

## Corruption in Hospitals, Causes and Prevention

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### Abstract

**Background and Objectives:** Corruption is a complex and multifaceted phenomenon emerging when people misuse their power for personal gain. The current study aimed to delve into the causes of corruption in hospitals and anti-corruption preventive measures.

**Methods:** In this review study, national and international databases were searched using the keywords “corruption”, “health” and “hospital” and their English equivalents, both separately and in conjunction.

**Results:** In both advanced and developing countries, corruption is on the rise in hospitals and related preventive measures are steadily getting more complicated. In addition, informal payments have affected hospitals and paying for officially free of charge services has led to patients’ distrust in the healthcare system.

**Conclusion:** Allocation of different roles and responsibilities to regulators, payers, healthcare providers, suppliers, and consumers has made good decision-making difficult even with the absolute honesty of all the people involved. In other words, in organizations with underlying principles of secrecy and confidentiality, such consequences as corruption are inevitable.

**Keywords:** Corruption, Hospitals, Prevention and control.

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### Introduction

Corruption is a complex and multifaceted phenomenon (1,2). Various interpretations of corruption exist around the world and there is no agreement on a conclusive definition of the term. Corruption is the abuse of entrusted power for personal gains (3). To the supreme leader, corruption means all those greedy cheaters who smile to people’s face and stab them in the back and stuff their own pockets with people’s money. Nowadays corruption is considered a universal public disease and a major obstacle to the proper governing and sustainable development of countries (4, 5). Corruption is not limited to a specific system, rather it can affect any sector, whether public or private, and the

budget of the susceptible organization can vary. In other words, widespread corruption is a mirror of the surrounding community (3). Studies indicate that increased corruption in the healthcare system gives rise to dissatisfaction among people (6). In both developing and developed countries, the hospital sector represents a significant risk of corruption. In a survey conducted in 109 countries, more than half of respondents in 42 countries regarded the health care sector as corrupted (7). On average, hospitals receive between 30-50% of health budget around the world, and this percentage may be as high as 70% in some areas, such as Eastern Europe (8).

Health care providers in hospitals are particularly vulnerable to corruption and conflict of interests since they contribute greatly to medical decisions, such as prescribing medications, determining hospital stay, and patients' referrals for laboratory tests and further services and counseling. In such circumstances, health care providers may act against patients' common interests and needs, such as direct funding (under the table money), paternity and guardianship, and abuse of patients' positions. In addition, patients generally abide by decisions taken by health professionals. Consequently, health professionals are in a unique position that can determine the services provided to consumers. Given the vital role of health professionals in creating a corruption-free environment, the current study investigated the causes of hospital corruption and anti-corruption preventive measures.

## Methods

In this review study, internal databases, including Magiran, SID, and IranMedex, as well as external databases, namely PubMed, Google scholar, Scopus and WOS were searched for all related articles using the keywords of corruption, health, and hospital along with their English equivalents both separately and in combination. Searches for related articles were conducted simultaneously by two researchers from May 1998 to July 1989. Initial searches only included full-text articles in Persian and English (68 cases). Inclusion criteria entailed: 1) full-text access, 2) articles related to corruption in the health and hospital system (44 cases). On the other hand, exclusion criteria included: 1) non-Persian or non-English articles, 2) articles unrelated to corruption in hospitals (26 cases).

## Result

Corruption affects health policy and cost preferences and can exert a direct negative impact on access and quality of patient care, making the distribution of health care services uneven. Corruption in hospitals violates the citizens' right to health in the country. Figure

(1) illustrates the different types of corruption in hospitals.

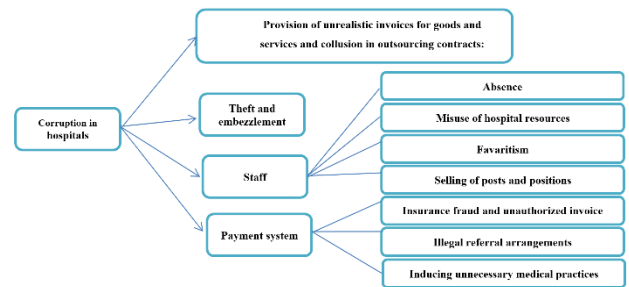


Figure 1: Corruption in hospitals

The results of several studies also indicated that payments made by patients for officially free of charge services pose a serious problem to many middle and low-income countries. The hidden nature of informal payments has made it difficult to offer an accurate measurement. Physicians perform a leading role in forming expectations for informal payments. The position of this profession can also motivate the physicians to receive direct payment from patients.

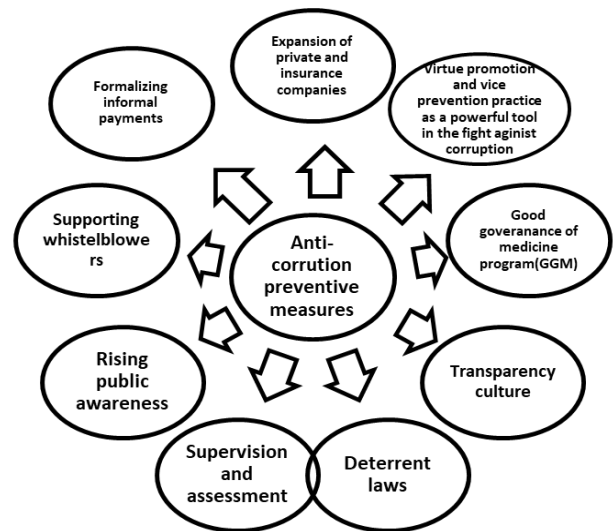


Figure 2. Anti-corruption preventive measures

Hospitals are also one of the most important sectors that urgently need corruption eradication. Therefore, it is essential to prevent corruption to improve this situation. Figure (1) depicts anti-corruption preventive measures.

## Discussion

### 1. The causes of corruption

The causes of corruption are listed below:

1.1. Provision of unrealistic invoices for goods and services and collusion in outsourcing contracts:

After staff salaries and benefits, excessive expenditures arise from provision of medicines and supplies. Shopping agents and suppliers may be looking for bribes, or contractors may collude with companies or bribe hospital officials to win contracts. Evidence in Argentina, Bolivia, Venezuela, and Colombia revealed that these measures increase the price of purchased supplies.

In 32 public hospitals in Colombia, for instance, in 1998, an estimated 2 billion US dollar which could be spent on health insurance coverage of 24,000 people was consumed on seven specific medicines as advance payment. Small hospitals where specialists are scarce face particular challenges to reduce their vulnerability to the abuses of suppliers since specialist might ask for specific equipment or products and affects managerial decisions (9). Corruption in this sector can be attributed to poor and inadequate supervision (10-12). In addition, one of the major challenges in this respect is equipment maintenance. When equipment needs servicing, responsible engineers usually do not promptly react and patients turn to private facilities due to delayed repairing or equipment deactivation. Moreover, in case of repairing, the technicians increase the maintenance expenses to gain sufficient interests (13) which results in squandering large amounts of country's health resources.

1.2. Embezzlement and theft

In fact, embezzlement is civil servants' abuses of public properties and money in the performance of their governmental responsibilities. Theft is the taking of another person's funds or assets without that person's permission or consent. This illegal act in this context implies theft of cash or other revenues from hospital funds by financial staff or other departments entrusted with handling money and revenue. Hospitals with a poor economic system that are not computer-controlled are more susceptible to corruption (14). In developing countries, embezzlement is usually

pertinent to revenues from healthcare customers generated by drug sale earnings and diagnostic tests, as well as payments for patients admission. The results of a study revealed that staff of a hospital clinic in Uganda transferred 68-77% of this revenue to their own bank account (15). Theft and embezzlement result in worsened working conditions, reduced salaries and irregular payments (16) and exert a profound impact on the reduction of health professional satisfaction.

1-3-Staff

Personnel corruption includes absences from workplace, misuse of hospital resources, favoritism in invoice issuance, and selling positions.

1.3.1: Absence: means not being at work or working for less than working hours while they are paid fully, it is also referred to as "stolen time". For example, some physicians do not attend public hospitals while receiving payment for their current position and often spend time in private institutions (10). Many other examples can be found in this regard, such as members of the medical faculty who do not attend the hospital on duty and work in the private sector. Moreover, 32% of health professionals interviewed in Peru said that absence from work was very common among hospital staff, and in Venezuela physicians and nurses were absent 30-37% of contracted hours. Absence of work has been linked to low salaries and dual-occupation which is sometimes considered as a management mechanism rather than corruption (16-18-18).

1.3.2. Misuse of hospital resources: refers to the use of hospital equipment, space, vehicles, and funds for private business and personal gain. This type of corruption occurs more often in environments where employees are of the idea that injustice, favoritism, and disrespect for meritocracy prevail in the workplace (19).

1-3-3. Favoritism in invoice issuance: implies deferring payments or forging insurance documents for specific individuals and the use of hospital budgets for the benefit of friends, family members or members of an association (20) which is prevalent in many cases.

1.3.4. Selling positions and posts: pertains to extortion or taking bribes to influence recruitment and licensing decisions. In this regard, the human resources supply system must have transparent measures and procedures and be accountable for the implemented measures and prioritize the principle of meritocracy and justice in recruitment, selection, and employment (21). The use of corporate personnel and abusing their rights is common especially in case of nurses. Companies owned by specific individuals cause a vicious cycle and procedure in squandering of health resources.

#### 1.4. Payment system

Corruption in the payment system includes insurance fraud and unauthorized invoice issuance, illegal referral arrangements and the induction of unnecessary medical procedures.

1.4.1. Insurance fraud and unauthorized invoice issuance: refer to illegal invoice issuance to companies, friends or patients for services that are not covered by insurance or not actually provided in order to maximize revenue as much as possible. It entails forging and manipulating records, invoices or the creation of superficial records. For instance, medicine dealers and distributors can issue fake invoices for a large number of patients on a large scale and inflict substantial damage to the economic system and health of community (22).

1.4.2. Illegal referral arrangements: refers to the physicians' use of jobbery for the referral of patients. For instance, doctors make contracts with pharmaceutical companies or medical equipment to get paid if they refer their patients to them. In this case, physicians may prescribe a medicine or device that is too expensive or the patient does not need it at all (10). Moreover, physicians refer patients to their public offices for surgery without any reason which is called "revolving doors" in which patients are on the go between the public system and the private sector (22). Revolving doors" is a type of influential relationships affecting the activity of economic firms. Therefore, the private sector may use the generated economic rent by motivating public sector employees in a "quasi-legal" but

"unethical" manner. Since the "revolving doors phenomenon" is rooted in conflicts of interests, the methods of different countries for dealing with the challenges they may face when implementing conflicts of interest directly or indirectly affect the revolving door phenomenon (23).

1.4.3. Inducing unnecessary medical practices: Many hospitals and clinics pay the physicians some funds and present these unessential issues as occupational health, hospital or clinic services and encourage clients to use these services.

#### 1.5. Informal payments for healthcare

Payments made by patients for officially free of charge services present a serious problem in many middle and low-income countries, make poor people abandon or delay treatment, and can also exert negative effects on the quality of clinical services. Some patients also get poverty-stricken due to borrowing or selling their assets to pay for informal payments. Therefore, in countries where this form of appreciation is common, informal payment may be asked for free services and determines the degree of access to quality of services which exerts adverse effects on equity and efficiency (25-28).

Informal payments are both diverse and widespread being manifested in many forms, ranging from cash payments to non-monetary offers and from gift-giving to informal charging. While gift-giving typically represents a token of appreciation, it is counted as a service charge in informal payment. This kind of payment undermines the official payment system, reduces access to health systems, and prevents health improvement. Moreover, it can fuel unprofessional conducts that are merely financial (29, 30). One of the reasons for the prevalence of informal payments is the shortage of human resources that can motivate service providers to prioritize affluent healthcare customers (2.5%).

##### 1.5.1 Informal payment dimensions

The hidden nature of informal payments has made it difficult to offer an accurate measurement. For example, a study conducted on providers and the public in Albania revealed that providers considered payments as

gifts, whereas the general public thought of this kind of payment as mandatory for receiving healthcare services. Unofficial payments account for 84% of total health expenditure in Azerbaijan (31).

#### 1.5.2. Role of physicians in informal payments (under-the-table)

Physicians play a leading role in forming expectations of having to make informal payments. The position of this profession can also motivate them to receive direct payment from patients. Informal payments have almost doubled the official income of physicians in Poland (32). In the same vein, in Bulgaria, owing to informal payments, physicians' average monthly income has increased by \$ 100 (33). Studies suggested that doctors with the highest salaries and family income receive more informal payments. Therefore, it does not suffice to increase physicians' salaries to the level of the majority of society or even higher. In Greece, for example, after the introduction of national health services in early 1980, hospital doctors' salaries increased significantly; however, this increase had no effect on the prevalence of informal payments (34).

### 2. Anti-corruption measures

The following anti-corruption preventive measures can be suggested:

2.1. Formalizing informal payments: It is essential that these payments be fully transparent and traceable to ensure that they are definitely replaced informal payments (3). Of course, the realization of service tariffs is acceptable if paid by the insurance companies. Otherwise, it will deprive many citizens of health services which is against citizenship rights charter. Article 2 of Citizenship rights states: Citizens have the right to enjoy a decent life and necessities thereof, such as clean water, adequate food, promotion of health, environment, appropriate medical treatment, access to medicines, and medical, medicinal and health equipment, supplies and services in compliance with current standards of science and national standards, and safe and sustainable environmental conditions.

2.3. Expansion of private and insurance companies: Some believe that private sector

activity in the health sector will increase informal payments since it provides affluent patients with another alternative. In addition, private insurance companies can also tackle the problem of informal payments. Nonetheless, informal payments and the cultural tendencies associated with the healthcare system hinder the development of private insurance companies. It is more convenient for patients to directly pay their physician or other providers, rather than to pay to an intermediary company that appears to be interfering with the patient-physician relationship (3).

2.4. Good governance for medicines program (GGM): is intended to be a guideline suggested by The World Health Organization for promoting transparency in the field of health in an attempt to combat drug-related corruption. The core concept of GGM approach is that policymakers and government officials adopt appropriate solutions by the identification of weaknesses and strengths (35).

2.5. Culture of Transparency: Human experiences have revealed that withholding necessary information from people results in corruption. In this regard, transparency can be effective by publishing reports and monitoring the adherence of private companies to ethical rules and regulations. As a matter of fact, transparency builds trust by sharing information, creates learning opportunities, and leads to more sensible decisions (36-37).

2.6. Deterrent laws: When corruption is detected, the response must be completely deterrent with both preventive and restraining effects (39) so that no incentive remains to continue corruption (38).

2.7. Monitoring and evaluation: Unexpected inspection of hospitals and the involvement of people in monitoring the presence of physicians and staff can be effective in reducing corruption. Furthermore, it entails the recruitment of staff to do this and purchase equipment to control processes that show the number of provided and received services (22) in a way that transparency increases in hospitals through the mechanization of the inspection process.



2.8. Raising public awareness: people must be informed about corruption using various means and they should be informed of what services they are entitled to so that they can refuse to give a bribe if a medical practitioner requests it (1). Raising public awareness of their fundamental rights, especially in health field, is an integral part of human rights education.

2.9. Protecting the whistleblowers: If the staff of healthcare centers discloses corruption, they should be safeguarded, apart from receiving encouragement. Whistleblowing and supporting it is one of the most effective ways to combat corruption. Therefore establishing legal, cultural, and political mechanisms is critical to support these actors (41).

2.10. Virtue promotion and vice prevention as a powerful tool in the fight against corruption:

In a similar vein, virtue promotion and vice prevention creates a spirit of empathy and supervision in society. The hospital as a small part of the community becomes efficient if it is subjected to the practice of virtue promotion and vice prevention. Employees who consider themselves agents of virtue promotion and vice will prevent and even eradicate corruption. Hospital visitors as agents of virtue promotion and vice prevention play a considerable role in the transparency and reflection of the shortcomings of the hospital authorities (42). In a nutshell, the concept and function of virtue promotion and vice prevention in health regulatory system is the prevention of evil, including corruption. Implementation and application of virtue promotion and vice prevention institution can address the issue of corruption in health system, especially in hospitals. The phenomenon of whistleblowers which is institutionalized in developed countries has been adapted from Islamic virtue promotion and vice prevention practice. Our religious country which adheres to Imam Hussein's movement in the fight against corruption and cruelty can revive Iranian health system by institutionalizing virtue promotion and vice prevention practice in the regulatory system.

## Conclusion

According to studies, the main causes of corruption include: 1) issuance of fake invoices for goods and services, 2) collusion in outsourcing contracts, 3) embezzlement and theft, 4) absence from workplace, 5) misuse of hospital resources, 6) favoritism in issuing invoices and expenditures, and 7) selling of posts and positions in healthcare staff. In other words, roles and responsibilities in hospitals are allocated to regulators, payers, healthcare providers, suppliers, and consumers in a way that makes good decision making difficult, even when everyone is fully honest. In organizations with the underlying principle of secrecy and confidentiality which misuses privacy, intellectual property, trade secrets, and national security, consequences such as corruption, individual governance, and conflicts of interest are inevitable.

In revolving door theory, the private sector uses the generated economic rent by motivating public sector employees in a "quasi-legal" but "unethical" manner. Corruption is a problem that threatens all countries and is not limited to one particular country or region. One of these practices is law enactment on whistleblowing and supporting whistleblowers. In addition, enforcement of such laws as Law on Free Access to Information, supporting virtue promoters and vice preventers, and Transparency Law can improve the efficiency, accountability, and agility of the administrative and financial system in the health system, and especially in hospitals. Both involvement in corruption and turning a blind eye to economic corruption slows down public movement in the country.

According to the supreme leader: "Thief does not stop stealing by being called a thief, rather practical measures must be implemented in this respect. Countries' authorities should not deliver a speech and hold conferences on corruption as the newspapers do, rather the corrupt must be punished in public. "

In order to have an efficient and corruption-free healthcare environment, healthcare customers and patients must first be informed and then monitored constantly by the

implementation of external monitoring systems.

### Conflict of interest

The authors declare that they have no conflict of interest regarding the publication of this article.

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### References

1. Vian T. Review of corruption in the health sector: theory, methods and interventions. *Health Pol Plann* 2008;23(2):83-94.
2. Mardali M, Nasiripour A, Masoudi A, Abdi J. Model of Corruption Measurement for Islamic Republic of Iran's Healthcare System. *Med Law*. 2018;11(43):127-46. [Persian]
3. Savedoff WD. *Global Corruption Report 2006*. 1 ed. London: Pluto Press; 2006.
4. Darvish H, Azimi Zachevani F. The effect on reducing corruption organization Transparency mediated by organizational trust studied Khordad hospital staff Varamin. *J Public Admin (Management Knowledge)*. 2016;8(1):153-66. [Persian]
5. Holmberg S, Rothstein B. Dying of corruption. *Health Econ Pol Law*. 2011;6(4):529-47.
6. Habibov N. Effect of corruption on healthcare satisfaction in post-soviet nations: A cross-country instrumental variable analysis of twelve countries. *Soc Sci Med*. 2016;152:119-24.
7. Transparency International. *Global corruption barometer* [Internet]. 2013 [2019 July 10]. Available from: [www.transparency.org/gcb2013/in\\_detail](http://www.transparency.org/gcb2013/in_detail)
8. Becker D, Kessler D, McClellan M. Detecting medicare abuse. *J Health Econ*. 2005;24(1):189-210.
9. Inter-American Development Bank, organize charity soccer tournament in Washington, DC [Internet]. 2002 [2019 July 12]. Available from: <https://www.iadb.org/en/news/news-releases/2002-06-03/inter-american--development-bank-organize-charity-soccer-tournament-in-washington-dc%2C237.html>
10. Lewis M. Governance and corruption in public health care systems. Center for global development [Internet]. 2006 [2019 July 4]. Available from: <http://www.cgdev.org/publication/governance-and-corruptionpublic-health-care-systems-working-paper-78>
11. Transparency International *Global Corruption Report* [Internet]. 2006 [2019 July 2]. Available from: [http://www.transparency.org/whatwedo/publication/global\\_corruption\\_](http://www.transparency.org/whatwedo/publication/global_corruption_)
12. Mostert S, Njuguna F, Olbara G, Sindano S, Sitaresmi MN, Supriyadi E, et al. Corruption in health-care systems and its effect on cancer care in Africa. *Lancet Oncol*. 2015;16(8):394-404.
13. Delpasand K, Kiani M, Afshar L, Tavakkoli SN, Shirazi SFH. Extracting the Ethical Challenges of Pharmacy Profession in Iran, a Qualitative Study. *J Res Med Dent Sci*. 2018;6(1):52-8.
14. Mackey TK, Vian T, Kohler J. The sustainable development goals as a framework to combat health-sector corruption. *Bull World Health Organ*. 2018;96(9):634-43.
15. McPake B, Asiimwe D, Mwesigye F, Ofumbi M, Ortenblad L, Streefland P, et al. Informal economic activities of public health workers in Uganda: implications for quality and accessibility of care. *Soc Sci Med*. 1999;49(7):849-65.
16. Ferrinho P, Omar MC, Fernandes MD, Blaise P, Bugalho AM, Lerberghe WV. Pilfering for survival: how health workers use access to drugs as a coping strategy. *Hum Resour Health*. 2004;2(1):4.
17. García-Prado A, Chawla M. The impact of hospital management reforms on absenteeism in Costa Rica. *Health Policy*. 2006;21(2):91-100.
18. Sommersguter-Reichmann M, Stepan A. Hospital physician payment mechanisms in Austria: do they provide gateways to institutional corruption? *Health Econ Rev*. 2017;7(1):11.
19. Mirzaei V, Rahimnia F, Mortazavi S, Shirazi A. Organizational Cynicism of the Nurses: A Phenomenological Study. *J Qual Res health Sci*. 2018;7(1):88-102. [Persian]
20. Mostert S, Sitaresmi MN, Njuguna F, van Beers EJ, Kaspers GJ. Effect of corruption on medical care in low-income countries. *Pediatr Blood Cancer*. 2012;58(3):325-6.
21. Imani H, gholipour a, Azar A, Pourezat AA. Validation of Dimensions and Component of Risk Culture: Using Fuzzy Delphi Method. *Public Administration*. 2019;11(42):5-32. [Persian]
22. Jodaki H. *Identification of Possible Corruption in the Health System*. 1 ed. Tehran: The Social Security Research Institute; 2017. [Persian]
23. Egener BE, Mason DJ, McDonald WJ, Okun S, Gaines ME, Fleming DA, et al. The charter on professionalism for health care organizations. *Acad Med*. 2017;92(8):1091-9.
24. Sachan D. Tackling corruption in Indian medicine. *Lancet*. 2013;382(9905):23-4.
25. Davies T, Polese A. Informality and survival in Ukraine's nuclear landscape: living with the risks of Chernobyl. *Eurasian Studies*. 2015;6(1):34-45.
26. Stan S. Neither commodities nor gifts: post-socialist informal exchanges in the Romanian healthcare system. *J R Anthropol Inst*. 2012;18(1):65-82.
27. Stepurko T, Pavlova M, Gryga I, Murauskiene L, Groot W. Informal payments for health care services:

- the case of Lithuania, Poland and Ukraine. *Eurasian Studies*. 2015;6(1):46-58.
28. Zhu W, Wang LJ, Yang CS. Corruption or professional dignity: An ethical examination of the phenomenon of "red envelopes" (monetary gifts) in medical practice in China. *Dev World Bioeth*. 2018;18(1):37-44.
29. Gaal P, McKee M. Informal payment for health care and the theory of 'INXIT'. *Int J Health Plann Manage*. 2004;19(2):163-78.
30. Buinickiene N. Causes of Corruption and Their Management Measures in the Health Care System of Lithuania. *Manag Theor Stud Rural Bus Infrastruct Dev*. 2017;39(2):148-56.
31. Lewis MA. Who is paying for health care in Eastern Europe and Central Asia? World Bank Publications; 2000.
32. Chawla M, Berman P, Kawiorska D. Financing health services in Poland: new evidence on private expenditures. *Health Econ*. 1998;7(4):337-46.
33. Ensor T. Informal payments for health care in transition economies. *Soc Sci Med*. 2004;58(2):237-46.
34. Mossialos E, Allin S, Davaki K. Analysing the Greek health system: a tale of fragmentation and inertia. *Health Econ*. 2005;14(1):151-68.
35. Baghdadi-Sabeti G, Serhan F. WHO Good Governance for Medicines programme: an innovative approach to prevent corruption in the pharmaceutical sector[Internet]. 2010: World Health Report [2019 July 5]. Available from:<https://www.who.int/medicines/areas/policy/goodgovernance/en/>
36. Gaitonde R, Oxman AD, Okebukola PO, Rada G. Interventions to reduce corruption in the health sector. *Cochrane Database of Systematic Reviews* 2016
37. Ansari B. Freedom of information. Tehran: Ghashghaei; 2018. [Persian]
38. Faghihi A, Gholipour A, Abooyee M, Ghalibaf Asl A, Asadi A. Review of relevant legislation about physicians misconduct in Iran. *Sci J Forensic Med*. 2010;16(3):215-23. [Persian]
39. Taromsari M, Mirkamali S, Delpasand K. Criminological Analysis of Medical Crimes in Isfahan Province in Iran. *JDR Clin Trans Res*. 2018;6:372-76.
40. Kesselheim AS, Studdert DM. Whistleblower-initiated enforcement actions against health care fraud and abuse in the United States, 1996 to 2005. *Ann Intern Med*. 2008;149(5):342-9.
41. Givati Y. A Theory of Whistle-blower Rewards. *J Leg Stud*. 2016;45(1):43-72.
42. Talabaki Toroghi A, Attar MS. Necessities and Strategies for Establishing the National Human Rights Institution in the Islamic Republic of Iran (Based on the Constitution, Islamic Human Rights Declaration, Paris Declaration and the Precedent of the Countries). *Public Law*. 2017;6(17):21-41. [Persian]