Health Service Management, School of Allied Health Sciences, Qom University of Medical Sciences, Qom, Iran Email: afaraj@muq.ac.ir <sup>2</sup>Department of Health Care Management, Science and Research Branch, Islamic Azad University, Fars, Iran

### Abstract

Over the past two decades, due to some reasons such as their vulnerability and need on one hand and on the other hand, increasing attention of international associations to human rights the patients' rights have been focused too much. This study is a comprehensive review by searching the database of Iranian sources, websites Centre for Scientific Information, University Jihad, Research, Science and Technology of Iran, Medical Sciences Papers Database (Iran Medex) and Google search by the keyword Patients' Rights. So finally, from a total of 60 found articles, 24 ones were examined in relation to the subject.

Keywords: Patients' rights charter, health service recipients

#### Introduction

One of the major attributes which is the source of many virtues is to feel a sense of responsibility towards others' rights and to serve mankind is that each educated person should have it. In the field of health and treatment, caring and promoting the preservation of human life have special importance to related personnel so the patients' rights become more important (Alfetrio, 2007). Effective health system requires active participation and interaction among health services personnel and recipients. The patients' rights charter was issued to define the health services recipients and promote moral norms observation in one of the most important fields of health services namely treatment with cooperation of the related experts and beneficiaries and executed. Patients' rights observation with important role in improving patient's health is one of the important goals of the treatment group. The term 'Right' means what should be done and what should not be done in all languages and human rights and patients' rights are similarly defined (Atashkhaneh, 2001). It is possible to define the goal of patients' rights charter as follows: defending human rights to revere him (her) and guarantee to save and treat him (her) when he (she) is sick (Specially in emergency conditions) regardless of his (her) race, age, sexuality and financial condition. Patients' rights charter states that any patient should benefit from hidden care, inquire directly the physicians and other medical personnel about their diagnosis, the treatment the prognoses in detail and should be able to decide about the recommended treatment continuation or discontinuation and keep secret his (her) treatment program (Sedghiani, 1998). The importance of patients' rights depends on the community requirements; in other words, they are executed by the government or other public or private legal departments to provide necessary facilities for the people's health. Like everybody the patient has some vital needs. Due to his (her) illness, he (she) may not fully meet some of his (her) needs and needs his (her) family help. Being aware of the needs of patients, it would be possible to recognize them better and select better ways to help these people. Understanding the patients' needs through them or their relatives will be a useful framework for better service (4). In the past, the patient was deprived of autonomy and decision making power and the health - care decided for him (her) and he also agreed with the decisions and trusted them while by virtue of new definitions

of patients' rights general concept concerning the patients' role, powers and decisions and health care has changed (Ingram, 2006). In 2002 the first charter of patients' rights was issued in Iran and was notified by then assistant of Ministry of Health, Treatment and Medical Education. Considering the necessity of issuing a comprehensive patient's rights literature a charter was compiled with a new and comprehensive view to define the health services recipients and observe moral norms in field of treatment. Having examined available sources, executed field studies concerning physicians', nurses' and patients' views about necessity of observing patient's rights, drafted the charter, inquired experts' views about the draft by correspondence and consulted with them the patient's rights charter was compiled. Finally the charter was sent to the policy council of Ministry of Health, Treatment and Medical Education and approved. Then the final patients' rights charter was noted to affiliated centers in Nov. 2009 by then Ministry of Health, Treatment and Medical Education; The comprehensive charter of patients' rights included five main principles, 37 paragraphs, weltanschauung and value and one note. The five principles included (Alfetrio, 2007) the right to benefit from the optimum services, (Atashkhaneh, 2001) having enough information, (Sedghiani, 1998) patient's right to decide voluntarily to benefit from the health services, (Moosaei et al., 2001) right to keep secret the patient's personal information and secrecy and (Ingram, 2006) the right to complain; these are explained in the paragraphs 14, 4, 7, 9 and 3, respectively (Parsapoor et al., 2009). This study was done to examine all previous studies concerning patient's right charter and views concerning the charter in order to inform the health personnel and patients about it and examined how much the patient's right has been observed in light of different dimensions of the rights and the effects of different factors related with them in Iran.

## **Materials and Methods**

This study is a comprehensive overview done by searching in the Iranian database including Scientific Information Database (SID) of University Jihad, Science and Technology Research Center of Iran Information, Iranian Research Institute, IranMedex and Google with the keyword: Patient's Rights Charter. Finally 60 Persian articles found by the Keyword of which only 24 ones were in accord with the study goal and the rest examined special dimensions of the patients' rights beyond this study scope.

### Results

The studies reviewed in this study were done in recent ten years (In 2002-2012) namely after the first patients' rights charter compilation in Iran and noted by the assistant of Ministry of Health, Treatment and Medical Education.

Writer(Year)	Title	Study Type	Findings
Rangrazjedi	Patients' rights	Descriptive,	The patients' rights charter observed: %
& Rabiei	observance in public	analytic &	67.74. Patient's awareness of diagnosis
(2002)	hospitals, Kashan, 2002	cross-	& remedy: % 80.72, dealing with
		sectional	complaints about costs: % 25.08, taking
			patient's satisfaction for presence of his

 Table 1. Some studies regarding patients' rights in Iran

Rangrazjedi & Rabiei (2003)	Examining physicians' & nurses' views towards the patients' rights charter, Kashan, 2003	Crosse- Sectional	<ul> <li>(her) relatives: % 21.70 &amp; dealing with patient's request for remedy &amp; release: % 53.80 observed</li> <li>% 74.50 of physicians agreed. Their most agreement was with secrecy of patients' information &amp; medical files (% 95.84); their least agreement was with respected remedy: % 48.11.</li> </ul>
Abazar Hajavi et al., 2004	Comparing patients' rights charters in some countries to find a solution appropriate to Iran	Descriptive, comparative & case study	Appropriate solution proposed to define the patients' rights charter.
Jolaei et al. (2004	Defining patients & their accompanying persons views about patients' rights	Qualitative	Themes appeared in the examination related to patients' rights in views of them and their accompanying persons about fair behaviour, respect & receiving necessary information about disease in the hospital.
Bateni et al. (2006)	How much are patients aware of their rights in 8 hospitals, Esfahan	Descriptive- cross- sectional	More than % 50 of patients did not know their rights; there is significant relation between their awareness & education level.
Nasiriani et al. (2007)	Defining how much patients' rights observed in nurses' view in Yazd hospitals	Descriptive, analytic & cross- sectional	More than half of the nurses believed patients' rights observed moderately; patients' right observance(Of interferer variables) has significant relation with nurses' work experience.

Openly accessible at <a href="http://www.european-science.com">http://www.european-science.com</a>

Sarbaz &	Comparing patients'	Descriptive,	We need essential comparative
Kimiafar,	rights charters in some	comparative	reexaminations because of
2008	countries to find a	& case	insufficiencies in Iran patients' rights
	solution appropriate to	study	charter
	Iran		
Parsapoor et	patients' rights charter in	Field study	Final patients' rights charter contents
al. (2009	Iran		notified to affiliated departments by
			Nov. 2009 by Ministry of Health,
			Treatment & Medical Education
Parsapoor et	Examining patients',	Descriptive,	Study groups' view towards ignoring
al. (2009	physicians' & nurses'	analytic &	patients' rights from different views;
	views towards the charter	cross-	most important problem was the
	observance in 2006	sectional	patient's right to select & decide which
			were not favorable in hospitals
Moosaei et	Examining factors &	Qualitative	Generally patients' rights are observed
al.,2010	mechanisms to observe		poorly in the hospital because of low
	patients' rights in		public culture & patients' unaware of
	Shariatrazavi hospital,		patients' rights charter necessitating
	Tehran, 2010		exact programs
Sadeghi &	Professional ethics in	Descriptive	Professional ethics dominance in
Khamarnia,	managing health to create		hospital specially among authorities &
2010	background observing		directors should help considerably
	patients' rights		organization decrease tensions &
			succeed effective to achieve goals &
			enable organization responsive
Hosseini et	How much do coworkers	Descriptive,	The patients' awareness level was low
al., 2010	& technicians know	analytic &	regarding patients' rights charter, but the
	patients' rights in	cross-	technicians' was good. There was

Davati et al., 2010	rehabilitation centers, welfare & rehabilitation university, 2010 How much general practitioners know	sectional Descriptive, analytic &	
	patients' rights charter	cross- sectional	acceptable
Bakaei et al., 2010	How much are patients aware of patients' rights charter in Shahid Sodooghi hospital, Yazd, 2010	Descriptive- cross- sectional	The most awareness of patients was about paragraph "Patient has the right to benefit from favorable care & treatment on time" & their least awareness was regarding: "Patients has right to know educational & training activities in hospital to decide if he(she) agree with participation"
Basirimogha dam et al., 2010	Patients' & medical personnel's awareness of patients' rights charter in Gonabad educational hospitals	Descriptive- cross- sectional	Patients' & medical personnel's awareness was good, but its observance is not favorable. If patients' awareness is higher, their rights are observed more
Basirimogha dam et al., 2010	Patients' & medical personnel's awareness of patients' rights charter in Gonabad educational hospitals	Descriptive- cross- sectional	Patients' & medical personnel's awareness was good, but its observance is not favorable. If patients' awareness is higher, their rights are observed more
Colroozi et al., 2010	Patients' satisfaction regarding health – treatment team' operation	Descriptive- cross- sectional	Patients' satisfaction of remedy group regarding patients' rights charter execution in AJA treatment centers has

Openly accessible at <a href="http://www.european-science.com">http://www.european-science.com</a>

	regarding patients' rights		relation with numbers of days of
	charter observance		hospitalization, section type, remedy
			group & patients' education level
Oskooei et	Promoting patients' rights	Descriptive-	By executing interferences based on
al., 2011	observance by training	interference	education, patients' rights charter
	patients & employees		observance increased considerably &
			surely it improves remedy & patients'
			satisfaction
Karami et al.,	Examining interaction	Descriptive-	There are significant relation between
2011	between patients and	cross-	the five patients' rights principles in the
	accompanying persons	sectional	charter & interaction improvement with
	based on patients' rights		patients
	charter in Ghazvin		
	training – treatment		
	centers, 2011		
Dahharanai	Effect of motiontal	Descriptions	76.60 memory of motionts had madien
Dehbozorgi	Effect of patients'	Descriptive-	76.60 percent of patients had median
et al., 2011	awareness of patients'	interference	awareness. There was significant
	rights charter on meeting		difference between responsiveness
	patients' expectations		scores before & after training in the
	before & after training		group. In this study there was significant
	charter in		relation between patients' education
	internal/surgery section,		level & their awareness regarding their
	Namazi hospital, Shiraz,		rights
	2011		
Ghaziasgar	Patients' & medical	Descriptive-	Most of the studies personal had not
& Ghaderi.,	personnel's awareness of	cross-	good awareness regarding patients'
2011	patients' rights charter &	sectional	rights & considering awareness is base
	effective factors on		of operation it was recommended to
	observing it in Bouali		program for patients' rights charter

	hospital, Tehran, 2011		specially for medicine & paramedical fields to improve it
Moharami et	How much patients'	Descriptive-	patients' rights charter was observed
al., 2011	rights are observed in	cross-	5450 percent in the studies hospitals
	Ardabil hospitals	sectional	
Oskooei et	Knowing and prioritizing	Descriptive-	First & second patients' rights principles
al., 2012	the referents' problems in	cross-	have the most insufficiencies.
	physiotherapy clinic *	sectional	Meanwhile, no insufficiency was seen in
	comparing it with Iran		third, fourth & fifth principles led to not
	patients' rights charter,		observe well patients' rights.
	2012		
Kazemnezha	Examining how much do	Descriptive-	Physicians & nurses believe patients'
d et al., 2011	physicians & nurses	cross-	rights charter is not observed
	observe patients' rights	sectional	completely. There was significant
	charter in view of		difference between physicians & nurses
	employees of educational		regarding general patients' rights
	hospitals of Mazandaran		observance level
	hospitals, medical		
	science university		
Babamahmo	Examining how much	Descriptive-	In the universe view patients' rights
odi et al.,	patients' rights charter is	cross-	charter was generally observed 14.59
2011	observed in view of	sectional	percent of cases. By virtue of the
	patients of educational		findings patients' rights charter was not
	hospitals of Mazandaran		observed satisfactorily in the universe
	hospitals, medical		from hospitalized patients' viewpoint
	science university		

# Discussion

The first patients' rights charter was issued in Iran in 2002 and was notified by assistant of Ministry of Health, Treatment and Medical Education. The studies done since 2002 indicate that related

Openly accessible at <a href="http://www.european-science.com">http://www.european-science.com</a>

researchers have had an interest in patients' rights. The comparative studies indicate that it had better reexamine essentially and comparatively because of insufficiencies in Iran patients' rights charter; on this basis a paradigm was offered to define an appropriate patients' rights charter for Iran (Sarbaz Zinabadi and Kimiafar, 2011). Hajavi et al. in their study showed that patients' right charter in U.S.A., England, Canada and France includes, the right to benefit from health and treatment cares, the right to consent to treatment, keeping patient's rights, the right to privacy and the right to sue; the latter is not in the Iran Charter approved in 2002. The secrecy right was in the charters of the studies countries and the right to have translator and quiet pain are mentioned only in some states of U.S.A. (Hajavi et al., 2004). In 2009, by virtue of the field study done by Parsapoor et al. entitled "Patients' Rights Charter in Iran". The final text of the Charter presented and the procedures of compilation were described: The Patients' Rights Charter was defined by a comprehensive review of the available related literature, a field study of the attitudes of physicians, nurses and patients about the need to observe patients' rights, draft the patients' rights charter, correspondence and in-person survey of the experts on the draft and eventually consultative workshop hold to review comprehensively it. Finally the offered draft was approved by the Policy Council of Ministry of Health and Medical Education. The final text of the Charter of Patient Rights was notified in November, 2009 by then Minister of Health and Medical Education to affiliated centers.

It is possible to divide the studies done concerning the patients' rights from different views into three fields:

1. The views and attitudes concerning patients' rights charter.

2. The knowledge of the health personnel and patients concerning the patients' rights charter.

3. Patients' rights observance rate.

Regarding the evaluation of the views and attitudes towards patients' rights charter, Fatemeh Rangrazjedi and Reza Rabiei in their cross-sectional study in 2003 entitled "Assessment of physicians' and nurses' Views towards Patients' Rights Charter in Kashan city" indicated that the universe agreed with Patients' Rights Charter. Their findings showed that 74.50 percent of the physicians and nurses agree with the Patients' Rights Charter; in relation to the contents the most agreement was related to patients' privacy and file secrecy (95.84 percent) and the least agreement was with secret treatment (p.11). By virtue of the study, no significant relation was between physicians' and nurses' views and between the female and male universe (Rangrazjedi and Rabie., 2003). The findings of the cross – sectional, analytic-descriptive study entitled "The patients', physicians' and nurses' attitudes on respecting patients' rights" by Alireza Parsapoor et al. (2009), in a number one General Teaching Hospital, a number one private hospital and a public-treatment (All in Tehran) indicated the subjects' views about respecting the patients' rights are different about the principles. The most important problem was in relation to the patients' right to choose and decide which is the ideal situation that was not favorable in the training hospital (Parsapoor et al., 2009). By virtue of the findings it seems that the health technicians specially medical team should be informed about respecting patients' rights more in relation to informing them about their rights to choose and decide which is the ideal situation. Generally the studies in this field indicated similar views (Of physicians, nurses and patients) concerning patients' rights.

Concerning the health service technicians' and recipients' awareness of the patients' rights charter, Bateni et al. examined the patients' awareness of their rights in the fourth quarter of 2006 in eight training hospitals in Isfahan. The findings of this cross – sectional and descriptive study conducted on 385 hospitalized patients suggested that more than 50 percent of the patients were not aware of their rights and also according to the researchers' findings there was a statistical significant relation between patients' awareness of their rights. Bateni et al. believe that if training conditions and

information facilities are promoted, the patients' rights conditions are improved (Bateni et al., 2011). In their study Dehbozorgi et al. examined the effect of the patients' awareness of patients' rights charter on the potential to meet their expectations before and after training the charter in internalsurgery section of Namazi hospital, Shiraz; their sample included 120 patients selected randomly. Their findings indicated awareness of 76.60 percent of the patients was median. Besides, no significant difference was seen between the responsiveness scores before and after the training. Here also there was a significant relation between patients' awareness of their rights and their education level (Dehbozorgi et al., 2011). In their study, Ghaziasgar and Ghaderi examined the personnel's awareness level concerning the patients' rights charter and the factors effective on respecting it in Bouali hospital, Tehran; their descriptive study was conducted on 120 hospital employees selected randomly and generally their awareness level about the patients' rights was not good and considering awareness is the base of operation some programs were offered about patients' rights specially in field of medical and paramedical disciplines in order to improve it (Ghazi Asgar and Adeli, 2011). Several studies in this field showed that the majority of patients do not have sufficient knowledge of their own rights. This ignorance may be due to lack of adequate and accurate information regarding patient rights and also because mass media do not cooperate in this regard and on the other hand, the service personnel are not aware, either. Some studies have also indicated that this was a significant relationship between patient awareness and compliance with patient rights, so that with increasing patient awareness, increased observance; even the patients did not know that they had some rights in the health service system. Also some studies indicated there was statistical significant relation between patients' awareness of their rights and respecting their patients' rights charter namely when the patients were more aware of their rights their rights were respected more.

Finally, regarding "how much are the patient rights respected?", a descriptive-analytic study was conducted on 320 patients selected randomly in Kashan public hospitals by Rangraz and Rabiei. The findings indicated the patients' rights charter was respected in 67.74 percent of the universe cases. The patients' awareness of diagnosis and treatment was respected 80.72 percent; taking patient's consent with presence of accompanying persons was respected 21.70 percent during the examination; dealing with patient's request for treatment and release by his (her) own decision was respected 53.80 percent. There was a significant difference between the female and male universe regarding respecting the patients' rights charter (p < 0.001) and also between the subjects with educational level under diploma and higher than it (p < 0.001). Final conclusion indicated that patients believed all the patients' rights had not been observed completely specially regarding the presence of accompanying persons during the examination. Rangraz and Rabiei recommended some mechanisms to increase the technicians' and patients' information during reception (Rangrazjedi and Rabiee, 2005). In their cross-sectional descriptive study, defining how much the patients' rights are respected in nurses' view Khadijeh Nasiriani et al. indicated that they were observed in median rate in more than half of the cases and the patients' rights observation had significant relation only with the nurses' work experience (Of interferer variables) (p=0.006) so by virtue of the findings the patients' rights observation is in median rate which is not satisfactory considering the importance of the subject and it is necessary to issue related regulations concerning patients' and nurses' rights and guarantee their execution in order to increase respect for them in a way that we have better treatment-health services and team and more patients' satisfaction very soon (Nasiriani and Farnia, 2007). Having examined different studies it became clear that more than half of the patients stated their rights had been respected by the related personnel. Despite some insufficiencies in the health and treatment system such satisfaction may be due to patients' unawareness concerning their rights and their low demands about respecting their rights in the health services system and also related studies indicated physicians, nurses and all heal service personnel agree with the patients' rights

Openly accessible at http://www.european-science.com

2548

principle and necessity of its execution and are highly aware of such rights; the findings indicate patients' rights are very important for all health service personnel, but the patients receive enough information from them because of unawareness. By virtue of the Parsapoor's study examining the difference between the patients' and physicians' views in this regard indicated while the physicians think if they give necessary information and right to decide the patients, they have permitted them to participate in the decision the patients do not think so; such different views indicate the necessity of more attention to the subject. In relation to the nurses lack of enough personnel, too much work and sometimes inappropriate structure and lack of equipments in the hospitals are of effective and important factors influencing the quality of the care and respecting the patients' rights in many studies. Monir Karami's et al. study entitled, " Examining The Plan To Interact With Patient & his(her) Accompanying Persons Based on Patients' Rights Charter' indicated that the five main principles mentioned in the patients' rights charter have significant relation with better interaction with the patients in a way that the first principle had 74.30 percent effect and the fourth and fifth ones had 81.20 and 59 percent effect, respectively; their findings in accord with other studies' indicated there is a very close relation between the patients' rights charter observation in the treatment centers and their interaction increase (Karami et al., 2011).

#### Conclusion

The patients' rights studies, which have increased since 80s, indicated that patients' rights respect is one of the most important elements of ethical and humanistic care. Since 2002, many studies have focused on the importance and way to respect such rights and many regulations and by-laws approved in this regard, too, but practically only circular letters and declarations are not enough and it is necessary to train the health services personnel, patients and their families to consider them as active agents in care and treatment. Recent developments regarding patients' rights indicate that the legislators, international organizations and related associations have paid attention to this matter. Physicians and nurses have the most responsibility to respect the patients' rights. The patients' rights observation should be incorporated into the programs training the related directors and employees. One of the mechanisms to help the process is paying attention to professional ethics and developing them in hospitals especially for the directors. If the hospital directors and personnel do not agree with such rights and do not respect them, it is not possible to execute them. It goes without saying that such process needs a cultural change in hospitals and treatment centers. If such rights are observed, the patients are more satisfied, the utility increases and related activities and results are influenced considerably. Finally, considering the researchers' cooperation with this process, it is recommended that as a directive related training and treatment centers take into consideration the examination of the patients' rights charter importance in their next studies.

#### References

Alfetrio, A. (2007). Patient Rights, Translator: Tabrizi, M., Tehran, Nezhat publication, 12-23.

- Atashkhaneh, M. (2001). Patient Rights, Shiraz, Iran: Iran Social Security Organization Treatment Management, 70-94.
- Bateni, M., Sajjadi, M., & Hosseini, M. (2011). Patients' awareness of patients' rights charter, Health Information Management, 7 (4),31-45.
- Dehbozorgi, M., Kavoussi, Z., Keshtkaran, W. & Shahmohammadi, J. (2011). Examining the influence of patients' awareness of patient rights charter on meeting the expectations of patients before and after training in Internal- Surgery Department , Nemazee Hospital, Shiraz, the first student congress of clinical governance and continuous quality improvement, Tabriz University of Medical Sciences, Tabriz, Iran.

- Ghazi Asgar, M., & Adeli, G. (2011). The employees' knowledge concerning the patients' rights charter and factors influencing its observation in Booali Hospital of Tehran, the first student congress of clinical governance and continuous quality improvement, Tabriz University of Medical Sciences, Tabriz, Iran.
- Hajavi, A., Tabibi, M., & Sarbaz, M., (2004). A comparative study of patients' rights in selected countries and providing the perfect solution for Iran. Journal of Legal Medicine, 10 (36), 196-201.
- Ingram R. (2006). The nurse as the patients advocate. MSc Dissertation. University of Portsmouth, School of social & Historical studies.
- Karami, M., Farnia, F., Mohammadi Zadeh, N., Keshavarzi, S. & Dehestani Bafghi, S. (2011). Study of the interaction with patients and their families based on patient's rights charter in training and treatment centers affiliated with Ghazvin Medical University of Medical Sciences. The first student congress of clinical governance and continuous quality improvement, Tabriz University of Medical Sciences, Tabriz, Iran.
- Moosaei, M., Fatemi Abhari, M. & Nikbinsedaghati, F. (2010). Examining the factors and mechanisms to observe the patients' rights, Quarterly Scientific Research Journal: Refah Ejtemaei (Social Welfare), 10(39), 55-84
- Nasiriani, Kh., & Farnia, F., (2007), Evaluation of patients' rights from nurses' view in the hospitals of Yazd, Journal of Legal Medicine, 13 (1), 29-38.
- Parsapoor, A., Mohammad , K., Malek Afzali, H., Alaedini, F. & Larijani, B., (2009). Patient's Rights Charter in Iran, Special Journal of Ethics & Medicine History, 3 (1), 31-53.
- Parsapoor, A., Mohammad, K., Malek Afzali, H., Alaedini, F. & Larijani, B. (2009). Examining the patients', Physicians' and Nurses' of Brilliant number one and governmental – Treatment Educational-Treatment Hospitals towards observing the patients' rights charter in 2006, Journal of Medical Ethics and History of Medicine, 2 (4), 79-90.
- Rangrazjedi, F., & Rabiee, R. (2005). Respecting patients' rights in public hospitals in Kashan. Quarterly Journal of Kermanshah University of Medical Sciences, 9 (1), 62-71.
- Rangrazjedi, F., & Rabiei, R. (2003). Examining the Physicians' and Nurses' Views towards patients' rights of Kashan city, Feiz Journal, 10 (3), 40-46.
- Sarbaz Zinabadi, M. & Kimiafar, Kh. (2011). Comparison of patient's rights in some developed countries and a model for Iran, Health Information Management, 8 (2), 218-227.
- Sedghiani, B. (1998). Organization and management of hospital. Volume 2, Tehran, Jahan Rayaneh publication (PC World), 471-490.