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# A Study on the Challenges Faced By Health Systems in Establishing Risk Management in Selected Hospitals of Tehran University of Medical Sciences

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**ABSTRACT**

**Introduction:** This study aimed to identify the challenges of risk management in the context of clinical governance in selected hospitals of Tehran University of Medical Sciences.

**Materials and Methods:** This study was implemented in two phases: qualitative step and quantitative step (survey). The first step was conducted using in-depth interviews and the second was carried out through a survey by questionnaire. Data were collected in hospitals through in-depth interviews with hospitals managers and the experts involved in clinical governance who had been introduced by the hospital manager. All professionals affiliated with clinical governance in Baharloo, Firoozgar, Farabi, Shahid Rajai, Ziaeian, Motahari and Sina hospitals were selected.

**Results:** 35 experts involved in clinical governance were interviewed. According to these experts, the main obstacles in hospital risk management were: Lack of an error reporting culture, exaggerated fear of the consequences, and physicians' lack of interest in this domain. High workloads in this area have led to a reduction in employees' contributions.

**Conclusion:** Establishing clinical governance in health care organizations has had many benefits, such as improving patient care, increased level of patients' satisfaction, establishment of a risk management system, improvement in staff and health-care personnel cooperation, and achieving a more successful organizational management. Appropriate changes in the organizational culture are necessities for the successful establishment of risk management. Human and cultural obstacles that hinder the implementation of risk management in hospitals are evident; thus, major actions are necessary to implement risk management properly in a disciplined manner.

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## Introduction

Quality of care and services provided for the patients is one of the major issues in health sector. Patient safety is one of the most important elements that comprise care quality (1). The main focus of hospitals is on patient and hospitals services are done to satisfy the patients' needs (2). One must also note that health care is inevitably associated with an increased risk for patients' safety (3).

Regardless of how much skilled, committed, and careful the health-care personnel are, medical teams are prone to making errors in managing the patients (4,5).

Patients expect being taken care of in accordance with the best standards and based on the latest scientific and clinical evidences (6). The errors take place when there is either a failure to complete a planned action in accordance with the Schedule (administrative error) or a mistake in selecting the appropriate plan for a certain aim (planning error).

So there are two types of errors: administrative errors and planning errors (7). Various statistics have been published about the incidence and the prevalence of medical errors in different hospitals. According to the estimates, almost one out of every 10 person admitted in a hospital will experience adverse events, about half


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of which are preventable. About one-third of the events harm the patient directly, which might lead to inconveniences ranging from a simple prolonged hospital stay to mortality (8,9). Previous studies show that only the errors which result in serious adverse events are reported and the ones with minor consequences tend to be ignored (10). These errors could occur due to various reasons such as inappropriate and abnormal working hours (evening and night shift, holiday shift, two consecutive night shifts, two shifts at night and morning and long working hours), excessive nursing responsibilities, insufficient work experience, and manpower shortage for covering night shifts (11). Currently, clinical governance is being conducted as a plan to improve services quality in hospitals across the country. Clinical governance is a framework in which the service provider organizations are accountable for the continuous quality improvement, and by creating an environment in which clinical care excellence flourishes, aims to safeguard high standards of services (12).

Risk management is an important aspect of clinical governance that reduces the probability of health-care associated errors and the consequent damages imposed on. Also, this method reduces the complaints and legal issues to the minimum (13). Risk management used to be studied in a clinical setting with the reactive approach. In this approach, after the occurrence of a certain event, the suspected causes are analyzed in order to prevent recurrence. However, in the clinical governance framework, preventive methods are highly emphasized. In this approach the risk is accepted and managed appropriately before the occurrence (14). This study aimed to identify the challenges faced by health systems in risk management in selected hospitals of Tehran University of Medical Sciences.

## Materials and Methods

The study was implemented in two steps: qualitative step and quantitative step (survey). In this study, hospital managers and executive experts affiliated with clinical governance were interviewed. The first step was conducted using in-depth interviews and the second stage was carried out through a survey by questionnaires. In the first phase, after completing interviews, information was using content analysis method. After an interview with each expert, interview ideas were transcribed and coded. In the second phase, a checklist of the challenges faced by the system in risk management was created based on the interview findings. Again, the checklists were given to the target group to score each item based on a five point Likert scale.

Then, the checklist data was entered to SPSS for analysis. In the checklist, each item contained five options: completely agree (score 5), agree (score 4), could be (score 3), disagree (score 2) and completely disagree (score 1). Items with rating above four were considered fundamental challenges. Main challenges were challenges on which there was general consensus in all hospitals, and most experts agreed or completely agreed with them being a major obstacle. Items with a mean score between three and four were considered actual challenges. Items with mean scores between two and three were considered potential challenges.

Potential challenges are not considered challenges per se in all hospitals and there is no consensus on them being a major hindrance to the risk management establishment. Items with mean scores below two were not considered challenges at all.

Data were collected in hospitals through in-depth interviews with hospitals managers and experts involved in clinical governance who had been introduced by the hospital management. Using the results of these interviews, a checklist of the administrative challenges in clinical governance was extracted. After completing the checklists, a list of consensual challenges was announced based on priorities. In this study, all professionals related to clinical governance in Baharloo, Firoozgar, Farabi, Shahid Rajai, Ziaeian, Motahari and Sina hospitals were enrolled. These hospitals had been chosen as the top hospitals in the implementation of clinical governance in the second National Festival of clinical governance. From a qualitative perspective, emphasis was put neither on the scale nor on statistical estimates, but rather on the sample values with respect to the purpose of the research. Therefore, in this study the "non-random purposive" sampling and expert sampling methods were used. The philosophy of purposive sampling or criterion sampling is that subjects are preferably selected based on the purpose of the research not on random methods. This kind of sampling, allows for the selection of people whose experiences will prove helpful for the study. In other words, the researcher continues to interview up to the point that all the required data has been gathered.

“Expert sampling” is one type of purposive sampling used when the researcher does not have enough information about the sample selection and should base his actions on the opinion of other experts in this field.

In this method, experts’ opinions with high credibility will be considered (15).

## Results

The main objective of the present study was to investigate the challenges faced by health systems in risk management establishment as an important pillar of clinical governance in selected academic hospitals of Tehran University of Medical Sciences. For this purpose, Farabi, Firoozgar Motahari Ziaeian, Rajai and Baharloo hospitals which are considered active in the clinical governance domain were chosen. These seven had been chosen as the top hospitals for the successful implementation of clinical governance in the second National Festival of clinical governance. To prepare a

checklist of challenges against risk management, in-depth interviews were done with hospital administrators. At the end of each interview, the hospital administrators introduced four officials involved in clinical governance. Thus, a total of 35 interviews with experts affiliated with clinical governance were conducted. The results of those interviews were integrated in the following checklist.

**Table 1: checklist of challenges and barriers against risk management implementation**

| |
|---|
| Lack of an error reporting culture and exaggerated fear of the consequences |
| Fear of being sued by the patients |
| Lack of coordination of jurisdictions with hospitals in reporting errors |
| Lack of obligations for the physicians to cooperate in this domain |
| High workloads and the consequent reduction in staff's contributions |
| Insufficient physical space in Hospitals |
| Lack of nurses' cooperation with the risk manager in providing feedback |
| Insufficient practical instructions on the principles of clinical governance for the staff |
| The possibility of data misuse |
| Data Manipulation |

**a. Implementation of risk management barriers:**

1. Lack of an error reporting culture and exaggerated fear of the consequences:

Supervisor: "Despite the fact that we reassure the personnel that they will not be blamed or fined, they are reluctant to report errors. This may be some extent due to the fear of being sued by the patients".

Hospital administrators: "Let us say that we design the system in a way that all staffs report the errors and are reassured that nobody will be punished. But, we cannot guarantee that legal issues will never arise".

2. Lack of obligations for the physicians to cooperate in this domain:

Office of risk management Director: "Our assumption is that an error occurs per patient. But many of the physicians do not cooperate since they are not obliged to get involved with this issue".

Supervisor: "High workloads and manpower shortage hinder the process of forming error reports, especially the minor and negligible ones".

3. High workloads and the consequent reduction in staff's contributions:

Supervisor: "Whenever the error is negligible and does not have any serious outcomes, it would not be reported due to time shortage".

Office of risk management director: "staff shortage forces our nurses to prioritize their tasks. Obviously, error reports, with possible negative effects on their peers' opinions towards themselves will be put aside".

4. Data Manipulation

Supervisor: "Risk management is carried out in hospitals based on the reported data which does not always reflect the fact".

Supervisor: "when there is no supervision, the false data can be made up to account for many of things that have not been done in reality, or at least not in the correct way"

5. Lack of teamwork culture

Office of clinical governance director: "Risk management is carried out in the framework of FMEA plan. Implementation of this program requires group participation and we are weak in this field.

Unfortunately, our working system is individual based and does not have a teamwork mentality".

**b. Implementation of risk management strategies:**

1. Creating the culture of error reporting

Hospital administrators: "Whenever an error occurs, wrong behavior should be criticized, not the person who has committed the error. If the staff takes the blame and criticism personally, they will try to hide their errors later on".

Supervisor: "Previously there was a system in which all errors, either big or small, were reported and each department and generally all hospitals of university exchanged information with each other and were aware of each other's errors. This would prevent errors from being repeated in the other connected hospitals and departments".

2. Practical obligation for physicians to enter this area:

Hospital administrators: "The medical practice is teamwork, when an error occurs many staffs understand it and can report the issue. The fear of not being excused should be managed".

Supervisor: "We should assign reporting errors as a duty for each of the colleagues like any other tasks and draw their attention towards this area".

Hospital administrators: "The goal of risk management is learning, an error would not be repeated if properly analyzed"

3. Performance supervising and monitoring:

Hospital administrators: "The evaluation process should be done step by step. By monitoring the work we can ensure that there has been no data manipulation.

When we make sure that a hospital has been successful in one area, other hospitals can use that data as well".

Hospital administrators: "When error prevention becomes a major concern for authorities, nobody can hesitate in performing his duties or try to hide an error".

4. Emphasis on teamwork culture and Acceptance of criticism culture:

Hospital administrators: "When we focus on errors and incidents, we become unaware of the program. We should consider all areas of clinical governance in the context of an overall and complete program. For example, consider the use of information: in what area can we work and not use the information? This is not an isolated area and it must be seen as a part of a whole. Training and risk management are the same".

Supervisor: "Teamwork means that individuals work together and try to prevent the occurrence of errors; not to ignore reporting errors and mistakes of their group-mates".

**Analysis of the checklist**

In the second phase, the created checklist was transformed into a questionnaire with a Likert scale scoring system (completely agree, agree, could be, disagree and completely disagree) considered for each item.

At first, the questionnaire was approved by the educational advisor and counselor, and then, using the test-retest method, its reliability was confirmed by Chronbach's alpha test (r = 0.91). The created questionnaire was distributed among the experts who had been interviewed. Once completed, the questionnaires were analyzed by SPSS v20 and the following results were obtained.

**Table 2: implementation of risk management challenge**

| implementation of risk management challenges | mean | Standard deviation |
|---|---|---|
| Lack of an error reporting culture and exaggerated fear of consequences | 4 | 0.87 |
| Fear of being sued by the patients | 15.3 | 1.01 |
| Lack of coordination of jurisdictions with hospitals in reporting errors | 87.3 | 0.97 |
| Lack of practical obligations for the physicians to cooperate in this domain | 9.4 | 0.68 |
| High workloads and the consequent reduction in staff contributions | 9.4 | 0.70 |
| insufficient physical space in Hospitals | 93.3 | 0.75 |
| Lack of nurses' cooperation in providing the risk manager with feedback | 3.75 | 1.02 |
| Insufficient practical instructions on the principles of clinical governance for the clinical staff | 21.3 | 1.03 |
| The possibility of data misuse | 90.3 | 0.89 |
| Data Manipulation | 36.4 | 0.60 |

As can be seen in the table above, Data Manipulation was the most fundamental challenge with highest mean score.

## Discussion and Conclusion

Clinical governance establishment in health care organizations has had many benefits, such as improving patient care, increased level of patients' satisfaction, establishment of risk management system, improvement in staff's and personnel's cooperation, and enhanced organizational management (16). Verbanco conducted a study in health care institutions in Italy to evaluate the risks of human errors and the reliability of risk management system. He concluded that the interpretation of risks and their management is unique for each hospital due to the different organizational cultures. Risk management culture should be created through educational programs, implementation of clinical risk management, evaluating the present policies and considering clinical governance in hospital (17). In this study, data manipulation was the most fundamental challenge facing the implementation of risk management in studied hospitals. This challenge can distract the system from its main purposes. Wright believes that in the absence of constant monitoring, there is a tendency to look for new means of data manipulation by hospitals (15). To achieve real success, efforts needed to reform the health sector should be continuously and closely monitored. For successful implementation of any policy, the existence of an appropriate reporting system is very important. It should be noted that providers have sufficient incentives for inaccurate and even false reports.

Reforms informer should ease acting against resistance and fraud with designing a flawless monitoring system. Lack of practical obligation for the physicians to cooperate in this domain, lack of an error reporting culture, and exaggerated fears from the consequences were also identified as major challenges in this sector**.** Based on the findings of Seidi's research, nurses mentioned lack of enough instructions on how to report errors (59.8%) and forgetting to report errors (59%) as major barriers of reporting errors (18).

Fear of consequences**,** over-working**,** manpower shortage, postponing the report till the end of work shift, and ignoring the importance of this issue were the other factors responsible for inappropriate error reporting (18). In Joolaei's study, nurses listed some reasons for failing to achieve a proper error reporting system: errors which would not be detected and errors that might have been detected but would not cause harm to the patient were ignored. Two other hindering factors were fear of being fined and unfavorable consequences which will discourage staff from reporting in the hospital system (19). Creating a dynamic organizational culture can be a solution to the challenges of this area.

One feature of a dynamic organizational culture is that it treats negative results as learning material. Most organizational issues are not a source of errors. Most of

organizational problems are not caused by errors rather they result from a failure to learn (20). In this regard, Fong expresses that systematic dealing with medical errors and lack of documentation process can lead to an increase in accidents and errors. In some cases, the error is caused by innate problems in working processes. Fong suggests modifying working relationships, not for punishment but as a means preventing future errors and reducing their severities (21). High workload and time/ manpower shortage were the other main challenges identified in this area.

Mohammadpoor's study introduces some factors such as lack of required manpower in departments, lack of appropriate resources and facilities for training, staff's insufficient level of knowledge and skills as unfavorable characteristics of medical centers of Gonabad (22).

Hogan's study in 2007 showed that specialists in all professional groups consider lack of time, lack of teamwork, lack of focus on program objectives and negative view about clinical governance program as obstacles to establishing of this plan in hospitals (15). It seems, for the realization of establishing risk management in hospitals, it is essential to change the organizational culture. Human and cultural obstacles that face the implementation of risk management in hospitals are evident and major actions are necessary to execute risk management properly and in a disciplined manner.

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