

Electronic Physician (ISSN: 2008-5842)

September 2016, Volume: 8, Issue: 9, Pages: 2935-2941, DOI: http://dx.doi.org/10.19082/2935

## Comparison Quality of Health Services between Public and Private Providers: The Iranian People's Perspective

Mehran Alijanzadeh<sup>1</sup>, Seyed Ali Moosaniaye Zare<sup>2</sup>, Roya Rajaee<sup>3</sup>, Seyed Mohammad Ali Mousavi Fard<sup>4</sup>, Saeed Asefzadeh<sup>5</sup>, Mahnaz Alijanzadeh<sup>6</sup>, Soheyla Gholami<sup>7</sup>

<sup>1</sup> Ph.D. Candidate of Health Care Management, Social Determinants of Health Research Center, Qazvin University of Medical Sciences, Qazvin, Iran

<sup>2</sup> Ph.D. Candidate of Health Services Management, Tehran Science and Research Branch, Islamic Azad University, Tehran, Iran

<sup>3</sup> M.Sc. of Health Care Management, School of Public Health, Shahid Beheshti University of Medical Sciences, Tehran, Iran

<sup>4</sup>General Practitioner, Employee in Alborz University of Medical Sciences at Health Department, Alborz, Iran

<sup>5</sup> Ph.D. of Health Care Management, Professor, Social Determinants of Health Research Center, Qazvin University of Medical Sciences, Qazvin, Iran

<sup>6</sup> B.Sc. of Health Information Technology, Student Research Committee, Deputy of Research and Technology, Mazandaran University of Medical Sciences, Sari, Iran

<sup>7</sup> M.Sc. of Health Care Management, Health Information Management Research Center, Hormozgan University of Medical Sciences, Bandar Abbas, Iran

Type of article: Original

### Abstract

**Introduction:** Health services quality has been the most important criteria of judging, and its improvement causes people's satisfaction of health systems. In a health system, public and private sectors provide services and typically have been effective in promoting health services quality of community. The aim of this study was to compare the quality of health services in both public and private sectors from the perspective of residents in Qazvin (Iran).

**Methods:** This cross-sectional study was conducted in 2014. The study population included all residents of Qazvin Province, and the sample size was estimated to 1002. The research tool was a perceptions of services quality standard questionnaire. Data were collected by trained interviewers visiting homes and were analyzed by IBM-SPSS software version 22 and t-test and linear regression. Cronbach's alpha coefficient was 0.91 and test–re-test coefficient was 83%.

**Results:** 741 people (74%) in their last visit to receive services were referred to the public sector. Between the perception of people participating in the study about medical equipment and supplies, welfare facilities, competence and experience of doctor, waiting time, rapid reception, and access to doctor in public and private sectors, significant differences were observed (p < 0.05). In the tangible realm in perception of health services, there was a significant difference in quality between the public and private sectors (p < 0.05). In addition, place of receiving services, waiting time, education, occupation, and type of received services were affecting factors in regards to perceptions of health services from the perspective of Iran's population (p < 0.05).

**Conclusion:** The results showed the importance of a tangible realm on people's satisfaction of health services. It seems that the public sector should pay more attention to this issue.

Keywords: Services quality, Public sector, Private sector, Perceptions

#### **Corresponding author:**

Soheyla Gholami, Health Information Management Research Center, Hormozgan University of Medical Sciences, Bandar Abbas, Iran. Tel: +98.9108383690, Fax: +98.2833337006, Email: sohailagolami@yahoo.com

Received: April 08, 2016, Accepted: June 02, 2016, Published: September 2016

iThenticate screening: June 02, 2016, English editing: August 15, 2016, Quality control: September 05, 2016

© 2016 The Authors. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

## 1. Introduction

Ouality of health services is the most important factor in the success and sustainability of health organizations, thus increasing loyalty and customer satisfaction of provider organization (1). The quality of services, especially in institutions faced with high volumes of visitors, can be used as a crucial measure in order to be considered customeroriented institutions; this has led to satisfaction of service recipients and development of health organization activities, which leads to effectiveness and efficiency of health service organizations (2, 3). Improving service quality can have advantages such as increasing trust and customer loyalty, profitability, and reducing cost for an organization and ultimately gaining competitive advantage (4). Quality, which is especially important for an organization such as a hospital, can yield positive results in indicators such as length of stay and bed turnover (5). In recent years, due to increased awareness and expectations of patients and health services customers from healthoriented organizations, paying attention to quality has become an essential issue. Today, patients pay more for their health and undoubtedly want to get more quality services because they are aware of the opportunity cost (6, 7). The Iranian health care system includes a mix of health care providers in the public and private sectors in which the public sector, especially the Ministry of Health and Medical Education, contribute more in this field. According to statistics, about 62% of the institutions affiliated with medical universities, 16% belong to private sector, 8% to Social Security, and the rest belong to other organizations (8, 9). Because, with the exception of referral and emergency patients, other patients choose a hospital wisely, examining and identifying factors affecting patients' perception of health services quality, and factors influencing choosing public or private hospitals is one of the main challenges of managers of a health system and managers of hospital medical centers, and these factors can assist in planning and decision-making in order to improve health-based services (10).

One of the valid models for measuring service quality from the perspective of customers and their perceptions is the Servqual model. In the model, five areas of empathy (individual attention to customer), reliability (ability to offer reliable and trustworthy services), responsiveness (willingness to help and respond to customer needs), assurance (merit and ability of employees to instill a sense of confidence in customers), and tangible (physical space and conditions of services environment including facilities, equipment, personnel, and communication channels) are examined from the perspective of health service customers, and this model can specify parameters from the customer's perspective (11). In Ramez's study to evaluate the quality of services provided at public and private hospitals of Bahrain, the results showed that patients were unsatisfied with services in both private and public hospitals; however, the quality of services in private hospitals was better than in public ones; in all dimensions of the study, except for empathy, a significant difference was observed (12). In some studies, recipients of health services have stated the quality of services provided at private hospitals was better than in public hospitals (13, 14). Results of a study conducted in the city of Qazvin in Iran with regard to quality health services in 2014 revealed that, from the perspective of people in Qazvin (Iran), there was a gap in health quality of organizations providing health services in this province; however, there was no study conducted for comparison between public and private sectors in Oazvin Province (15). Tabatabai's study also showed a quality gap in health services, and patients' expectations were not met adequately (16). Evaluating quality of health services provided to patients and their perception of services as well as identifying factors influencing their perception is among the main criteria of a health system. Thereby determining the strengths and weaknesses of health services quality can provide appropriate strategies to improve quality, meet the expectations of patients, increase the loyalty of patients to health-based organizations, and earn more revenue for the organizations. Thus, due to the lack of targeted study to evaluate quality of health services in public and private sectors in the province of Qazvin in Iran, we decided to conduct a study to compare the quality of health services of public and private sectors from the perspective of people of Qazvin.

## 2. Material and Methods

## 2.1. Research design and sampling

This cross-sectional study was conducted in Qazvin, Iran, in 2014. The number of samples was determined by using sample size formula, taking p = 0.5, and margin of error 5% equivalent to 400 samples, and, by considering cluster effect 2, the sample size was considered to be 800 subjects; for accuracy 1002 people were examined. According to 25% of rural population to urban ones in Qazvin province, 253 rural and 749 urban samples were collected. Sampling was in the cluster model and sample selection was random. Among the urban population of Qazvin, six provinces-Takestan, Abyek, Boein Zahra, Avaj, and Alborz-were selected. In Qazvin 403, Abyek 51, Avaj 38, Alborz 121, Boein Zahra 44, Takestan 92 samples were analyzed. Difference of sample size was due to the difference in city population. Also among the rural population in Abyek, Avaj, Alborz, Boein Zahra, Takestan, and Qazvin, 24, 16, 21, 56, 54, and 82 samples were taken, respectively.

# 2.2. Measurement tool

The standard Servqual questionnaire was used to collect data. The questionnaire consisted of two parts, background variables (education, age, occupation, place of receiving services, waiting time to receive services, and kind of receiving services public or private) and the main question regarding five dimensions of service quality (physical, reliability, responsiveness, assurance, and empathy). The questionnaire contained 22 questions to determine people's perceptions of which physical, reliability, and responsiveness have four questions each, and assurance and empathy five questions each. Quality of services was calculated based on a five-item Likert scale from very good to very bad. The type of sections to refer for receiving services was a question with two answers, including public and private sectors, in the questionnaire. The validity of questionnaire was approved by studies of Zarei and Nekoeimoghadam in Iran (17, 18). Reliability was measured based on Cronbach's alpha score 0.91 and a test–re-test coefficient of 0.83.

# 2.3. Data collection

To complete the questionnaire, the last place referred to receive service was considered as an option to response. Data were collected by referring to urban and rural people's homes and asking the question of quality of units and health service providers of Qazvin. First, a teaching workshop was held for interviewers and tried as much as possible to collect the data by trained indigenous forces of each area. Three hundredths percent of patients (three patients) did not express the type of used service, whether private or public; thus, this number was removed from the calculations.

# 2.4. Research ethics

The Ethics Committee of Qazvin University of Medical Sciences (Iran) approved the present study number 8346. Participants were told the importance of this study by researchers, and they were assured that their privacy will be considered. Participation in the study was voluntary, and if samples did not wish to participate in the study, they could opt out. The form of satisfaction was completed by the subjects.

# 2.5. Statistical analysis

Data analysis was done by SPSS software 21.00, using t-test and regression. Kolmogorov-Smirnov test confirmed data normality; and the Levene's test confirmed the equality of variances.

## 3. Results

The mean age of participants was  $32 \pm 9.9$ . Average waiting time for health services was  $73 \pm 47$  minutes; 29.8% (298 patients) participating in the study were highly educated; 75% (750 people) of participants lived in urban areas. From the perspective of people participating in the study, among proper medical equipment, appropriate facilities for patients and their entourage, qualified and experienced doctor, waiting time for services, rapid reception and access to a doctor, there was a significant difference between the public and private sectors (p < 0.05) (Table 1). Only in the realm of tangible (physical) health care quality, a significant gap between public sector  $3.47 \pm 0.67$  and private  $3.72 \pm 0.75$  was observed (p = 0.01); in terms of tangibility, health services quality of the private sector was higher (Table 2). In other areas of health services quality, no significant difference between public and private sector was higher such that this amount also was not significant (p < 0.05). Linear regression showed that waiting time for services, location of services (hospitals, clinics, physicians' offices, health homes, urban health posts, and health centers), services types, education, and occupation of the participants were factors affecting their perceptions of health services quality and had significant relationship with perceptions (p < 0.05) (Table 3).

## 4. Discussion

The main objective of this study was to compare health service quality in the public and private sector from the perspective of people in Qazvin, Iran. The results showed that clients' perception of services quality in five areas examined in private hospitals was totally higher than in public hospitals but was statistically significant in only one area and was consistent with almost all studies in this area (12-14, 19). Due to increasing public awareness of their right to receive quality services, improving service quality is considered more than the past, and people of different communities have been sensitive to this issue (6). Thus, for being and remaining in this competitive arena, all health-based organizations should provide quality services adapted to people's needs to obtain customer satisfaction of provider organization's services. Private sectors have been more successful than public hospitals due to focus on needs and wishes of patients and providing quality services, especially in physical areas. In this study, only in the tangible or physical realm of health services quality, people's perception of services quality in private hospitals was

at a higher level than that in public hospitals. However, in al-Khattab's study of hospitals in Jordan (20) and Irfan's study of hospitals in Pakistan (21), the quality of services offered in private hospitals in all aspects was higher than in public hospitals such that it was not consistent with the present study.

Subject	Sector	n	Mean±SD	<i>p</i> -value
Appropriate and clean environment	Public	741	$349\pm0.83$	0.10
	Private	258	$3.74\pm0.91$	
Appropriate appearance of doctors and staff	Public	741	$3.87\pm0.76$	0.55
	Private	258	$3.96\pm0.71$	
Appropriate equipment and devices	Public	741	3.39±0.90	0.02
	Private	258	3.87±0.88	
Providing appropriate facilities	Public	741	3.13±0.96	0.00
	Private	258	3.32±0.98	-
Service without delays	Public	741	3.42±1.14	0.19
	Private	258	3.20±1.17	-
Performing service in the promised time	Public	741	3.44±0.99	0.29
	Private	258	3.42±1.14	-
Staff and doctors competent	Public	741	3.67±0.97	0.01
•	Private	258	3.99±0.87	
Explain health condition, diagnosis and treatment in understandable way	Public	741	3.60±0.98	0.33
	Private	258	3.63±0.99	-
Reliable behavior of doctors	Public	741	3.69±0.95	0.10
	Private	258	3.94±0.96	-
Willingness to fix the patient's problem	Public	741	3.54±1.04	0.49
	Private	258	3.60±1.06	-
Appropriate waiting time	Public	741	3.36±1.09	0.00
	Private	258	3.17±1.27	
Appropriate and fast receptions	Public	741	3.48±1.06	0.04
	Private	258	3.53±1.17	
Friendly behavior from staff and doctors	Public	741	3.73±0.98	0.95
	Private	258	3.87±0.99	-
Access to related doctor	Public	741	3.43±1.12	0.00
	Private	258	3.86±1.01	
Respectful toward patient	Public	741	3.73±0.92	0.81
	Private	258	3.75±0.89	
Provide privacy during treatment	Public	741	3.85±0.85	0.23
	Private	258	3.94±0.82	
Reply to answer questions	Public	741	3.59±1.01	0.48
	Private	258	3.66±1.04	
Quickly resolving problems of patients	Public	741	3.37±1.08	0.43
	Private	258	3.36±1.11	
Receive feedback from patients	Public	741	3.36±1.11	0.21
	Private	258	3.22±1.19	
Access in services at all time	Public	741	3.27±1.15	0.15
	Private	258	3.05±1.26	
Willingness to help patients	Public	741	3.51±0.99	0.18
	Private	258	3.65±0.93	
Understanding patients' specific needs	Public	741	3.49±1.03	0.34
	Private	258	3.56±1.05	

**Table 1.** Comparing the mean and standard deviation subsets health services quality

Realms	Sector	п	Mean±SD	<i>p</i> -value
Tangible	Public	741	3.47±0.67	0.01
	Private	258	3.72±0.75	
Reliability	Public	741	3.53±0.84	0.86
	Private	258	3.56±0.81	
Responsiveness	Public	741	3.52±0.86	0.62
	Private	258	3.56±0.87	
Assurance	Public	741	3.67±0.78	0.79
	Private	258	3.82±0.74	
Empathy	Public	741	3.40±0.89	0.88
	Private	258	$3.37 \pm 0.88$	
Total Perceptions	Public	741	3.52±0.70	0.74
	Private	258	3.60±0.71	

Table 2. Comparing the mean and standard deviation areas of health services

Table 3. Linear regression	factors affecting the	perception of c	quality health services
U	U	1 1	1 2

MODEL	β	SD	Beta	Confidence interval	Sig
Constant	3.29	0.12	-	3.05-3.54	0.00
Waiting Time	0.00	0.00	-0.08	0.00-0.00	0.00
Place of Receiving Services	0.04	0.01	0.11	0.01-0.06	0.00
Type of Services	0.11	0.05	0.07	0.01-0.21	0.02
Education	-0.04	0.02	0.07	0.02-0.08	0.04
Occupation	0.02	0.01	0.06	0.00-0.04	0.05

It seems that implementation of the healthcare reform plan in Qazvin Province somewhat reduced the gap between public and private services and met the relative satisfaction in this province. In addition, in Yousapronpaiboon et al.'s study to check the quality of services in private hospitals in Thailand (22), the results showed that, only in assurance area of health services quality, significant difference was found between private and public hospitals; in other areas such as assurance, responsiveness, and empathy, differences between the public and private sector were not significant, which was consistent with the results of this study. In the present study, a significant difference in terms of tangibility could be due to attractive environment and appropriate hoteling services in private hospitals than in public hospitals. In private hospitals, in addition to medical aspects, special attention is paid to the appearance and physical aspects of the environment, such as hoteling, sufficient space, proper waiting room, and paying more attention to patients in order to meet their expectations.

The results also indicate that waiting time, type of service, education, occupation, and location of services affect people's perceptions. In the study of Ameri et al., examining the causes of choosing private hospitals in Yazd, the results showed that one of the factors affecting people's perception in choosing hospitals is education (7). In addition, DengJuin (23) and Bakar (24) reported that patients with higher education had higher expectations to receive more quality services than the others; thus the result was consistent with the present study. In the study of Zarei et al., there was a significant relationship between education and choosing of hospitals, and those with higher education had higher expectations than educated patients (17). In Ramez's study, which was done at private and public hospitals in Bahrain, variables such as occupation and location of services were among factors affecting people's perception that the results were consistent with the present study (12). Nasiripour et al. reported long waiting time as factors affecting patients' dissatisfaction of quality of services and quality at service provider centers (25) such that the result was consistent with the present study. A study in Iran showed that factors such as equipment, personnel competence, and other social variables also have been effective in improving services quality (26). A study in Belgium showed that, in addition to experience and competence of medical personnel, distribution in the countries also can affect the services quality, in a way that there was a direct (positive) relationship between the higher densities of health care workers with an increase of health services quality (27). In the study of Asefzadeh in Iran, results showed that the quality of services provided in health centers was higher than in medical centers such as hospitals and doctors' offices (28). Patient satisfaction of quality of provided services is the most important factor in selection of public and private services. If patients are dissatisfied with the services provided at a hospital, they will choose another hospital for treatment the next time. A study in Iran showed that 38% of changes in people's trust of a health care system associated with quality of health services and physician's experience and skills and the

waiting time for services are among factors enhancing loyalty and trust in the system (29). Therefore, service provider centers should check the quality of provided services from their patients' perspective; thus, reducing weaknesses and taking opportunities, especially in the public sectors, will enhance the quality of services and improve patients' satisfaction. Among the limitations of the present study was lack of comparing the quality of health services in rural and urban areas, and it is recommended to be considered in future studies.

#### 5. Conclusions

In summary, the findings showed that only in a tangible realm of health services quality, the private sector enjoyed a higher status. Because the issue of health services quality is important for customers, the importance of the findings is that we can focus more on weaknesses and, by taking appropriate facilities and equipment and paying more attention to amenities for customers, improve the public sector. It is suggested to improve the quality of public services by updating medical equipment and paying more attention to amenities, competence, and experience of health care workers, especially in teaching hospitals (because of the use of students), reducing waiting time for services, rapid reception and convenient access to a doctor should be considered. Conducting a complementary study in the field of examining the service quality gap between urban and rural community in the Qazvin Province in Iran with descriptive methodology can be an appropriate path for future research in this field.

#### Acknowledgments:

We appreciate the Head of Social Determinants of the Health Research Center, Deputy of Research and Health of Qazvin University of Medical Sciences, as well as all health professionals in rural and urban health centers, health homes, and health posts of the city that help researchers in this project (No. 8346).

### **Conflict of Interest:**

There is no conflict of interest to be declared.

### Authors' contributions:

All authors contributed to this project and article equally. All authors read and approved the final manuscript.

#### **References:**

- Ibarra L, Casas E, Partida A. Servqual methods applied to Agencia Fiscal del Estado de Sonora: An analysis about service quality. Procedia - Social and Behavioral Sciences. 2014; 148(25): 87-93. doi: 10.1016/j.sbspro.2014.07.021.
- Aghamolaei T, Eftekhaari TE, Rafati S, Kahnouji K, Ahangari S, Shahrzad ME, et al. Service quality assessment of a referral hospital in Southern Iran with SERVQUAL technique: patients' perspective. BMC Health Serv Res. 2014; 14: 322. doi: 10.1186/1472-6963-14-322. PMID: 25064475, PMCID: PMC4115484.
- 3) Prattana P, Nattapan B, Patchaya M, Kanokporn L. Health Care Service Quality: Case Example of a Hospital with Lean Implementation. POMS 23 rd. Annual Conference, Chicago, Illinois, U.S.A. 2012.
- 4) Wabo C, Ortenwall P, Khorram-Manesh A. hospital evacuation, planning, assessment, performance and evaluation. Journal of acute disease. 2012; 1(1): 58-64. doi: 10.1016/S2221-6189(13)60013-X.
- 5) Medici A, Murray R. Hospital Performance and Health Quality Improvements in São Paulo (Brazil) and Maryland (USA). Word bank. 2010; 156.
- 6) Victoor A, Friele RD, Delnoij DM, Rademakers JJ. Free choice of healthcare providers in the Netherlands is both a goal in itself and a precondition: Modeling the policy assumptions underlying the promotion of patient choice through documentary analysis and interviews. BMC Health Serv Res. 2012; 12: 441. doi: 10.1186/1472-6963-12-441. PMID: 23206601, PMCID: PMC3548770.
- Amery H, Panahi M, Jafari A, Khalafi A, Alizadeh H, Abbaspour R. The Reasons of Private Hospital Selection by patients in Yazd Province for Treatment. Journal of Torbat Heydariyeh University of Medical Sciences. 2013; 1(3): 37-42.
- 8) Ministry of Health and Medical Education (MOHME), statistics and information of hospitals site in Iran. Available from: http://avab.behdasht.gov.ir/rbp
- 9) Vali L, Tabatabaee SS, Kalhor R, Amini S, Kiaei MZ. Analysis of Productivity Improvement Act for Clinical Staff Working in the Health System: A Qualitative Study. Glob J Health Sci. 2015; 8(2): 106-16. doi: 10.5539/gjhs.v8n2p106. PMID: 26383203, PMCID: PMC4803926.
- 10) Jalili S, Aghaei M, Saeid Mahdavi A. Studying the Factors for Selecting Public or Private Hospitals by Non Emergent Patients of Ardabil District in 2012. J Ardabil Univ Med Sci. 2014; 14(4): 388-97.

- 11) Butt MM, de Run EC. Private healthcare quality: applying a SERVQUAL model. Int J Health Care Qual Assur. 2010; 23(7): 658-73. doi: 10.1108/09526861011071580. PMID: 21125961.
- Ramez W. Comparing Patients' Satisfactions Towered Service Quality of Public and Private Hospitals in Bahrain. International Business and Management. 2014; 8(1): 72-82. doi: 10.3968/j.ibm.1923842820140801.1140.
- 13) Zarei E. Service quality of hospital outpatient departments: patients' perspective. Int J Health Care Qual Assur. 2015; 28(8): 778-90. PMID: 26440482.
- 14) Karekar P, Tiwari A, Agrawal S. Comparison of Service Quality between Private and Government Hospitals: Empirical Evidences from Yavatmal City, Maharashtra. International Journal of Advance Research in Computer Science and Management Studies. 2015; 3(6): 39-43.
- 15) Alijanzadeh M, Asefzadeh S, khoshtarkib H, Ghamari F, Alijanzadeh M. The Perceptions and Expectations Survey of the People about Quality Health Services in Qazvin Province. Health Inf Manage. 2015; 12(5): 600.
- 16) Tabatabaei M, Behmanesh Pour F, Share Mollashahi S, Sargazi Moakhar Z, Zaboli M. The Quality Gap in the Services Provided by Rural Maternity Units in Southeast of Iran. Health Scope. 2015; 4(4): 25344. doi: 10.17795/jhealthscope-25344.
- 17) Zarei A, Arab M, Froushani AR, Rashidian A, Ghazi Tabatabaei SM. Service quality of private hospitals: the Iranian patients' perspective. BMC Health Serv Res. 2012; 12: 31. doi: 10.1186/1472-6963-12-31. PMID: 22299830, PMCID: PMC3306759.
- 18) Nekoei Moghadam M, Amiresmaili M. Hospital services quality assessment: Hospitals of Kerman University of Medical Sciences, as a tangible example of a developing country. Int J Health Care Qual Assur. 2011; 24(1): 57-66. doi: 10.1108/09526861111098247. PMID: 21456498.
- 19) Taner T, Antony J. Comparing Public and Private Hospital Care Service Quality in Turkey. Int J Health Care Qual Assur Inc Leadersh Health Serv. 2006; 19(2-3): i-x. doi: 10.1108/13660750610664991. PMID: 16875104.
- 20) Al Khattab S, Aborumman As. Healthcare Service Quality: Comparing Public and Private Hospitals in Jordan. International Business Management. 2011; 5(5): 247-54. doi: 10.3923/ibm.2011.247.254.
- 21) Irfan M, Ijaz A. Comparison of Service Quality between Private and Public Hospitals: Empirical Evidences From Pakistan. Journal of Quality and Technology Management. 2011; 7(1): 1-22.
- 22) Yousapronpaiboon K, Johnson W. A Comparison of Service Quality between Private and Public Hospitals in Thailand. International Journal of Business and Social Science. 2013; 4(11): 176-84.
- 23) Lin DJ, Li YH, Pai JY, Sheu IC, Glen R, Chou MJ, et al. Chronic kidney-disease screening service quality: questionnaire survey research evidence from Taichung City. BMC Health Serv Res. 2009; 9: 239. doi: 10.1186/1472-6963-9-239. PMID: 20021684, PMCID: PMC2803180.
- 24) Bakar C, Akgun HS, Al Assaf A. The role of expectations in patients' hospital assessments: A Turkish university hospital example. Int J Health Care Qual Assur. 2008; 21(4): 343-55. doi: 10.1108/09526860810880144. PMID: 18785460.
- 25) Nasiri pour AA, Jahangiri K, Aghamohamadi S. Study Of Waiting Time In Shahid Dastani's Specialized Clinics Of Shariati Hospital Using By Six Sigma Model. payavard. 2011; 4(3-4): 50-9.
- Mosadeghrad AM. Factors affecting on medical service quality. Int J Health Policy Manag. 2014; 3(2): 77-89. doi: 10.15171/ijhpm.2014.65. PMID: 25114946, PMCID: PMC4122083.
- 27) Blozik E, Rapold R, Reich O. Prescription of potentially inappropriate medication in older persons in Switzerland: does the dispensing channel make a difference. Risk Manag Healthc Policy. 2015; 8: 73-80. doi: 10.2147/RMHP.S78179. PMID: 25977609, PMCID: PMC4418391.
- 28) Asefzadeh S, Gholami S, Rajaee R, Najafi M, Alijanzadeh M. Evaluation of the Quality of Health Service Providers: The Iranian People Perspective 2014. Electronic Physician. 2016; 8(3): 2073-80. doi: 10.19082/2073. PMID: 27123214, PMCID: PMC4844471.
- 29) Zarei E, Daneshkohan A, Khabiri R, Arab M. The Effect of Hospital Service Quality on Patient's Trust. Iran Red Crescent Med J. 2014; 17(1): 17505. PMID: 25763258, PMCID: PMC4698328.