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# Ranking of Challenges of Accreditation Standards Implementation in Public and private Hospitals: A comparative approach

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#### **ABSTRACT**

**Purpose:** The study aimed to ranking the challenges of accreditation standards implementation in private and public hospitals.

**Methodology:** The method of data collection was descriptive research of field studies branch. Statistical population included the managing director, manager, matron and head of Quality Control (accreditation) of public and private hospital of Tehran. For collecting data, a questionnaire was designed in 39 item based on reviewing of literature and previous scale. Content and face validity of this questionnaire was considered and confirmed in separately stages; also, reliability of this questionnaire investigated through Cronbach's alpha and for whole dimensions were higher than 0.7. In final, for data analysis and testing assumptions, exploratory factor analysis and Friedman test has been administered by using SPSS-20.

**Finding:** result of exploratory factor analysis showed that challenges of accreditation standard implementation were classified in 9 aspects and explained 72.4% variance of this variable. These 9 factors in order to priority are encouraging drivers; perception of accreditation standards; financial resources; quality improvement; management knowledge, skills and commitment; support of regulatory initiatives; standard & surveying development; human resources and determining macro policies and procedures. Also finding showed that there are differences between the ranking of these challenges in public and private hospitals. **Originality Value:** the results of the study showed that the challenges which have the highest rank are ones of the main obstacles of implementation of accreditation in hospitals and more attention should be given to them.

Keyword:
Accreditation standards implementation,
Challenges, Private hospitals, Public

hospitals

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#### Introduction

WHO declared that attention to quality in health care systems is essential, along with providing effective services and the health care organizations should consider quality as a main objective in their service outcomes (Farzianpour et al. 2011).

When a hospital was accredited by accreditation body which is large and international, as a result the patients would be ensured that they acquire standard cares which are good and safe in many aspects. (R: Woodhead Anthony, (2013) "Scoping medical tourism and international hospital accreditation growth", International Journal of Health Care Quality Assurance, Vol. 26 Iss: 8, pp.688 – 702)

There are four benefits when health care systems participate in accreditation surveying which include: surveyor faces innovation methods; it delivers a special continual learning; it provides a source for obtaining proficiency to increase quality in organizations and finally prepare chances to participate in quality improvement and increase public health in a way that participants were frequently engaged. (R: Judith Lancaster, Jeffrey Braithwaite, David Greenfield, (2010) "Benefits of participating in accreditation surveying", International Journal of Health Care Quality Assurance, Vol. 23 Iss: 2, pp.141 – 152).

In this regard, In many countries, accreditation has established as a successful strategy for continuous improvement of healthcare organizations, with benefits to customers, managers, professions, regulators and other stakeholders(Shaw 2004).

The attention to the quality improvement in the Iran health service industries has grown in recent years and the government has emphasized that implementing quality system in hospitals in both public and private hospitals is essential. The ministry of health efforts has been continued to find the best system of quality for hospitals. So Iran ministry of Health, department of monitoring on hospitals by study of other countries hospital standards, provided the book of national hospital accreditation standards in 2010 and announced to all private and public hospitals that they have to implement these standards according to this book and it is planned that the first step of hospitals' assessment be conducted with regard to implementation of this standard since August 2012.

At present hospitals are in the process of implementing the national hospital accreditation standards to achieve the quality that they need and in 2013 all of the Iran hospitals were audited by the assessors of accreditation form ministry of health and medical science universities.

In relation to the implementation of accreditation standard, World Health Organization, (2001) reported that in spite of a large resource of existing standards to adapt to specific needs and the growing interest in establishing standards by various health care organizations, there still exist certain challenges to this process and suggest that in order to achieve improvement, all factors, barriers and strengths of the system should be reviewed, assessed and improved(Organization 2001).

Also, Shaw(2006) stated that all countries in accreditation standards implementation have not been successful, even those who had skilled experts and technical assistance(Shaw 2006). So each country that has a new plan, it is better to

search about world experiences. However, the technology of accreditation does not at all times transfer satisfactorily to various countries, or gets them the same favorable outcomes. It means that there are Common challenges to acceptable transfer this standards that should be eliminated according to the principles, policies and organizations of individual countries(Shaw 2004).

In this regard, A review of implementing accreditation standards position in Iran hospitals, (by interview with the charge of hospitals' Assessment Department of the Ministry of Health and some of health professionals and managers of hospitals) indicated that most hospitals have had lots of problems related to implement accreditation standard yet and there are challenges in implementation of these standard that have been caused some hospitals not to be successful in implementing it and some hospitals implemented it but with heavy workload and lots of job responsibilities.

So, aim of this study is ranking of implementation of accreditation challenges in Iran Hospitals. Therefore, this study focuses ranking of these factors with a concentration on the public and private hospitals of Tehran hospitals because according Casile & Davis-Blake, (2002) belief, when accreditation standards change, private and public organizations, have different responsiveness to them (Casile and Davis-Blake 2002).

#### Challenges of accreditation standard implementation

The review of literature in the field of challenges of hospital accreditation standards implementation identified nine groups of challenges that it is possible classified in two levels, the program and the organization ones (Zarifraftar and Aryankhesal 2016). The program challenges are factors related to outside of health care systems. The organization challenges refer to internal issues of healthcare organizations (Braithwaite et al. 2012, Hinchcliff et al. 2013, Shaw 2004, Shaw et al. 2010).

#### **Program challenges**

The program challenges are related to external of health care systems to encourage them for participation and could be divided into three levels: support of regulatory initiatives, encouraging drivers, and professional requirements (Zarifraftar and Aryankhesal 2016).

- Support of regulatory initiatives: Policymakers are constantly searching for the best standard methods in order to provide them for the hospitals to protect the health and safety of the patients. Yet alongside such policies, the important issue is constant legal support for these programs(Shaw 2004). According to litreture this challenge refer to four factors which are:
- o legal support from accreditation program: accreditation programs will have very limited success when there is lack of political support from government that is essential to be constant (Hinchcliff et al. 2013), (Ng et al. 2013), (Braithwaite et al. 2012), (Rafeh and Schwark 2006), (Shaw 2004), (Organization 2003a), (Organization 2001).
- o Independent or dependent accreditation entity: Establishing accreditation agency with defining the relationship to government is another issue which should be considered in each country individually. For example establishing independent accreditation body external to the government have the benefit of being relatively less prone to

government, health ministers and policy changes [(Ng et al. 2013),(Shaw et al. 2010)] but one of the major challenges to sustainable accreditation is the policy related to support of healthcare and providing regulation could prepare guarantee in accreditation organizations. Few number of accreditation organizations that were independent, have been supported by governmental strategies. But all governmental and mixed organizations (independent agency with government representation) were supported by governmental strategies in order to safety and quality (Braithwaite et al. 2012), (Bukonda et al. 2002), (Ng et al. 2013), (Purvis et al. 2010), (Shaw 2004), (Shaw et al. 2010), (Organization 2003a).

- o Sustainable resourcing for accreditation programs: one of the main challenges to the continuation of accreditation programs is the issue of financing the program (Braithwaite et al. 2012), (Bukonda et al. 2002, Nandraj et al. 2001, Ng et al. 2013, Nolan et al. 2007, Purvis et al. 2010, Rafeh and Schwark 2006, Schieber et al. 2006, Shaw 2004, Shaw 2006, Shaw et al. 2010).
- Voluntary mandatory accreditation program: or Mandatory accreditation program may be a control measure for the government to supervise hospitals and guarantee a minimum standard of hospital accreditation and can potentially provide ongoing regulatory pressure improvement. But this may be considered as only a formality for completion of accreditation and it will lead to superficial behaviors in implementing the process of accreditation with no effectiveness .On the other hand in voluntary program of accreditation, healthcare organizations can have the choice to participate in implementing accreditation and using financial encouragements and grant programs which are obvious. So they are more prone to be those with higher quality services and the ability to fulfill necessary standards(Braithwaite et al. 2012, Ng et al. 2013, Nolan et al. 2007, Schieber et al. 2006, Shaw 2004).
- Encouraging drivers: The high costs of sustaining accreditation programs and the absence of incentives can serve as obstacles during the implementation of accreditation. So lack of incentives for participation and high expenses of sustaining such programs were threats to accreditation. According to literature this challenge refer to two factors which are:
- Financial incentives regarding to implementation: the strongest motivation for hospital accreditation could be the promise of additional funding offered by the governments and insurance agencies (Hinchcliff et al. 2013, Organization 2001). The relationships between the various healthcare providers and purchasers must be defined, and the Ministry of Health must coordinate with private insurance firms to determine the most suitable models for provision and financing of health services. Furthermore, special contracts (e.g. Medicare in US) with organizations which have been accredited can also play a major role in stabilizing the programs (Braithwaite et al. 2012, Bukonda et al. 2002, Hinchcliff et al. 2013, Ng et al. 2013, Nolan et al. 2007, Organization 2001, Organization 2003a, Shaw 2006, Shaw et al. 2010, Tabrizi et al. 2011).
- o Accreditation marketing: introduction of accreditation to the public by government and policymakers, in a way that releasing the accreditation results would represent quality of services at audited organizations, will help consumers of healthcare services to select a hospital based on this

criterion and thus, this issue will lead to increase of competition among hospitals for attracting more patients, and so bigger share of market(Braithwaite et al. 2012, Nandraj et al. 2001, Ng et al. 2013, Organization 2003a).

- Professional requirements: The accreditation standards will be implemented more successfully when they are accepted by professionals of healthcare organizations, relevant standards (suitable) have been used for the hospitals and the program could be collaborative and reliable. These are professional needs and requirements that Ministry of Health's policies should consider before forcing hospitals to contribute in the accreditation program(Hinchcliff et al. 2013, Pongpirul et al. 2006). In this regard three factors could be consider which included:
- o Perception of accreditation standards by health care professional: explains that one of factors affecting the implementation of hospital accreditation programs is acceptance of accreditation standards by professionals, which means cultural adoption, related to the local health care organizations. Collaboration of universities and training hospitals and their role in introducing the concept of accreditation standards and continuous improvement is vital for encouraging healthcare experts to realize the necessity of these standards. (Bateganya et al. 2009, Braithwaite et al. 2012, Buetow and Wellingham 2003, Bukonda et al. 2002, Hinchcliff et al. 2013, Ng et al. 2013, Nolan et al. 2007, Pongpirul et al. 2006, Purvis et al. 2010, Rafeh and Schwark 2006, Shaw 2004).
- o Standards development according to each nation's setting: refer to that the accreditation standards will be implemented more successfully when standards are designed and adapted for the national circumstances, not copied from other inappropriate settings (Bouchet et al. 2002, Bukonda et al. 2002, Hinchcliff et al. 2013, Nandraj et al. 2001, Ng et al. 2013, Purvis et al. 2010, Shaw 2004, Shaw 2006, Tabrizi et al. 2011).
- o Reliable surveying practices: The validity of accreditation program is, to a great extent, determined by the validity of auditing and auditors. Therefore, lack of confidence in the process of assessment and ability of the assessors to implement the assessment program leads to discontinuation of cooperation between frontline healthcare professionals and managers. Thus, using a clear assessment process and competent assessors is of particular importance (Bukonda et al. 2002, Hinchcliff et al. 2013, Nolan et al. 2007, Organization 2001, Organization 2003a, Pongpirul et al. 2006, Shaw 2004).

Organization challenges: According to litreture organization challenges are based on the following four aspects: management and organization; human resource; financial and facilities resources and quality improvement (Zarifraftar and Aryankhesal 2016).

- Management & organization: refer to two factors which
- **o** Knowledge, skills and commitment of management of hospital about implementation of accreditation standards (Bateganya et al. 2009, Hinchcliff et al. 2013, Ng et al. 2013, Pongpirul et al. 2006, Shaw 2004).
- o Determining macro policies and procedures which is prioritizing the sectors and activities in hospitals for implementation of accreditation, as implementation of

related standards should be done step by step (Bateganya et al. 2009, Organization 2001, Organization 2003a, Shaw 2004, Shaw et al. 2010).

- *Human resources*: In this section there are three factors that included:
- o "staff efficiency" due to the heavy workload of responsibilities that personnel have for documentation, recording and following up the activities [(Bateganya et al. 2009, Ng et al. 2013, Pongpirul et al. 2006)];
- o "creating motivation" for personnel who participate in implementation of accreditation standards (Bateganya et al. 2009, Hinchcliff et al. 2013, Ng et al. 2013, Organization 2003b, Rafeh and Schwark 2006);
- o "education and technical assistance" for staff to increase their knowledge and skills regarding to how to implement accreditation standards [(Bateganya et al. 2009, Buetow and Wellingham 2003, Bukonda et al. 2002, Ng et al. 2013)].
- Financial& facilities Resources: Over capacity of patients as a result of limited physical space, inadequate supplies, limited drugs and scarcity of resources were impediment of accreditation standards implementation one of factors that would enable accreditation implementation to be successful is increasing resources allocated to CQI. (Bateganya et al. 2009, Bukonda et al. 2002, Ng et al. 2013, Organization 2003b, Pongpirul et al. 2006, Shaw 2004).
- *Quality improvement*: In this section there are four subjects related to obtain quality improvement according to accreditation standards:
- o "knowledge and skill about QI" that is essential for acquiring internal and external objectives(Ng et al. 2013);

- o "Integration and utilization of information" regarding to how information system in health care systems could integrate and utilize information to make concentration on the areas that need improvement (Bouchet et al. 2002, Ng et al. 2013, Pongpirul et al. 2006);
- o "participation of personnel and relationships between the sectors" which is essential to continue the process of implementation in health care systems (Bouchet et al. 2002, Bukonda et al. 2002, Ng et al. 2013, Pongpirul et al. 2006);
- o "balance between internal and external organizational objectives" regarding to this item that it is important to sustain concentration on the improvement constantly in the health services quality receiving instead of just receiving a certification to satisfy the expected objectives (Hinchcliff et al. 2013, Pongpirul et al. 2006).

#### Methodology

This research, in terms of aim, is applied research and method of data collection is descriptive research of field studies branch. Statistical population included the managing director, manager, matron and head of Quality Control (accreditation) of public and private hospital of Tehran. Krejcie- morgan table is used for computation of sample size required for research and estimated 280 people. For collecting data, a questionnaire was designed based on review of literature and previously tested scales that included 39 items. The references of variables and questions are presented in table 1.

Table 1: Reference of variables and questions

| Table 1: Reference of variables and questions |  |  |  |  |  |
|---|--|--|--|--|--|
| Variable                                      | Questions (Program challenges)   | Resources  |  |  |  |
| ves   | To what extent has the implementation of accreditation standards been made mandatory by the Ministry of Health?  | Shaw C., (2004a); Ng, et al., (2013); Braithwaite, et al., (2012); Nolan, et al., (2007); Jaafaripooyanal., (2011); Bandyopadhyay& Hayes, (2009); Schieber, et al., (2006)   |  |  |  |
| Support of regulatory initiatives             | To what extent is the current support of the Ministry of Health, through organizing periodical sessions and studying requirements and expectations of hospitals, in line with implementation of accreditation? | Hinchcliff, et al., (2013); Ng, et al., (2013);<br>Braithwaite, et al., (2012); Rafeh& Thomas,<br>(2006); Shaw, (2004a); (WHO, (2003b); WHO,<br>2001)  |  |  |  |
| upport of re                                  | To What extent are the initial contributions of<br>the Ministry of Health, for implementing<br>accreditation in hospitals with limited<br>financial resources and facilities?                                  | Ng, et al., (2013); Braithwaite, et al., (2012);<br>Shaw, et al., (2010); Purvis, et al., (2010); Nolan, et<br>al., (2007); Bukonda, et al., (2002); Nandraj, et al.,<br>(2001); Schieber, et al., (2006); Shaw, (2004a) |  |  |  |
| <i>σ</i>                                      | To what extent does accreditation institute act independently from the government?   | Ng, et al., (2013); Braithwaite, et al., (2012);<br>Shaw, et al., (2010); Purvis, et al., (2010); Shaw,<br>(2004a); WHO, (2003b); Bukonda, et al., (2002)  |  |  |  |
| rivers  | To what extent are the financial incentives, which are offered by the Ministry of Health for encouraging hospitals to implement accreditation?   | Hinchcliff, et al., (2013); Ng, et al., (2013);<br>Braithwaite, et al., (2012); Shaw, et al., (2010);<br>Nolan, et al., (2007); Shaw, (2004b); Shaw,<br>(2004a); WHO, (2003b); WHO, (2001); Davis, et<br>al., (2009)     |  |  |  |
| Encouraging drivers                           | To what extent has significance and role of accreditation been introduced to the insurance companies?  | Ng et al. (2013): Braithwaite et al. (2012):   |  |  |  |
| Encor   | To what extent have the patients and public been informed of the significance and role of accreditation?   | Ng, et al., (2013); Braithwaite, et al., (2012); Shaw, (2004a); Bukonda, et al., (2002); Nandraj al., (2001)   |  |  |  |

| Vriable                  |                                   | Questions (Program challenges)   | Resources   |
|--------------------------|-----------------------------------|--|---|
|                          |                                   | To what extent are complete data resources available for implementation of accreditation standards?                                      |   |
|                          | dopment                           | To what extent is Evaluation Manual Guide effective to clarify the accreditation measurements?   |   |
|                          |                                   | To what extent has accreditation criteria and principles had the ability to create a common understanding for the hospital and assessor? |   |
|                          |                                   | To what extent is there a specific evaluation policy and procedure for the determination of accreditation evaluation time?               | Hinchcliff, et al., (2013); Ng, et al., (2013); Purvis, et al., (2010); Nolan, et al., (2007); Pongpirul, et al., (2006); Shaw, |
|                          | dev                               | To what extent is the combination and size of accreditation evaluation team suitable?  | (2004b); Shaw, (2004a); WHO, (2003b);   |
|                          | ing                               | To what extent are there clear executive instructions and  | Bukonda, et al., (2002); Tabrizi, et al.,   |
|                          | 'ey                               | rules regarding the requirements related to following up   | (2001); Bouchet, et al., (2002); Nandraj, et al., (2001); WHO, (2001)   |
|                          | l in                              | and requesting revision, conditions of cancellation or   | et al., (2001), WHO, (2001)   |
| ent                      | Standards & surveying development | suspension of accreditation?   |   |
| em                       |                                   | To what extent does the Ministry of Health carry out   |   |
| uir                      |                                   | consecutive evaluation of accreditation program to assess  |   |
| reg                      |                                   | performance and motivate organizations?  |   |
| Professional requirement | <i>S</i> 2                        | To what extent will the existing accreditation evaluation  |   |
| Sio                      |                                   | process lead to learning and solving management and  |   |
| fes                      |                                   | clinical problems?   |   |
| Pro                      |                                   | To what extent is assessment process reliable?   |   |
|                          |                                   | To what extent are assessment work forces reliable?  |   |
|                          |                                   | To what extent is there a gap between evaluation time and  |   |
|                          |                                   | providing feedback on accreditation auditing results?  |   |
|                          |                                   | To what extent have universities and training hospitals  |   |
|                          | <u>s</u>                          | cooperated in introducing the concept of accreditation and   | H; 1 1;cc 4 1 (2012) N 4 1  |
|                          | ard                               | quality improvement to healthcare specialists?   | Hinchcliff, et al., (2013); Ng, et al., (2013); Braithwaite, et al., (2012);  |
|                          | and                               | To what extent have tendency, environmental capacity and development time for the implementation of                                      | (2013); Braithwaite, et al., (2012);<br>Bateganya, et al., (2009); Purvis, et al.,  |
|                          | Perception of standards           | accreditation been taken into consideration?   | (2010); Nolan, et al., (2007); Pongpirul, et  |
|                          |                                   | To what extent are health care specialists confident of  | al., (2006); Rafeh& Thomas, (2006);   |
|                          | otio                              | accreditation ability for promoting hospital quality and its   | Shaw, (2004a); Buetow & Wellingham,   |
|                          | leo.                              | cost-effectiveness?  | (2003); Bukonda, et al., (2002); Dimaggio   |
|                          | Peı                               |  | & Powell, (1983)  |
|                          |                                   |  |   |
|                          |                                   |  |   |

| Variable   | Questions (organization challenges)   | Resources   |  |
|--|---|---|--|
| Management<br>Knowledge, skill<br>and commitment | To what extent does hospital management cooperate in and is committed to implementation of accreditation?   | H. 1 1.00 (1.1 (2012) N. (1.1   |  |
|  | To what extent is hospital management knowledgeable and skilled in guiding accreditation process?   | Hinchcliff, et al., (2013); Ng, et al., (2013); Bateganya, et al., (2009); Pongpirul, et al., (2006); Shaw, (2004a) |  |
| Determining macro policies and procedures        | To what extent are priorities of activities identified for implementation of accreditation standards?  To what extent are priorities of departments identified for implementation of accreditation standards? | Shaw, et al., (2010); Bateganya, et al., (2009); Rafeh& Thomas , (2006); Shaw, (2004a); WHO, (2003b); WHO, (2001)   |  |
| Human<br>resource<br>s                           | To what extent is the number of the staff and personnel in hospital for implementation of accreditation adequate at present?  | Hinchcliff, et al., (2013); Ng, et al., (2013); Bateganya, et al., (2009); Pongpirul, et al., (2006); Rafeh&        |  |

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|                                    | To what extent are policies of development of human resources executed in hospital?   | Thomas, (2006); (Buetow & Wellingham, (2003); Bukonda, et al., (2002); WHO, (2003a)  |
|------------------------------------|---|--|
|                                    | To what extent does implementation of accreditation have necessary flexibility and professional autonomy in providing services?   |  |
| Financial&<br>lities resources     | To what extent is the budget considered for the implementation of accreditation activities adequate?  To what extent is the medical equipment for the   | Ng, et al., (2013); Bateganya, et al., (2009); Pongpirul, et al., (2006); Shaw,  |
| Financial&<br>facilities resources | implementation of accreditation activities adequate?  To what extent is the physical environment for the implementation of accreditation in hospital adequate?  | (2004a); Bukonda, et al., (2002); WHO, (2001)  |
| Quality improvement                | To what extent are the staff and personnel skilled in executing continuous quality improvement?  To what extent is there any balance between attaining intra- organizational objectives and evaluation of accreditation?  To what extent is there any communication and interaction between departments in implementation of accreditation?  To what extent are there training and consultation services for technical assistance related to implementation of accreditation?  To what extent is there integration of information and its use for implementation of accreditation process at hospitals?  To what extent are there policies related to promotion of collective ownership of staff as well as creation of inner motivations to attain continuous quality improvement?  To what extent are quality indicators identified accurately for the implementation of accreditation activities?  To what extent are responsibility and authority divided accurately in implementation of process of accreditation? | Ng, et al., (2013); Pongpirul, et al., (2006); Hinchcliff, et al., (2013); Bateganya, et al., (2009); Buetow & Wellingham, (2003); Bukonda, et al., (2002); Bouchet, et al., (2002); The Health Foundation, (2010) |

These constructs were operationalized by multi-item measures using 5-point Likert scales. Content and face validity of this questionnaire was considered and confirmed in separately stages; also, exploratory factor analysis was done for investigating of construct validity and identifying factors structure. Reliability of this questionnaire investigated through Cronbach's alpha and for whole dimensions was higher than 0.7. To ensure that the wording of this questionnaire was clear and understandable and the equivalence of the instrument was achieved, a pre-test was conducted prior to conducting the final survey. Also, one other question included in the questionnaire for the distinction of samples in public and private hospitals. In order to collect data 280 questionnaires were distributed and 239 of them were collected with the response rate of 0.85. Method of sampling in this research was simple random sampling. Period of research was from the beginning of July 2014 up to August 2014. In this research, for data analysis. both descriptive statistics method and inferential statistics method have been used. Indeed, at first, research variables were tested by using descriptive statistics methods and then inferential statistics method has been used. In final, for data analysis and testing assumptions, exploratory factor analysis and Friedman test have been administered by using SPSS-20.

#### **Finding**

Results of this research is presented in three section; in the first section, the result of exploratory factor analysis was

presented and in the second section, ranking of accreditation implementation challenges in both sectors is shown and in the final section ranking of challenges in private and public hospitals is presented and compared together.

#### The results of exploratory factor analysis

In order to assess the impressive and impressible challenges, 39 questions were considered totally. Generally, factor analysis was done with the method of Principal Component Analysis and Varimax rotation. KMO measure of sampling adequacy in addition to Bartlett's test of sphericity sig. was also obtained as 0.861 and 0.000 respectively (KMO=0.863; Bartlett's Test of Sphericity: chi square=4.922, sig=0.000). Thus it can be concluded that the data are adequate for factor analysis. Some of the questions were deleted due to factor loading and communality values less than 0.5 as was expected previously and the remaining questions were classified in 9 aspects. Results of this exploratory factor analysis from SPSS software is summarized in the table 2.

Table 2: Total Variance Explained

| Row | Factor                                       | number of questions | Eigen value | % of Variance | Cumulative % |
|-----|--|---------------------|-------------|---------------|--------------|
| 1   | Standard& surveying development              | 11                  | 12.371      | 31.720        | 31.720       |
| 2   | Quality improvement                          | 8                   | 3.572       | 9.158         | 40.878       |
| 3   | Human resources                              | 3                   | 3.058       | 7.841         | 48.719       |
| 4   | Support of regulatory initiatives            | 4                   | 2.243       | 5.750         | 54.469       |
| 5   | Financial and facilities resources           | 3                   | 1.946       | 4.991         | 59.460       |
| 6   | Encouraging drivers                          | 3                   | 1.481       | 3.796         | 63.256       |
| 7   | Perception of accreditation standards        | 3                   | 1.400       | 3.589         | 66.845       |
| 8   | Management Knowledge ,skills and commitment2 | 2                   | 1.131       | 2.899         | 69.745       |
| 9   | Determining macro policies and procedures    | 2                   | 1.037       | 2.658         | 72.402       |

Table 2 shows the variance explained by the initial solution, the amount of Eigen value and the number of questions in every factor. These 9 factors represent almost 72.40% of the variance in the table and suggest that 9 latent influences are associated with challenges of accreditation implementation, but there remains room for a lot of unexplained variation. Challenges of accreditation standard implementation are Support of regulatory initiatives, Encouraging drivers, Perception of accreditation standards, Determining macro policies and procedures, Standards and Surveying development, Professional requirements, Knowledge, skills and commitment of management, Human resources, Financial& facilities Resources, Quality improvement.

# **Ranking of Accreditation Implementation Challenges in both Sectors**

Challenges to implementation of hospital accreditation are not in the same rank. Furthermore, the hypothesis below is used to see whether all the challenges related to implementation of Accreditation standards are in the same rank. To attend this goal, Friedman test is applied in SPSS. According to table 1 p-value of this test is 0.000, which means Null hypothesis (H0) is rejected at 0.05 and even 0.01 levels, and thus, it can be said that there is significant difference between ranks of challenges related to implementation of Accreditation standards.

**Table 3: Test Statistics (Friedman Test)** 

| N           | 239     |  |
|-------------|---------|--|
| Chi-Square  | 615.382 |  |
| Df          | 8       |  |
| Asymp. Sig. | .000    |  |

Furthermore, as shown in table 4, it is cleared that the determining macro policies and procedures (A2) is in the lowest rank. However, the Encouraging drivers (A1) in the highest rank.

Table 4: Ranking of Accreditation Implementation Challenges in both Sectors

| Challenges                                  | Code | Mean Rank | Rank |
|---|------|-----------|------|
| Encouraging drivers                         | A1   | 7.72      | 1    |
| Determining macro policies and procedures   | A2   | 2.78      | 9    |
| Human resources                             | A3   | 3.52      | 8    |
| Standard& surveying development             |      | 4.24      | 7    |
| Financial and facilities resources          |      | 5.24      | 3    |
| Management knowledge, skills and commitment |      | 4.95      | 5    |
| Perception of accreditation standards       | A7   | 6.97      | 2    |
| Support of regulatory initiatives           | A8   | 4.45      | 6    |
| Quality improvement                         |      | 5.13      | 4    |

Studying the mean and ranking of challenges to implementation of accreditation, indicates that the challenges from the highest to the lowest are respectively: encouraging drivers; perception of accreditation standards; financial resources; quality improvement; management knowledge, skills and commitment; support of regulatory

initiatives; standard & surveying development; human resources and determining macro policies and procedures. In fact, the results of the study show that the challenge which has the highest rank is one of the main obstacles of implementation of accreditation in hospitals and more attention should be given to it.

## Compare the Ranking of Accreditation Implementation Challenges in Private and Public Hospitals

Results in Table 5 show that Challenges to implementation of accreditation in both private and public hospitals are not

in the same rank. Since the significance levels are less than 0.05, it was found that challenges to implementation of accreditation in private and public hospitals are not in the same rank.

Table 5: Test Statistics (Friedman Test)

| Public Hospitals |         | Private Hospitals |         |  |
|------------------|---------|-------------------|---------|--|
| N 155            |         | N                 | 72      |  |
| Chi-Square       | 410.884 | Chi-Square        | 214.666 |  |
| Df               | 8       | Df                | 8       |  |
| Asymp. Sig.      | .000    | Asymp. Sig.       | .000    |  |

Table 6: Ranking of Accreditation Implementation Challenges in Private and Public Hospitals

| Public Hospitals |           | Challenges                                  | Private Hospitals |      |
|------------------|-----------|---|-------------------|------|
| Rank             | Mean Rank | Challenges                                  |                   | Rank |
| 1                | 7.53      | Encouraging drivers                         | 8.12              | 1    |
| 9                | 2.67      | Determining macro policies and procedures   | 3.02              | 9    |
| 8                | 3.57      | Human resources                             | 3.40              | 8    |
| 7                | 4.11      | Standard & surveying development            | 4.51              | 6    |
| 3                | 5.45      | Financial and facilities resources          | 4.77              | 4    |
| 4                | 5.12      | Management knowledge ,skills and commitment | 4.58              | 5    |
| 2                | 6.96      | Perception of accreditation standards       | 6.99              | 2    |
| 6                | 4.48      | Support of regulatory initiatives           | 4.40              | 7    |
| 5                | 5.09      | Quality improvement                         | 5.22              | 3    |

As shown in table 6, it is cleared that both in private and public hospitals, the determining macro policies and procedures (A2) is in the lowest rank and the encouraging drivers (A1) in the highest rank.

Studying the mean and ranking of challenges to implementation of accreditation in private hospitals indicates that the challenges from the highest to the lowest are respectively: encouraging drivers; perception of accreditation standards; quality improvement; financial and facilities resources; management knowledge, skills and commitment; standard & surveying development; support of regulatory initiatives; human resources; determining macro policies and procedures.

Also, ranking of challenges to implementation of accreditation in public hospitals indicates that the challenges from the highest to the lowest are respectively: encouraging drivers; perception of accreditation standards; financial and facilities resources; management knowledge ,skills and commitment; quality improvement; support of regulatory initiatives; standard & surveying development; human resources; determining macro policies and procedures.

#### Conclusion

Purpose of this study was ranking of important challenges of accreditation standards in private and public hospitals. In this regard, the questionnaire of accreditation implementation challenges included 39 items have been designed. The results of exploratory factor analysis showed 9 groups of challenges that was match with primary classification. Between 9 groups of challenges, 4 of them

are program challenges and 5 of them are organization challenges.

Findings of this research show that, the first important group of these 9 groups of challenges in both sectors and in public and private hospitals separately, is "encouraging drivers" which is program level challenge. It means that both public and private hospitals believe that incentives drivers are not enough to encourage them to participate better. Also by literature review, it was clarified that two encouragement factors for hospitals, are financial incentives and accreditation marketing. In this regard Braithwaite, et al., 2012 explained that lack of incentives for participation and high expenses of sustaining accreditation program were threats to accreditation(Braithwaite et al. 2012) and also Hinchcliff, et al., (2013) & WHO, (2001) added that participation of healthcare organizations in accreditation programs is encouraged through important financial incentives offered by the governments and insurance agencies(Hinchcliff et al. 2013, Organization 2001). Moreover the relationships between the various healthcare providers and purchasers must be defined, and the Ministry of Health must coordinate with private insurance firms to determine the most suitable models for provision and financing of health services(Organization Organization 2003a). Also beside of this program other incentives like accreditation marketing should considered. Bukonda, et al., stated that market forces provide financial incentive to accreditation(Bukonda et al. 2002). Shaw C., & Nandraj, et al., also found that introduction of accreditation to the public by the government and policymakers in a way that implementation of accreditation in a hospital and its grade

would represent quality of services at that hospital, will help consumers of healthcare services to select a hospital based on this criterion and thus, this issue will lead to competition among hospitals for attracting more patients and increasing their market share(Nandraj et al. 2001, Shaw 2004).

The second important group of challenge in both sectors and in public and private hospitals separately, is "perception of accreditation standards" which is program level challenge again. This challenge consists of 3 factors which include: Perception of accreditation standards by healthcare specialists(Hinchcliff et al. 2013, Ng et al. 2013); Cooperation of universities and educational hospitals in introducing the standards to hospitals(Rafeh and Schwark 2006); Attention to development time for implementation of these standards related to present infrastructure(Bukonda et al. 2002, Nandraj et al. 2001, Ng et al. 2013).

This category of challenges clears that, firstly the development time for implementation of accreditation standards have not been considered properly. Secondly the hospitals have not been accurately informed of the importance and role of accreditation standards, so at present most of them do not believe that accreditation have ability in improving hospital service quality and also it is not cost effectiveness for hospitals. Consequently, they do not participate to implement them properly or they will implement them superficially.

The third important group of challenge in both sectors and separately in public hospitals is "financial and facilities resources". According to the literature scarcity of resources was impediment of accreditation standards implementation (2, 10, 13, 19, 20, 22). This factor represents shortage of required resources for implementation of this standard in the public sector is more than the private sector and the necessity of allocating more budget and facilities to the public sector, this group of challenge is in the fourth level. It means that this factor is less important in private than public hospitals.

The forth important group of challenges in both sectors is the issue of "quality improvement" which includes the following instances: Knowledge and skill about CQI; Balance between internal and external organizational objectives; Participation of personnel and relationships between the sectors and Integration and utilization of information. Ng, et al., argued that the negative factors which weaken the successfulness of accreditation standards implementation included, lack of knowledge on CQI and lacking personnel training and support for CQI(Ng et al. 2013). This challenge is in the third level of challenge in private hospitals and fifth level in public hospitals. It means that private hospitals have more problems than public hospitals in quality improvement activities and public hospitals have more information related to QI compared to private hospitals.

The fifth group of challenges in both sectors and in the private hospitals is "management knowledge, skill and commitment". Ng, et al., & Shaw C., explained that management of accreditation processes by the senior management of the hospital has direct impacts on its implementation(Ng et al. 2013, Shaw 2004). According to findings in the public hospitals, this group of challenge is in

the fourth level. These challenges demonstrate that the hospitals management especially in public hospitals does not have enough knowledge, skill and even commitment in accreditation implementation. This finding is consistent with complaint of some of public hospitals that they had lots of problems related to financial and facilities resources (which is third level of accreditation challenges in public hospitals) and also change the manager of hospital frequently caused the management could not participate accurately in accreditation implementation. So it should be better at first to employ manager of hospital according to job qualification and criteria which is needed for management of hospitals. And also prepare training courses related to accreditation implementation for them to increase their knowledge and skills and finally try to provide performance appraisal of them periodically to check their abilities and also to increase their commitment related to accreditation implementation.

The sixth group of challenges in both sectors and in the public sector is the issue of "support of regulatory initiatives" which includes the following instances: Legal support of accreditation implementation; Voluntary or mandatory accreditation; Sustainable resourcing of accreditation; Independent or dependent accreditation entity. Accreditation programs in LMICs economy have had very limited success because of government and policy change and also lack of political and financial support that is essential to be constant(Purvis et al. 2010). One of negative factors that may weaknesses the successful implementation of accreditation programs is a regulatory approach for mandatory participation (Ng et al. 2013).

The seventh group of challenges in both sectors and in the public sector is the issue of "standard and surveying development" that include: standards development (Bouchet et al. 2002, Bukonda et al. 2002, Hinchcliff et al. 2013, Ng et al. 2013); Surveying practices(Hinchcliff et al. 2013); Audit program(Hinchcliff et al. 2013, Shaw 2004); Audit team(Bukonda et al. 2002, Hinchcliff et al. 2013, Nolan et al. 2007, Organization 2003b, Pongpirul et al. 2006, Shaw 2004). The accreditation standards will be implemented more successfully and also will be accepted by professionals of healthcare organizations, when relevant standards (suitable) have been used for the hospitals and the audit program could be collaborative and reliable (Bukonda et al. 2002, Hinchcliff et al. 2013, Ng et al. 2013, Pongpirul et al. 2006, Shaw 2004). Ng, et al., based upon their review of the literature argued that the development of standards primarily based on legislation, expert advice, research, current practices and overseas experience, and recent development usually focus on the interface between management units and follow patients' continuum of care(Ng et al. 2013). During the adoption of appropriate accreditation standards, it is crucial to create a balance between simplicity and low expense, and scientific authenticity and validity (auditing program and auditors). This group of challenges in private hospitals is in the sixth level and it show that private hospitals have more challenges with these group of challenges compared to public hospitals. Eighth challenge in both sectors and in the public and private sectors separately, which include: human resources efficiency(Bateganya et al. 2009, Ng et al. 2013, Pongpirul

et al. 2006); Create motivation (Bateganya et al. 2009, Hinchcliff et al. 2013, Ng et al. 2013, Rafeh and Schwark 2006); Education and technical assistance (Bateganya et al. 2009, Buetow and Wellingham 2003, Bukonda et al. 2002, Ng et al. 2013). Ng, et al., stated that the regulatory requirements from accreditation agencies may create significant workload in terms of administrative activities (Ng et al. 2013). Hinchcliff, et al., mentioned that, staff motivation for participation in accreditation implementation should be internal and based on a tendency to improve (Hinchcliff et al. 2013), but financial motivations quickly are considered not as incentives, but as rights so the work for which the incentive was created is quickly forgotten, yet the expectancy of the extra payment persists (Rafeh and Schwark 2006). Regarding education and technical assistance, Ng, et al., stated that one of the positive factors that may enable the successful implementation of accreditation programs is personnel training(Ng et al. 2013). As a result hospitals should consider factors include Staff efficiency, motivating the staff for improvement, supporting them, avoiding blaming them and providing education aimed at quality improvement (Organization 2003b)...

Ninth challenge in both sectors and in the public and private sectors separately, is determining macro policies and procedures (Bateganya et al. 2009, Organization 2001, Organization 2003a, Shaw 2004, Shaw et al. 2010)). Bateganya, et al., (2009) identified concerns related to priorities for standards. Most medical superintendents stated that they could make use of standards in infection control, cleanliness and hygiene, infrastructure (running water and functioning equipment) and medical records in order of significance(Bateganya et al. 2009). There was a general agreement that having standards in areas that could merely be improved with significant new funding, such as physical infrastructure, would not be beneficial. As one medical superintendent stated that It will only increase their stress. Scoring less on such a standard in a situation that they do not have much control, would only discourage staff.

It is necessary to begin with core standards and at the same time identify the priorities of the sectors and activities in order to implement accreditation and quality improvement program and implement accreditation step by step(Shaw 2004).

#### Suggestion

Iran ministry of health have prepared program of tariff rate and insurance contract with hospitals according to their degree or grade that hospitals get after accreditation assessment. But this program should be reviewed again and try to find the aspects that could be revised to encourage hospitals more and even effectively to participate in accreditation implementation. Also beside of this program other incentives like accreditation marketing should be considered. Bukonda, et al., (2002) stated that market forces financial incentive provide the to accreditation(Bukonda et al. 2002). Shaw C., (2004a) & Nandraj, et al., (2001) also found that introduction of accreditation to the public by the government and policymakers in a way that implementation of accreditation in a hospital and its grade would represent quality of services at that hospital, will help consumers of healthcare services to select a hospital based on this criterion and thus, this issue will lead to competition among hospitals for attracting more patients and increasing their market

share(Nandraj et al. 2001, Shaw 2004). The other point is that implementation of accreditation will be more successful in countries with a large enough healthcare market, so that by creating competition, the role of accreditation may become more prominent(Braithwaite et al. 2012, Shaw et al. 2010).

Finally regarding standard and surveying development, accreditation department should prepare more meetings with hospitals specially private ones to understand which parts of these standards are needed to be revised and localized according facilities and human resources that each hospital have and also evaluate performance of its assessors and surveying practices periodically to find deficiencies of the evaluation program and try to prepare proceedings according to remove them to increase the trust of the hospitals related to accreditation survey.

#### References

Bateganya, M., Hagopian, A., Tavrow, P., Luboga, S. and Barnhart, S. (2009) Incentives and barriers to implementing national hospital standards in Uganda. *International Journal for Quality in Health Care*, pp. mzp044.

Bouchet, B., Francisco, M. and Ovretveit, J. (2002) The Zambia quality assurance program: successes and challenges. *International Journal for Quality in Health Care*, 14(90001), pp. 89-95.

Braithwaite, J., Shaw, C. D., Moldovan, M., Greenfield, D., Hinchcliff, R., Mumford, V., Kristensen, M. B., Westbrook, J., Nicklin, W. and Fortune, T. (2012) Comparison of health service accreditation programs in low-and middle-income countries with those in higher income countries: a cross-sectional study. *International Journal for Quality in Health Care*, 24(6), pp. 568-577.

Buetow, S. and Wellingham, J. (2003) Accreditation of general practices: challenges and lessons. *Quality and Safety in Health Care*, 12(2), pp. 129-135.

Bukonda, N., Tavrow, P., Abdallah, H., Hoffner, K. and Tembo, J. (2002) Implementing a national hospital accreditation program: the Zambian experience. *Int J Qual Health Care*, *14*(Suppl 1), pp. 7-16.

Casile, M. and Davis-Blake, A. (2002) When accreditation standards change: Factors affecting differential responsiveness of public and private organizations. *Academy of Management Journal* 45(1), pp. 180-195.

Farzianpour, F., Arab, M., Amoozagar, S., Rahimi Fouroshani, A., Rashidian, A., Nakoei Moghadam, M. and Hosseini, S. (2011) Evaluation of international standards of Quality improvement and Patient Safety (QPS) in hospitals of Tehran University of Medical Sciences (TUMS) from the Managers' Point of View. *World Applied Sciences Journal*, 15(5), pp. 647-653.

Hinchcliff, R., Greenfield, D., Westbrook, J. I., Pawsey, M., Mumford, V. and Braithwaite, J. (2013) Stakeholder perspectives on implementing accreditation programs: a qualitative study of enabling factors. *BMC health services research*, 13(1), pp. 437.

- Nandraj, S., Khot, A., Menon, S. and Brugha, R. (2001) A stakeholder approach towards hospital accreditation in India. *Health Policy and Planning*, *16*(suppl 2), pp. 70-79.
- Ng, K., Leung, G. K., Johnston, J. M. and Cowling, B. J. (2013) Factors affecting implementation of accreditation programmes and the impact of the accreditation process on quality improvement in hospitals: a SWOT analysis. *Hong Kong Medical Journal*, 19(5), pp. 434-446.
- Nolan, P., Bialek, R., Kushion, M. L., Lenaway, D. and Hamm, M. S. (2007) Financing and creating incentives for a voluntary national accreditation system for public health. *Journal of Public Health Management and Practice*, *13*(4), pp. 378-382.
- Organization, W. H. (2001) Health Care Quality, An International Perspective. in *Regional Office for South-East Asia*, New Delhi: WHO Regional Publication.
- Organization, W. H. (2003a) Accreditation of hospitals and medical education institutions—challenges and future directions. in WHO Regional Publication, Regional Committee for the Eastern Mediterranean EM/RC50/Tech.
- Organization, W. H. (2003b) Quality and accreditation in health care services: a global review.
- Pongpirul, K., Sriratanaban, J., Asavaroengchai, S., Thammatach-Aree, J. and Laoitthi, P. (2006) Comparison of health care professionals' and surveyors' opinions on problems and obstacles in implementing quality management system in Thailand: a national survey. *International Journal for Quality in Health Care, 18*(5), pp. 346-351.
- Purvis, G. P., Jacobs, D. and Kak, N. (2010) International Health Care Accreditation Models and Country Experiences: Introductory Report on Options for The Republic of South Africa.
- Rafeh, N. and Schwark, T. (2006) Developing and Implementing an Accreditation Program in Egypt. *Bethesda*, *MD*, *US Agency for International Development*.
- Schieber, G., Baeza, C., Kress, D. and Maier, M. (2006) Financing Health Systems. *Disease control priorities in developing countries*, pp. 225.
- Shaw, C. (2004) Toolkit for accreditation programs: some issues in the design and redesign of external health care assessment and improvement systems. *Melbourne,: The International Society for Quality in Health Care*.
- Shaw, C. D. (2006) Developing hospital accreditation in Europe.
- Shaw, C. D., Kutryba, B., Braithwaite, J., Bedlicki, M. and Warunek, A. (2010) Sustainable healthcare accreditation:

- messages from Europe in 2009. *International Journal for Quality in Health Care*, pp. mzq043.
- Tabrizi, J. S., Gharibi, F. and Wilson, A. J. (2011) Advantages and disadvantages of health care accreditation models. *Health promotion perspectives, 1*(1), pp. 1.
- Zarifraftar, M. and Aryankhesal, A. (2016) Challenges of Implementation of Accreditation Standardsfor Health Care Systems and Organizations: A Systematic Review. *Journal of Management Sciences*, 2(3), pp. 191-201.