



## Specifying nurse's experiences of risk management is one of the patient security challenges in social security hospital: A phenomenological approach

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### ABSTRACT

Patient safety is regarded as prevention and damage adjustment due to elimination of errors related to mentioned hygienic care which decreases the mistakes by the help of applying practical methods and causes not occurrence of events. So this study was conducted aimed at specifying the experiences of nurses as a challenge to patient safety in social security hospital of Zahedan in 2015. This study is a qualitative research with a phenomenological approach. Participants of this study have been selected from nurse population on the basis of purposeful sampling. The sampling continued until the completeness of the data. 14 participants of this study consist of 2 supervisors, 1 head nurse and 11 nurses aged from 22-45 years old and all married. Data collection developed through deep, nonstructural interviews which were tape recorded and transcribed word by word. The data were then analyzed in Collaizzi's 7 step method. At the end of interview analysis, 130 codes were elicited and two themes were drawn named risk management and human resources management. Risk management consists of sub concepts; the policy of punishments of managers, inefficient management of medical errors and human resources management include sub concepts; The shortage of nurse forces, inefficient selection of nurses and increase in authenticity requirements. inefficient risk management is one of the most important patient safety challenges related to medical errors which should be specifically taken into account and intensify the encouragement system and the policy of not punishing nurses should be used in order to remove the mentioned challenges related to establishment of patient safety system.

**Key words:** risk management, safety challenges, patients.

### INTRODUCTION

Patient safety is regarded as one of the main contents of sanitarian services qualifications and means prevention of occurrence of any damage to patient while doing hygienic care. It is also adjustment to the occurred harm because of deleting the mistakes related to the mentioned hygienic cares and to decrease the occurrence of mistakes by practical methods and solutions and causes non repetition of them providing the occurrence of events. Also means the absence of any damage due to the sanitarian –therapeutic services and medical error.

One of the most evident human rights is the right of being safe from dangers and damages while receiving sanitarian services. The patient safety is a very essential part of therapeutic-hygienic systems and one of the main parts of quality in world health organization and because of this it is of a special importance in performing (patient safety principles in necessitated hospitals.

Zegers [1] shows that many people suffer from dangerous events and today many hospitals seek for ways in order for improvement of patient safety through decreasing the medical errors.

There conducted a good number of studies on standard of patient safety factors in hospitals and health-sanitarian centers in and out the country. Non safe services besides the unfavorable effects in the process of health recovery, cause also an undesirable senses on patient himself and his accompaniers.

It also makes mental pressure on hospital sanitarian care personnel and community. According to the existing observations, it is estimated that in developing countries one patient out of 10 gets injured while receiving health services in hospitals. Nonetheless, in developing countries, there exists no precise statistic in this respect. But its probability of occurrence is in turn more. Studies conducted in different countries demonstrate that at least 2.9-41.1% of patients have ever experience a side effect [2].

Occurrence of an error in process of patient safety does not mean human negligence or default but moral law of "work with no error" has created a special culture in medical community which considers error a personal problem and uses blame and punishment instead of finding out the cause of the errors. This is while the start point of decreasing the error occurrence is an awareness concerning the its causes and supporting the culture of repeating the error [3].

In 1998, a governmental American institute called "medical institute" made the public surprised by a look at human errors which said 44000 to 48000 American died each year because of medical errors. The US congress has held many sessions in order for listening to the reports concerning medical errors and patient safety and different aspects of this kind of health system's problem which can affect individuals anywhere any time. This took the attention of public opinion. Doctors, nurses and hospitals were informed in this respect and committed to organize their activities in order for improving the quality of patient safety and healthcare. Desirable findings obtained but many believe that there should be taken more actions in this respect.

Despite many approaches, studies, reports, debates and activities till 2006, we just see the progress in the knowledge. There were no miraculous treatments in hand except behavioral problems which are apparently delightful and humanly complicated and accompanied with obstinacy and pertinacity. It seems that some of these complications come out of human activities. Problems concerning present medical errors will be posed and investigated [4].

Seven years after the publication of this report by medical institute concerning the problem of medical errors, there revealed another report by another medical institute in July2006, which said the error concerning prescription of medicaments and medicines lead to injury of 1.5 million in USA per year. Medical errors kill thousands of individuals each year. The hospitalized patients in hospitals are subjects to occurrence of a number of these errors and their side effects. The incidence of these errors differ in different hospitals and at the same time all errors are not that serious [5].

There are different factors which influence the occurrence of medical errors; such as human factors (knowledge and function), technical, equipment, environmental condition of care, the factors related to patients, organizational factors like policies and principles and disagreement in care team. But the majority of world communities like world Health Organization (WHO) believe that medical errors and impendent events of patient safety take place due to defective systems and problems related to care giver systems(not mere fault of a caregiver).

Studies demonstrate that only in 26%of undesirable events, errors related to the function of caregivers are causes of the events. Meanwhile, errors due to non-observance of policies (27%), errors related to loss of skill (26%), technical errors (25%), errors related to knowledge (16%), wittingly errors (7%) play the most roles [6].

Reports of institutes in England, Canada and Australia concerning medical errors related to patient safety in hospitals make the system of sanitarian cares more considerable which have not enough safety. And this is really in patient safety inconspicuous but a serious problem [7].

Studies conducted in Iran also show that lots of medicaments are not appropriate and there exists lot of medicament's interventions in prescriptions. Also, in studies which investigate and view the rate of medical errors

through people complaints, the proved fault of therapeutic cadre is 42-53% of complaints. Among these complaints 22-44% relates to death, 35% sides effect and 27% to physical damages [8].

Findings of Parand [9] demonstrate that the spent time by managers and their activities in managing the patient safety may meaningfully influence the quality level of safety and efficiency of therapeutic process in hospitals.

Also in another research by Salavati [10], the findings show that the strong points of safety culture in university's hospital have three dimension of learning (organizational and continuous improvement), team work in hospital and non-punishment answer in time of error occurrence had the most impact on development of patient safety.

Smits et al [11] investigate the rate of similarities and differences related to sanitarian systems of under study hospital, all level of staff education concerning patient care centers and their nurses and also safety standards of care.

Results of their study show that 3 countries of Netherlands, Taiwan and USA have 92%, 88% and 85% of accordance to standards of care safety of patients and risk management, respectively. Concerning results of studies, patient safety is one of the basic concepts in therapeutic-sanitarian systems and this issue is of a great importance also regarded as a priority for policy making in therapeutic domain [12].

Undoubtedly, performing plan of risk management affirmed in clinical government requires patient safety information system in order for recording, reporting and analyzing the medical errors and threatening events related to patient safety. Therefore, in order to design this system in Iran's hospital, different dimension of this system should be specified correctly. Then, concerning the necessity of having an appropriate framework of designing of this system in order to investigate and specify the essential components of designing patient information system seems necessary.

Risk management in health care is applied to various actions which are done in order to improve the quality and ensure the safety services for patients [13].

Developments in hygiene concerning domain of making preventing ways of spreading disease, personal care, apropos medical action, long term actions and clinical study emphasize on educating and propagating electronic health which can secure the higher quality in patient safety care, risk management in sanitarian services and care [14].

Therefore, concerning the special importance of this topic and failure to conduct an identical research in hospitals and therapeutic centers existing in this respect, the present study proceed to investigate the risk management from nurse's viewpoint in patient safety in social security hospital of Zahedan.

## **MATERIALS AND METHODS**

This study is qualitative research because of special topic of it and the fact that the researcher seeks for understanding and describing nurse's experiences of risk management in patient safety corresponding that. The method of choosing samples was in such way that the researcher went to all therapeutic units and chose the sample on the basis of research criteria, up to the time the sample number got complete. Sample of this study are 14 participants; 2 supervisors, 1 head nurse, and 11 nurses aged between 22-45 years old and all married. No new data was elicited.

### **Data collection**

In order to collect data, the researcher set up interviews with nurses working in Zahedan social security hospital. The demographic characteristics of study were related to age, sex, education, marital status and professional record. Researcher started her interview with the major question of: "would you please express your experience of risk management concerning patient safety in hospitals?"

The next questions formed on the basis of participant's answer to first question. Interviews were done face to face deeply and non-structurally. Also concerning this interview questions like "can you explain more?", "is your opinion this...?" were used. These interviews done with less guidance of participants in 30-45 minutes and were all recorded

with consent of participants. Then researcher listened to them several times, over and over and transcribed the required contents. To analyze the data, researcher used the Colaizzi's 7 step method.

After carrying out the interviews and eliciting the data, researcher attempted at referring to samples to test verifiability of data and asked them if she understood the contents of their interviews correctly. So the data were evaluated according to the noted content. Also the probable significant contents were classified and explained. Then sample's agreement and confirmation obtained in this way. In order for assuring the certainty of the data, researcher of this study also tried to collect data on the basis of analysis by her supervisor which in turn helps to concreteness of the data and a way for certainty of them.

### Demographic characteristics of participants of the study

In this studies interviews were done by 14 participants; 2 supervisors, 1 head nurse, and 11 nurses in their rest room of therapeutic units of social security hospital, from 22/11/2015 to 22/12/2015. Participant of this study were 22-45 years old. Table 1 shows the demographic characteristics of these participants.

**Table1. Demographic characteristics of participants of the study**

Participants	Post	Sex	Age	Education	Marital status	Record
N#1	Nurse	Female	30	Bachelor of art	Married	14years
N#2	Nurse	Female	35	B A	Married	13 years
N#3	Nurse	Female	34	B A	Married	10 years
N#4	Nurse	Female	25	B A	Married	4 years
N#5	Head nurse	Female	42	B A	Married	20 years
N#6	Nurse	Female	38	B A	Married	16 years
N#7	Nurse	Male	32	B A	Married	8 years
N#8	Nurse	Male	33	B A	Married	10 years
N#9	Nurse	Male	35	B A	Married	10years
N#10	Nurse	Male	44	B A	Married	18 years
N#11	Nurse	Female	43	B A	Married	19 years
N#12	Nurse	Male	45	B A	Married	20 years
N#13	Supervisor	Male	46	B A	Married	22 years
N#14	Supervisor	Female	41	B A	Married	15 years

### Data analysis

Sampling of this study was done in such a way that the researcher went to the therapeutic units of hospitals and drew names of a number of individuals, having the criteria for experiments, with the help and guidance of the person in charge of unit. After taking their telephone number, the researcher made a call and after introducing herself, explained the objectives of her study. Then she selected a suitable place for doing interview providing that they were willing to do so (rest room of every unit). The researcher also asked them for an appropriate time for carrying out interviews. After attending the determined place and establishing a clear relation, the researcher assured the participants that all information to be confidential and they can refuse participating in the study whenever they want. After taking their permission, they did the interviews face to face, deeply and non-structurally. At the end of each interview, the researcher acknowledged the participants and took their consent for another probable meeting or a call in order for completing or clarifying previous interviews. To observe moral consideration, the researcher took a confirmation from the moral committee of university in order for conducting the research and authorization of therapeutic manager of social security hospital was also taken.

Also sufficient explanation concerning the importance and objectives of the study, confidentiality of their personal information, permission of recording participants voice, absence of any obligation or threat for participating in the study and having the right of cancelling the interview anytime in any steps of the study were all given to the participants.

Colaizzi's 7step method was used in order for interpreting and analyzing the qualitative data. In first step, researcher listened to the recorded interviews several times and transcribed them word by word. Then she compared the written notes with the recorded voices and checked them precisely. In second step, she referred to each utterance in order for elicitation of meaningful data, and the important related statements to case of the study. This step is known as elicitation of "significant statements".

In third step, the infrastructural meaning of every significant statement related to the study's case entitled as "formulized meaning" was elicited. Then in next step (i.e., 4th), after several reading out the codes and repeating the 3<sup>rd</sup> step, researcher put the formulized concepts in different topical categories and clusters and continued up to obtaining the theme categories or main subjects. In the fifth step, the result was combined together in order for gaining a complete description of understudy phenomenon. In this step, theme and the way they are formed are explained.

In the 6<sup>th</sup> step, codification of the complete description related to the understudy phenomenon, possibly with a clear and non-vague statement was developed. In 7<sup>th</sup> step, findings were referred to participants in order to confirm the validity of them, then they gave their opinion concerning the agreement of their findings with their experiences. Thus, the final validity obtained [15].

### **Findings of the study**

Findings of this study are classified in two themes of "risk management" and "human resources" along with objectives of the study. Risk management consists of sub-concepts; punishing policy of managers and inefficient management of medical errors. And human resources include shortage of human forces, increase in validation's requirements and inappropriate selection of nurses.

#### ***Risk management theme***

In establishment of risk management in order for meeting patient safety, development of importance of patient safety and making the patient safety systematic are essential.

##### ***1. Punishment policy for personnel***

Providing risk warning in hospitals, punishment policy is considered as one of the week points and challenge in encountering patient safety and is indeed the counter point of patient safety. Providing the existence of this policy, fewer errors are reported and in order for preventing error repetition, various problems will be made and therefore patient safety will be directly threatened. For instance: a participant said: "the personnel should know that they are to inform the existence of error in a special form which is certainly important in preventing the repetition of the same error.

"If an error is related to equipment, then we are considered blameful while its inefficiency has been before warned. Or the fact that it was disordered while working and has no other alternatives and is in disagreement to patient safety.

The primary elicited codes are as follow:

- Fear of punishment by managers
- less support for reporting
- disagreement in punishment and patient safety culture
- punishment even if they report before
- Inefficient persuasion and encouragement of personnel

The sum of them has been combined and these codes make the sub concepts of "punishment policy of managers".

##### ***2. Inefficient management of medical error***

In establishing risk management in hospital, error cognition, error prioritization, investigating the stem causes of an error, eliminating or removing error cause and even investigating preventing and providence actions are really necessary and with these methods there occurs no disorder in patient safety. A participant says: "some personnel are careless or have not enough care in preparing the medicaments, the true prescription of drugs especially those with the same package which is really dangerous.

Primary first level codes are as follow:

- Absence of support for reporting
- Absence of support for patient safety culture by superior managers
- non creation of a safe environment
- not carrying out of decreasing the professional risks
- absence of support of nurses if they are unintentional blameful by managers
- non creation of motivation in working

The sum of them is combined together and these codes create “inefficient management of medical error”.

In establishing risk management in order for establishing patient safety, the development of significant and systematic making of patient safety is regarded essential. The encouragement for the cooperation of personnel is very important in advancement and development of risk management which leads to voluntarily reporting of errors by them. The punishment policy and individualism were not used in diagnosis the error cause and nurses care is designed on the basis of patient safety. In strategic plan of hospital, establishment of error management should be posed and if an error is reported and informed, person should not be blamed and punished. Errors should be fundamentally solved in order for not repeating and damaging patient safety. For instance, drugs with identical apparent package which cause more errors should not be bought then it prevents frequent repetition of errors. The reflection of mistakes must be informed. Also support of cooperative morale and teamwork of personnel is efficient in risk managing and decreasing rates of errors.

Providing development of risk management in hospitals, taking error form to personnel and deep analysis and informing personnel in order for non-repetition of error are certainly of principles of work and the first step to take. And if informing is weak and personnel do not have any information about the most widespread, important and dangerous errors and be punished even if reporting, then the risk management process in hospitals will be subject to questions. The sum of the above theme makes “risk management”. The way of its formation is shown in the following figure:

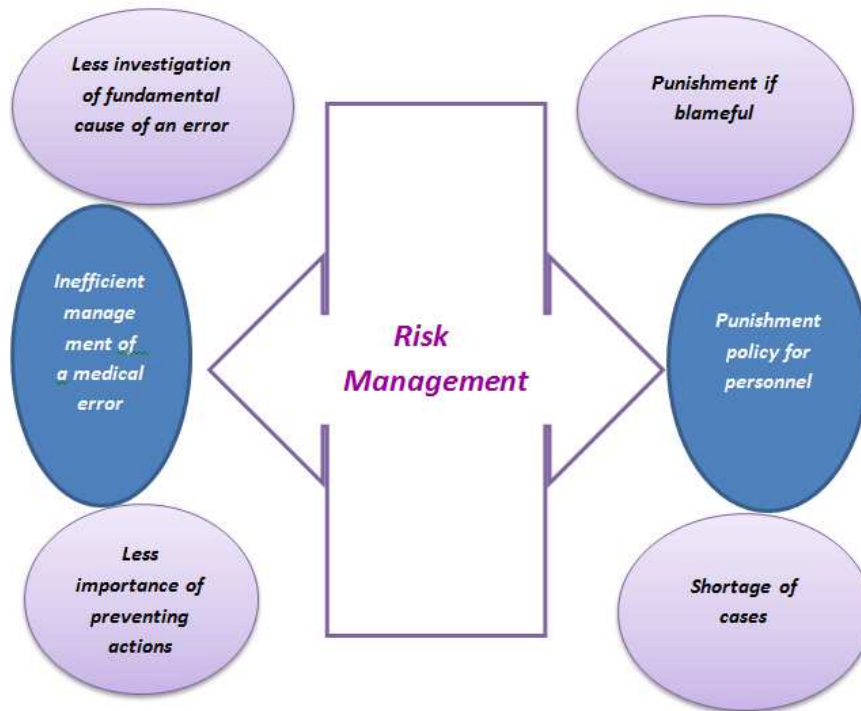


Figure1. Form of Risk Management

**CONCLUSION AND DISCUSSION**

According to the findings of this study coming from nurse’s experience, medical errors are one of the important issues in care and health environments. Despite the vast dimension of nurse errors, patient safety development becomes a great challenge. Although deleting nurse’s errors seems impossible, one can make them fewer. Nurses and all members of therapeutic cadre, regardless of how skillful, committed and careful they are, may commit mistakes while doing their care duties [16].

Nowadays in Iran's hygienic and therapeutic systems, there exists no systematic error reporting system. On one hand, the importance and advantages of this system in experienced countries are not covert. Certainly in care plans of Iran, there are reports but the lessons one can get of these errors are concealed in order for observing honor and respectability of patient and fear of existing punishment method. So these errors remain unspoken. On the other hand, superior managers of hospitals can have a considerable role in the process of reporting as first controlling system. In continuations of this process, it seems that if managers have got a proper attitude, they will play an important role in reporting of the error. In addition 3 elements of fear, blame and inattention to errors must be deleted. one must not hide the mistakes, but rather analyze them and makes attempts to improve them. Patient safety should not be limited to managers and leaders capacities. Patient safety agency introduces risk management as a step to patient safety which plays an important role in finding out and analyzing the reason of errors.

Creating a clinical government system and attempts of persons in charge of hospitals, in order to create a reporting system and instructing personnel to know that this system can help analyzing the errors and learning from mistakes and preventing further occurrence error management and medical errors in hospitals should be established and patient safety should be improved, so that today medicament mistakes are considered as a criteria for specifying quality of therapeutic staff's work [17].

Concerning the obtained theme of risk management, one should point out that organization managers' commitment causes decrease in injuries and errors in hygienic and therapeutic parts and without help and support of superior managers, one cannot make patient safety as a goal in therapeutic domain.

Studies show that fear of making judicial problems and patient's complaint related to unwittingly mistakes in care domain is a very significant topic [17]. Although there is no unwritten statistic available in Iran related to rate of error occurrence in hospitals, experts estimate that the rate is very high as increase in returned complaint's file of doctors and nurses to medical system organization and courts witness this claim [18].

Dargahi[19] points out that the observed statistic of reported errors is unfavorable to the reason that often an intervention method for every medical error is a punishing process of personnel. Therefore it seems that the defending behavior of individuals in form of not reporting or concealing error is an obvious behavior. Superior managers are to acculturate and pave the way for registering error and educating in order to make reports and basic serious risk managements in hospitals. Also a meeting should be set up to report errors without punishment. Medical error informing system is taken into accounts as one of the main components required for performing patient safety plan to decrease medical errors because it is a significant step in learning from the error and recognizing and registering of the and lesson learning of the previous experience. By means of this system, one can collect patient safety information as threatening events for patient safety and inform them.

Considering the international standards of validity for hospitals, one feels the need for improvement of safety and quality of patient's care in hospitals and therapeutic centers. Findings of many studies demonstrate that nurses do not have identical understanding of error definition in organization and this is one of influential factors in the way they encounter the error. In most studies, participants believe that more than 40% of occurred errors are not reported as fear is the most important cause of not reporting an error. Most nurses believe that culture governing the organizational culture in which they are working, is more efficient in rate of reporting of errors. In first step, a nurse recognizes the error then sees the existing choices regarding formal or informal reporting of error. In the step of view and selection, a nurse views the side effect of any probable answer.

In step of taking an action, she answers the error. In feedback step, nurse view the effect of her decision which affects the way she answers to her error in future. Exact statistic collection of all types of errors by nurses is very important and the occurrence of them is different in different studies. Failure in exact checking of patient and taking patient's health state, failure in preparing report for body's state and changes in condition of patient, specifying patient identity and recognizing patient, wrong treatment giving, failure in evaluating care and on time reporting to doctor, patient collapse, failure in observing and registering correctly and on time, using imperfect equipment which leads sometimes to injuries and burn of patient, not keeping the confidential information of patient and error in registering nurse's reports are some typical errors related to function of nurses.

In another research, risk management is considered as a very essential issue in safety challenges. This research views 12 dimension of patient safety culture and shows that a non-punishing answer and staff problems have the

least mean in safety culture dimension. Hellings et al [20] also views the 12 dimension of patient safety culture and counted reporting of error in safety culture dimension, a very significant fact in enhancing patient safety.

In this respect “risk management”, the best way to prevent medical error, recognizing them and their basic and systematic causes is learning from them and reforming care system in order for preventing the repetition of these errors. On the other hand, hygienic care organizations must, along with recognizing the threatening events of patient safety and medical errors, analyze them and recognize the improvement opportunities and do improvement plan on their basis [21].

The above mentioned studies are in agreement to findings of the researcher. The main organization management’s commitment leads to decrease in injuries and errors in hygienic therapeutic parts and without help and support of superior managers one cannot perform patient safety as an objective in therapeutic domain. Having a management cadre committed to patient safety and paying attention to quality improvement in hospitals are very necessary. One basic act of every organization to patient safety culture is that manager should do this change of attitudes of personnel. Requirement of setting down policies and clear and obvious applicable methods is very influential in patient safety enhancement. Attention of superior managers and healthcare system’s staff effect on recognizing the weak points of patient safety in hospitals, commitment concerning the patient safety , improving infrastructures , encouraging to cooperation and teamwork of staff in patient safety plans , creating systems for reporting and analyzing unwanted and undesirable events and awarding staff who cooperate in this respect, codifying the valid and stable indicators for evaluating patient safety in order for revealing imperfections and non-efficiencies and finally for removing recognized obstacles.

Risk management, concerning its integration by health ministry, applies determined and written policies in order for enhancing patient safety, in risk management which is for determining evaluation and analysis of dangers and events in order to decrease the damages to patient and his accompanier, nurses. Solution of risk management and integration of error is one of the basic steps toward enhancing patient safety, which is emphasized by international patient safety agency. Finding out the basic causes of dangers and their analysis play an important role in advancement of patient safety. After codification of policies concerning reporting of an error, error reporting process and holding educational classes in this respect and sending a message with this content: dean of hospital is committed to culture of not blaming persons concerning therapeutic reported errors and registering reports related to therapeutic errors in order to increase patient safety and quality improvement of therapeutic services. Therefore, no punishment for person having done that error and person reporting should be considered.

Also we suggest forming a committee in order for doing systematic methods in hospitals for reporting medical errors, to first acculturate and attempts to internalize reporting of an error as a valuable thing in therapeutic cadre should be allowed and appropriated. Also educational courses for therapeutic cadre to get familiar with current medical errors and solutions to confront them should be held. Next solution or method for reporting and all dimensions of errors, management and scientific meeting for making the major factor in occurring errors the least and an organization for spiritual support of blameful person and injured patient is one of the goals that this committee may reach it. And also this committee can be influential by creating a reporting system for the whole country and reports deduction and error warning in order for alarming and preventing repetition of these errors.

#### **Limitations of the study**

Different aspects of challenges related to establishment of risk management in social security hospital were studied and discussed. These are some limitations of this study:

1. inaccessibility to the same research in Iran to compare other hospitals condition
2. Newness of the scope of the study.
3. Worries of personnel related to impact of experience expressing on managers function.

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