

The impact of implementing safety standards on the patient safety performance in Shahid Faghihi hospital of Shiraz city

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Abstract

Purpose: The health system in the world, despite significant and undeniable advances in the field of science and technology, continues to face many challenges. Ensuring patient safety is the first step in improving the quality of care. Patient safety, as one of the main components of the quality of health care, means avoiding any injuries or injuries to the patient while providing care. Patient safety standards are a set of requirements that are critical to every hospital's implementation. The assessment of this process is an advanced mechanism in hospitals designed to determine the level of patient safety and can be used to initiate and evaluate the progress of running programs. **Methods:** The research method is applied in terms of purpose and descriptive-applied method. Correlation method has been used. The research sample was 306 nurses of the hospital Shahid Faghihi Shiraz city who were selected by stratified random sampling method. To evaluate the variables, two questionnaires were used by researcher and occupational attachment questionnaire. Data analysis was done using descriptive statistics using spss software. **Results:** There is a significant positive relationship between safety standards on patient safety ($r = 0.63$). The higher the safety standards in the hospital, the higher the safety performance of the patient. There is a significant positive relationship between governance and leadership on patient safety ($r = 0.607$). The higher the governance and leadership in the hospital, the higher the safety performance of the patient. There is a significant positive relationship between participation and interaction on patient's immune function ($r = 0.377$). The higher the participation and interaction in the hospital, the higher the safety of the patient. There is a significant positive relationship between safe clinical services and patient safety ($r = 0.635$). The higher the safe clinical services in the hospital, the higher the safety performance of the patient. There is a significant positive relationship between the safe environment and the safety of the patient ($r = 0.590$). The higher the safe environment in the hospital, the higher the safety of the patient. There is a significant positive correlation between continuous education and patient's immune function ($r = 0.465$). The higher the continuing education in the hospital, the higher the safety of the patient. **Conclusion:** It seems that institutionalizing patient safety culture, focusing patients on the provision of services, training staff and patients, and removing legal barriers will increase compliance with patient safety standards throughout the country.

Key Words: safety standards, patient safety function, governance and leadership, engagement and engagement.

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Many managers believe that most events and incidents happen for other not ourselves and so after occurrence of any event for a very limited time all efforts of the adventured hospitals authorities are diverted to the safety affairs of its unit and they hurriedly do some actions but after a short while again safety is located in the margin and this status continues till occurrence of the next incident which will be imminent. The increasing extension of standards and huge advancements that have been obtained during recent years show that its main objectives may be considered general saving in

consumption of human power, energy, supporting the consumer, preserving safety and health and environment and creating better relation. Creation of safety culture and thought in various sections of the hospital is an issue which is performed by observing safety principles and necessary preventions. Safety is a science which helps human in preventing events accession in the working environment and always steps for preserving human force and human asset. There are two relatively different definitions of safety. One of these definitions considers safety a mortgage state in which the personnel are aware of all damaging and eventful conditions. Another definition considers safety a state where the risk of occurrence of damage and loss to individuals is in an acceptable level. Some other researchers apply the word tolerable instead of the word acceptable. Many factors are involved in promoting safety. We may be able to provide some suggestions for raising safety performance considering safety in general. But for performing efficient measurements for effective control of accidents and injuries due to it, factors effective on safety performance should be specially identified and examined. Predicting the yields relating to safety for providing a valuable guide for raising safety in the organization requires having a wide knowledge in relation to various aspects that influence safety and method of this impact. One of necessary elements for trying in order to prepare the programs of increasing safety performance and safety behaviors is to have awareness about factors influencing it. Safety performance is comprehensive performance of safety management system. The aim of performing this study is to investigate the impact of implementing safety standards on the patient safety performance in Shahid Faghihi Hospital of Shiraz City.

RESEARCH BACKGROUND

An article under the title of investigating the rate of realization of safe environment standards in selected hospitals of ShahidBeheshti Tehran University in 2015 conducted by Khalifeh (2016) concluded that the average rate of observing standards is 71.77. Regarding the varage rate of observing standards, the highest observation has been in the group of safety standards of blood and blood products with 92% and the least rate of observing standards in the group of standards of the patient safety friendly in management sections with 54%. The safety environment status in studied hospitals has been in medium level. So it is suggested that with required targeting in management sections for planning and operation measurements are performed for complete achievement of required standards. Jalili Bal et.al (2015) in a study under the title of evaluating performance of private and public hospitals based on engineering factors

of resistance and safety with the combined approach of simulation and decision making concluded that the engineering indicators of resistance and safety play an important role in determining the hospitals efficiency. Also, the results obtained from analysis of collected data show that the performance of private hospitals is much better than governmental hospitals. The results show that the indicator of group work comparing other considered efficiency indicators has a greater impact in determining the hospitals performance level. Administrative managers of healthcare systems should have a greater attention to other engineering indicators of resistance along with group work indicator using policies of improving efficiency and performance. In a study under the title of safety standards in operation room of training hospitals of Gazvin conducted by Habibi et.al (2014), operation room of Kosar hospital was unsafe and other hospitals operation rooms were safe. It seems that continuous investigating and obviating the possible problem in the field of observing safety standards in operation room by all people working in healthcare centers causes progress and continuous improvement of providing healthcare services. Akdag et.al (2014) using a combined fuzzy TOPSIS method and Min-Max planning, evaluated the treatment quality of hospitals in Istanbul and stated that these fuzzy combinations and planning are effective in treatment quality. Vanroylen et.al (2014) using data covering method measured the hospital performance in two sections of quality and technical. Evaluating the hospital performance has a special focus on the patient satisfaction indicators. Also, the performance in two sections of quality and technical influences the indicators of the patient satisfaction. The research hypotheses are discussed as follows:

Hypothesis 1: there is a significant relation between safety standards and the patient safety performance

Hypothesis 2: there is a significant relation between governance and leadership and the patient safety performance.

Hypothesis 3: there is a significant relation between participation attraction and interaction with the patient and the patient safety performance.

Hypothesis 4: there is a significant relation between the safe clinical services and the patient safety performance.

Hypothesis 5: there is a significant relation between the safe environment and the patient safety performance.

Hypothesis 6: there is a significant relation between continuous training and the patient safety performance.

The present study is a descriptive study of correlation type. The statistical population of the study is all nurses of ShahidFaghihi hospital of Shiraz City which were studied and investigated with stratified random method.

Based on Morgan table, the sample content was tested as 306 persons.

Research tool: In this study, for collecting data, scholar made questionnaire was used.

Research findings: Hypothesis 1: there is a significant relation between safety standards and the patient safety performance.

RESULTS

Table 1: Correlation factor of safety standards with the patient safety performance

Sig)significance level(	r	variable
0.00	0.663	safety standards patient safety standard

Regarding table 1, it may be inferred that there is a significant positive relation between safety standards and patients safety performance in level 0.01. The higher the safety standard in the hospital, the higher is the patient safety performance. Hypothesis 2: there is a significant relation between governance and leadership and the patient safety performance

Table 2: Correlation factor of governance and leadership with the patient safety performance

Sig)significance level(	r	variable
0.000	0.067	governance and leadership patient safety performance

Regarding table 2, we may confer that there is a significant positive relation between leadership and governance and the patient safety performance in level 0.01. The higher is the governance and leadership in the hospital, the higher will be the patient safety performance Hypothesis 3: there is a significant relation between participation attraction and the patient safety performance.

Table 3: Correlation factor of attraction participation and interaction and the patient safety performance

Sig)significance level(	r	variable
0.00	0.377	participation attraction and interaction patient safety performance

Regarding table 3, we may infer that there is a significant positive relation between participation attraction and interaction and the patient safety performance in level 0.01. The higher is the participation attraction and interaction in the hospital, the higher will be the patient safety performance Hypothesis 4: there is a significant relation between safe clinical services and the patient safety performance

Table 4: The correlation factor of safe clinical services and the patient safety performance

Sig)significance level(	r	variable
0.00	0.635	safe clinical services patient safety performance

Regarding table 4, it may be conferred that there is a significant positive relation between safe clinical services and the patient safety performance in level 0.01. The higher is the safe clinical services, the higher will be the patient safe performance Hypothesis 5: there is a significant relation between the safe environment and the patient safety performance

Table 5: Correlation factor of safe environment and the patient safety performance

Sig)significance level(	r	variable
0.00	0.590	safe environment patient safety performance

Regarding table 5, we may confer that there is a significant positive relation between the safe environment and the patient safety performance in level 0.01. The higher is the safe environment in the hospital, the higher will be the patient safety performance. Hypothesis 6: there is a significant relation between continuous training and the patient safety performance.

Table 6: Correlation factor of continuous training and the patient safety performance

Sig)significance level(	r	variable
0.00	0.465	continuous training patient safety performance

Regarding table 6, we may confer that there is a positive and significant relation between continuous training and the patient safety performance in level 0.01. The higher is the continuous training in the hospital, the higher will be the patient safety performance.

DISCUSSION AND CONCLUSION

The results obtained from table 1 showed that there is a significant relation between safety standards and the patient safety performance. The results of this hypothesis are consistent with the results of Asefzadeh et.al (2013). In explaining this hypothesis, we may state that the higher is the safety standards in the hospital, the patient safety performance also increases. The patient safety is one of the most important dimensions of healthcare quality and no matter like harming the patient is not in contradiction with the philosophy of healthcare, but treatment measurements and procedures are not always riskless and always there is the possibility of occurrence of medical errors and events threatening the patient safety.

From care provider view, error existence and unwanted complications are somewhat tolerable in the healthcare, but this attitude is in contrast to the patients view.

Statistics indicate that encountering health systems especially hospitals, a high percent of patients suffer from complications and damages due to providing services and a problem is added to their primary problem. Research studies have shown that on average about 10% of all hospitalization cases suffer harm in various degrees and evaluated that 75% of these errors are preventable. Unsafe healthcare services besides imposing pain to human, causes a heavy economic cost. Also, it is estimated that between 5-10% of costs relating to health are due to unsafe clinical services which lead to the patients harm. The results obtained from table 2 showed that there is a significant relation between governance and leadership and the patient safety performance. The organizations have been created for achieving some goals and the success rate in achieving the organizational objectives are in direct relation with the performance of human forces especially managers. Managers as the main people deciding in facing various within and outside organization problems play a considerable and determining role in success and failure of the organization and performing their duty. Regarding that the greatest health services cost of health budget is designated to hospitals, evaluation of managers' performance has a very important role in correct use of costs. Since the hospital is one of social organizations and one of the most important units of providing healthcare services, the hospitals managers performance weakness causes delay in early treatment and advancement of the disease or death. Also, weakness of the country hospitals' managers' performance wastes the financial and human resources and finally reduces efficiency. In case of efficiency of system of evaluating performance of the hospitals' managers and having tangible and computable indicators for evaluating their work, many costs in the hospitals may be reduced and better services be provided to covered hospitals, since providing suitable services is related to good and effective management. Shouchak (2005) in his study categorized 30 skills in 5 classes and then with the aid of a 72 persons group of specialists ranked them. Here, personnel and physicians management has received the highest score among the groups. The results obtained from table 3 showed that there is a significant relation between participation attraction and interaction and the patient safety performance. Participation of the patients and the society in health affair through training patients and attendants leads to satisfaction increase and attraction of more trust in clients, reduction of the patients' anxiety and emotions, greater perception of individual needs, positive and better and positive relation with specialists and stable and positive impacts on health. Planning and providing patients healthcare services based on views, patients requirements, their attendants and the society is

the key point of health system and necessary element in promoting treatment system and effectiveness of services and finally causes improvement of health consequences, life quality and patients satisfaction. In case of realization of the patient and society participation and their perception as a treatment partner with equal rights, patients in their treatment process participate actively and will pursue their treatment plan with more precision and as a result of their empowerment, the patients' health will be provided better. The healthcare services provider organizations should identify the individuals from their society who are influenced with their plans and programs. They may warranty the patients active participation by ensuring suitable awareness to patients proportionate to their diagnosis and treatment, investigating the patients experience and measuring the results of providing services from their viewpoint and also creating consultation services and communicating with patients. The results obtained from table 4 showed that there is a significant relation between safe clinical services and the patient safety performance. The results of this hypothesis are consistent with the results of Asefzadeh et.al (2013). In explaining these findings, we may state that health services are a kind of stuff that most people need them during their life. The role of physicians, hospitals, insurer organizations and supporting groups in providing people health needs has become more obvious and the quality of services provided in healthcare organizations besides being influences by the capability of specialized and medical personnel is dependent on processes quality and the systems of that organization too and studies have shown that quality plans encourage hospitals in collecting, analyzing and reporting data considering progress in any of mentioned levels and may cause efficiency, quality improvement, costs reduction, improvement of personnel spirit and increasing of the patients satisfaction. The results of the study of Ghazanfari et.al in 2012 confirmed the impact of human resources management on successful implementation of clinical governance in hospitals of Tehran medical sciences university. Unsafe healthcare services besides imposing suffer to men cause heavy economic costs. It is estimated that between 5-10% of costs relating to health are due to unsafe clinical services which lead to harming patients. The results obtained from table 5 showed that there is a significant relation between safe environment and the patient safety performance. In explaining this finding, we may state that always many measurements are performed for the patient safety and his improvement that we divulge most of them when we face a problem or event while we may measure for removing them for promoting the patient safety status by identifying the problems root before occurrence. The patients' safety

improvement is one of priorities of the governments and this matter has a high significance regarding sensitivity of the patients care. It seems that low percent of positive attitude to safety and defect in safety culture is a sign of requiring a comprehensive approach for improving the safety status in the hospitals. This approach should be comprehensive and include all safety dimensions. Undoubtedly, achieving full observance of safety points requires group and common work and one of main goals of observing safety points is to create a safe space for the patient and personnel. Amini Tapouk et.al (2012), in their study concluded that there is no correct scientific management in this field and in most cases service personnel responsible for collecting, disposing and making the rubbish safe don't use safety equipment and means. Most hospitals don't perform any measurement in managing the medicinal and chemical waste. The results of this study indicate that by recognizing the existing status and possibility of using modern methods of waste management, separation and dividing dangerous rubbish is performed accurately. The results obtained from table 6 showed that there is a significant relation between continuous training and the patients' safety performance. In explaining this finding, we may state that in the process of training personnel, one of significant necessities is assessing training needs. Identifying training needs is the first step in obviating defects and promoting personnel training quality. Unfortunately, in many organizations training needs assessment has not been correctly performed and has mostly ceremonial aspect. The role of training preservation and work health for raising the personnel safety knowledge level, awareness of physical and mental health status, being informed of the illness signs and way of encountering them, preventing horrible events and creation and promotion of safety culture is a necessary and inevitable affair. Training may enable the individual that in required, by applying safety instruction timely involve them. A study in 2011 by Yamani et.al with the aim of investigating the impact of training on performance and knowledge of caring diabetic patients express that professional training may promote healthcare quality and team performance in healthcare teams. Finally, it is suggested that besides awareness of the role of standards (QPS) in increasing the hospital performance, some regular and continuous plans to be prepared with their cooperation for reducing medical errors. Implementing validation plans in all hospitals are seriously followed and the results obtained from the hospitals yearly evaluation are involved in yearly operational plans.

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