Assessment of International Joint Commission (IJC) accreditation standard in a military hospital laboratory

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Abstract
Aims: Expected hospital standards of the Health Ministry should be studied and investigated and existing weak points should be detected through continuous investigation of primary service providing centers, by valid local and international standards. The aim of this study was to assess the rate of observing the joint commission international standards in the laboratory of a military hospital in Tehran.

Methods: In this cross-sectional study conducted by qualitative method, was carried out in a military specialty and subspecialty hospital in Tehran. The international joint commission standard checklist was translated and after interviewing the laboratory expert and personnel (20 people), the interviews’ text was given to 10 accreditation specialists. The score of each section was extracted from interview text by consensus of accreditation specialists. Finally, Excel software was used for drawing diagrams.

Results: The studied laboratory gained the complete score of JCI standards in 52% of cases and gained partial score in 40% of cases. In addition, it didn’t follow JCI Standards in 8% of questions. Generally, the studied hospital laboratory had 71.52% of JCI standards and therefore the evaluation was in favorable level.

Conclusion: Regarding the incomplete accordance of the studied hospital situation in health ministry evaluation and JCI standards, it is necessary to take measures for more attention to international standards. The absence or imperfection of policies and necessary documentations is the most important weak point of the studied laboratory; therefore, determining strategies and needed documentations can considerably increase the obtained score.

Keywords: Accreditation, Standard, Joint Commission International JCI, Laboratory

Introduction
Nowadays, healthcare organizations face with significant challenges because of competitive needs for presenting services. The environment at which the economical, political and legal motives encounter cost control and quality maintenance causes quality increase as the only way of achieving desirable success [1, 2, 3, 4]. Therefore, most of the healthcare managers and politicians of health field know standardization, accreditation, and analysis of centers providing health service as unavoidable issues in improving quality [5, 6]. Yet, during the last two decades health-treatment services are affected by a flow of external analysis systems. The government, service users, professional medical committees, the managers of insurance companies and other stakeholders try to promote the healthcare services in order to answer the society’s needs through accreditation of activities [7, 8, 9].

Accreditation is a process in which a group or organization grant fame, credit and formality to a hospital for its capability of performing special services in a standard way. Accreditation is performed by experts and experienced people through analyzing the quality of organizational processes and according to its performance based on confirmed and written standards. The healthcare centers or hospitals are analyzed that request accreditation from the organization voluntarily, but formally. Then the accreditation group analyzes the center or hospital by the use of related standards. After analyzing the data, the degree of compliance and following the standards are announced to the mentioned center or hospital [7, 8, 9].

Accreditation is a voluntary independent program that was formed in 1917 in the United States by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) in order to analyze hospitals and accredit healthcare organizations. Its international branch started activity under the title of the Joint Commission International (JCI) in order to analyze the accreditation needs at the international level with developing one set of accreditation standards in 1998. In 1999, the first edition of accreditation standards was published and on November 1999 the first scaling
was done at the international level by the joint committee [10, 11]. JCAHO is a nonprofit organization outside the United States' healthcare system that is formally active in analyzing and improving the quality of healthcare organizations services [12, 13, 14, 15, 16, 17, 18]. This organization presents standards at the international level, outside of the United States borders by one of its subcategories under the title of JCI [19, 20, 21, 22, 23]. These standards have been tested by international census and by a group of experts on this issue and by the use of analysis methods in many countries [13, 14, 15]. Accreditation standards of JCI are exclusively developed to analyze the healthcare organizations. The list of hospitals to which the accreditation has been granted; moreover, the information related to the results and their accreditation degree are shown for public access in the internet site of the joint commission on accreditation of healthcare organizations. The details related to the process of accreditation and its results are only in the access of beneficiary organizations and other stockholders [10, 11]. The accreditation program is known as the most complete accreditation program in the world. This program includes significant notes on familiarizing with the changes of the evaluating and observational system of hospitals of the world into process methods [24]. International accreditation standards of the joint commission in the world are unique and designed for measuring the quality of patients’ care [16]. On this issue, the studies show that JCAHO and JCI standards provide a definite framework and present a systematic model for efficient operation of the organization (that is the basis of quality assurance) and can be a frequent evaluation model for healthcare in the world [5, 25, 26].

The evolution of standards’ edition in different countries shows that hospital standards are changed into standards depending on the continuous quality improvement and comprehensive management quality [24]. Yet, the standards practiced by the Ministry of Health are applied in Iran in order to evaluate hospitals, but the research conducted on this issue has shown that the hospital standards of Ministry of Health are not comprehensive enough [27]. At the status quo, the Ministry of Health evaluates the healthcare centers by the use of hospitals standards practiced by it annually, and the grades of hospitals are determined based on them. In spite of these standards and getting grades 1, and 2, some hospitals lack quality and efficiency [28, 29]. One may search the reason in the standards and evaluation propositions [29, 30].

As we know, hospitals are regarded as the cornerstone of the health system in any country and the correction of health system will be impossible unless the improvement of their efficiencies is taken into consideration. Moreover, the truth of most of the evaluations and analyses that the government requires, rise up in these centers. As one of the bases of services, laboratories have direct relationship and close association with all healthcare majors and are regarded as the basic pillars of diagnosis in hospitals, so that most treatments are presented based on the results obtained from the diagnostic tests. Therefore, the analysis of such unique unit is highly important [32]. May be the main protective pillar of people’s rights, patients, knowledge, staff and integration are well-designed standards [29]. On the other hand, hospital standards are of the most valuable conceptual elements of healthcare organizations due to the valuable role in showing the expected operation and assistance in evaluation of hospitals performances.

In addition, the results of conducted studies indicate that hospital standards of Ministry of Health should be analyzed and studied due to inefficiency in showing the weaknesses and losses of treatment centers [33, 34, 35]. Therefore, one should not rely only on the analysis performed by the Ministry of Health, but should identify the weaknesses through continuous analysis of centers by national and international valid standards and applying qualitative research techniques.

The aim of this research was the case analysis of one laboratory in a specialty and subspecialty military hospital regarding the amount of conformity with the standards of Joint Commission International to determine the weaknesses and strength points and the real distance of the studied center from international standards.

**Methods**

The is a qualitative study in which all the activities performed in the laboratory ward of a military hospital in Tehran, including Microbiology, Serology, Biochemical, Immunology, Hematology, cell biology, histology, virology, and other required wards to achieve the personal information, prevention, and follow-up treatment were analyzed.

First, the required data were collected through interview, observation, and analysis of available documents in the framework of JCI standard checklist. After the interview with authorities and personnel of the related laboratory (in addition 20) and the observation of the documents and the way of operation
of different parts of the laboratory by interviewees, interview, and observations were recorded thoroughly. After that the context of observations and written interviews were delivered to ten accreditation experts in the field of laboratory science, medical, and the management of healthcare services to use professors and scholars’ viewpoints and to prevent the touch of the observations. In order to interpret the data, the seminars of experts and discourse analysis were applied. In order to report the results quantitatively, the three-part evaluation was used. JCI accreditation checklist included 72 questions each of which a 0-2 points was given after analyzing the context of interviews and observations performed with the consensus of experts and discourse analysis regarding the observance of the standard considered. Thus the cases that were completely observed according to the experts’ consensus the whole point [equal to 2], to the cases of accreditation standards that were not observed at all, the lowest point [equal to 0], and finally to the cases of accreditation standards that were somewhat observed, the average point [equal to 1] were given. After practicing the above-mentioned stages, finally in order to state the amount of conformity of the laboratory with the mentioned standards got from the descriptive statistics and Excel software were used.

Results

According to the experts’ viewpoints, the laboratory unit of the mentioned hospital got 2 points (complete score) in 37 cases out of 72 cases of questions (equal to 52% of the questions), and it got 1 point (average point) in 29 cases out (equal to 40% of the questions). Finally, it didn’t get any point regarding the JCI standards in 6 cases (equal to 8% of the questions). In addition, the lowest point achieved according to the applied checklist was related to lack of registering the number of medical records on the cases, performing autopsy according to the culture of community, lack of existing emergency sockets, and USP in all parts of the laboratory and lack of doing frozen suction in the laboratory under study.

According the related experts’ viewpoints, the total number of scores achieved by the mentioned laboratory was 103 from the JCI accreditation checklist. Therefore, the laboratory ward of the mentioned hospital had 71.52% of JCI accreditation points.

Discussion

According to the accreditation experts, the results of the present study confirm the results of other studies conducted on this issue. So that, achieving about 71% of JCI standards for the laboratory part of the hospital that owns the first highest grade in the analysis of the Ministry of Health, shows lack of ability of the laboratory of such hospital in achieving the highest point of JCI standard. Therefore, it shows the lack of its conformity with the analysis of the Ministry of Health in the mentioned hospital. In this regard, in Ahmadi et al. study under the title of the comparative study of hospital standards of Ministry of Health with hospital international standards of accreditation JCI in 2006, it showed that despite of the fact that hospital standards of Ministry of Health have been more than the hospital standards of joint commission qualitatively, they couldn’t cover even 50% of JCI standards and they covered only 45.4% of these standards [27]. In other word, it seems necessary to gait in the way of leveling the national standards with those of international so that the available national standards determine necessary minimums for each of the presenting parts of services at low quality and high accuracy, especially. The necessity of attention to the quality of standards is at the level that on the application of suitable standards JCI states that using well edited standards results in improving the patient’s care and increasing his satisfaction and can be regarded as a support for good application of expert personnel, management improving, increasing the quality of patient’s care, decrease of expenditure, and increase the application of institute and services [25].

In the results achieved from his own study, Tofighi states that the way of writing statements (the questions), the evaluation hospital standards of Ministry of Health has a clear difference with that was done in ISO audition. In ISO audition, the result of each statement is yes or no and each statement should question only one issue and is so clear that has only one meaning for auditors and those who are audited. While, evaluating standards used by the Ministry of Health, the above-mentioned properties have not been observed [29]. Amerioun [36] knows the existence of suitable professional standards as one of the affecting factors on the quality of services and patients’ satisfaction [36].

Regarding the achieved results, it should be stated that although the laboratory of the hospital is analyzed at a relatively suitable level having 71.52% of JCI accreditation standards, due to the specialized hospital the amount should be promoted to the complete accordance and this issue is impossible without emphasizing on improvement the strengthens and modifying the weaknesses. Therefore, when the data
were analyzed by the related specialties, the following notes agreed by specialties, including the most significant strengthens of the mentioned laboratories regarding accordance with JCI accreditation standards:

1. In the studied laboratory, due to the fact that the academic degree and the experiences of managers of laboratories, the authorities of the wards and all the experts were in accordance with the assigned responsibility, the authentication of the human force posts was in accordance with JCI accreditation standards.

2. The studied laboratory was based on JCI accreditation standards regarding the service speed. Of course, one can provide condition to increase the speed of giving services for non-emergency tests.

3. Although one cannot analyze the studied laboratory exactly in terms of customer orientation, regarding the questions stated and the content of interviews performed, services presented in the mentioned laboratory won the interest of client service relatively.

4. The studied laboratory was consistent with JCI accreditation standards according to personnel and patients’ safety. Since according to the checklist, the environment of the laboratory were in accordance with the especial assignments of separated laboratory sections and according to the JCI standards of the studied laboratory including washing hands sink, safety features, eye-washing facilities, emergency shower, storage facilities for chemical flammable liquids and suitable elimination of cases.

The mentioned laboratory didn’t get any point from about 8% of the questions and in 40% of the related questions got only a relative score. On this issue, after analyzing the results, the most significant weaknesses of the laboratory were as follows:

1. In the studied laboratory, the policies were not registered in some wards and were not complete in some others. Moreover, in some part of the mentioned checklist based on the issue that "policies and methods are continuously revised and the policies are clear", no comprehensive booklet was available and they were mostly in the form of scattered pamphlets and instructions and often, they didn’t have any revising date.

2. The studied laboratory was analyzed highly active in terms of cooperation with the infection control center, health center, and the analyzing committee of hospital mortality. However, the statistical reports were not comprehensively available based on the informing and updating personnel.

Moreover, special cases were given to the physician or the related center by telephone. Of course by registering special cases and presenting them to the infection committee of hospital and to the health center monthly, its score was analyzed complete according to the regarded accreditation standard.

3. The studied laboratory was in suitable condition in terms of maintaining the facilities, however, for maintaining the facilities, there was no documentary table and no written analysis was observed.

4. The studied laboratory was not completely based on JCI accreditation standards documentarily. Although the related cases to the results of the tests, the instruction of the machines, patients’ information, and personnel’s information of the laboratory were complete, the booklets of policies, maintenance tables of facilities and statistical summary of results were not in accordance with the mentioned accreditation standards.

At the end, regarding the topics considered by accreditation experts and specialties for improving the rank of the above mentioned hospital, it is suggested that the laboratory provides statistical reports based on informing and updating the personnel of hospital including the ward managers, infection control center, health center etc on clinical issues (for example, allergic responses to antibiotics and related recommendations). Moreover, providing policies booklets, maintenance tables of facilities, apparatus instructions and the statistical summary of the results that are in accordance with accreditation standards should be considered and practiced.

Conclusion

Regarding that the rank that the studied hospital had gained from the ministry of Health did not fully math with the score got in JCI standard, it is necessary to adopt policies including paying more attention to international standards. Moreover, lack or defects of policies and necessary documents are the most significant weaknesses of the studied laboratory regarding JCI standards. Therefore, determining the necessary policies and documents can increase the achieved scores to a very high extent.

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References

31- Asefzadeh S. Management and hospital research. Qazvin: Qazvin University of Medical Science Publication; 2003.[Persian]
35- Asadallahpour S. Determining and comparing Mazandaranuniversity of medical science hospitals performance according to evaluation score [dissertation]. Mazandaran: Mazandaran University of Medical Science; 1998. [Persian]