

# Refusing to Report the Medication Errors and It's Effects on Patient's Safety in Razi Teaching Hospital during 2014-2015

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## A-R-T-I-C-L-E-I-N-F-O

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## A-B-S-T-R-A-C-T

**Background & Aims of the Study:** One of the most important health aspects of health care systems is patient's safety and medication errors can threaten this safety. The purpose of this research was the evaluation of refusing to report the medication errors and it's effects on patient's safety in Razi teaching hospital after healthcare reform during 2014-2015.

**Materials and Methods:** This study is a cross-sectional study that has been accomplished by descriptive-analytical method. The environment of research is Razi teaching hospital of Ahvaz, Iran. The studied population consisted of nurses who were working in different wards of selected hospital. The data collection tool was a questionnaire. The results were analyzed by Excel and SPSS 16.0.

**Results:** The results showed 60% of medication errors report by nurses. Also, it showed that the most important reasons for not reporting medication errors were related to the managerial factors ( $3.85 \pm 1.512$ ). This factor can be very important on patient's safety. Factors which were related to the fear of the consequences of reporting were  $3.80 \pm 1.301$  and the process of reporting were  $3.21 \pm 1.231$ , respectively.

**Conclusion:** The results of this study showed that the management factors were an important reason for not reporting medication errors. Encourage nursing, good drug administration, training an appropriate method, using suitable instruments and decrease direct contact with patient can increase the causes of errors report. Increase the report of medication errors can help to management these errors and reduction of injures to patients.

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## Background

Medication errors commonly occur during three steps of the medication use process including:

during administering an intravenous drug, drawing blood, performing other procedures, care procedures on patients during surgery and failure to use appropriate patients' protective equipment (1-9). Medication error is defined

according to forming damage, risk and any avoidable incidence to occur during the process of medication request to patient's monitoring (9-14). Medication errors increase mortality, disability, hospitalization time, adverse economic consequences, hospital costs, the incidence of health problems, failure in administration and necessary action for medication (12,15,16). Patient's safety and health are one of the most concerns that mention in the hospitals and medical places (3,17). Stress and anxiety are two important factors dependent on medication errors among health care workers (HCWs) (17). Preventing further mistakes in future and patients' safety are the famous benefits about reporting the medication errors (4,5,18). Shortage of nursing staff, errors of timing drugs, the condition of the patient, the type of hospital and ward, fear from reporting consequence, threat of management, fear from evaluation score and the lack of knowledge about unit policies are the important factors which are affected the medication errors and refusing to report (19-25). Concerning about medications administered during care and monitoring patients can be affect the treatment (26-28). Nurses because of their position to notice medication errors at first can thereby take steps to reduce the risk of incorrect medication errors (26,29-31). In the study conducted by Mohammad Nejad et al in 2013 in Tehran, they studied medication errors report refusing from the perspective of nurses in emergency ward (32). In another study performed in Arak University of medical sciences in 2009, fear from reporting consequence and the evaluation score were the main causes for refusing to report the medication errors (33). In the study conducted by Hosseinzadeh in 2012 in Tabriz and Maragheh, the reasons of nurses' medication errors and perspectives of nurses on barriers of error reporting were studied. Evidence showing that the most cited barriers were management factors (34).

#### **Aims of the study:**

The aim of this study was to evaluate the refusing to report the medication errors and its effects on patient's safety in Razi teaching hospital during 2014-2015.

### **Materials & Methods**

#### **Methods**

This descriptive study was conducted during years 2014-2015 after the healthcare reform on all nurses who were working in different wards at Razi teaching hospital of Ahvaz with 220 beds approximately. The target population comprised 110 nurses who were working day/night in different wards. Data collection was designed based on a questionnaire according to the operating system and administration errors (35). The questionnaire was assembled based on previous studies to ascertain the medication errors encountered by nurses (30,36-40). Sampling was performed based on random selection from nurses who were working in hospital after the healthcare reform plan. The nurses' age, gender, ward of working and reasons for not reporting the medication errors were analyzed by SPSS-16. Data were analyzed by applying descriptive statistical.

#### **3.2. Description of study area**

Razi teaching hospitals is one of the important health center in Ahvaz (in the southwest of Iran). This hospital with 220 beds has a big role to providing the health care for a population of over a 1 million, approximately (41-47).

### **Results**

This study was conducted on more than 110 nurses' working in Razi teaching hospital in Ahvaz during 2014-2015 after the healthcare reform plan. The results showed that 67.05% had lower than 1-5 years job experience and 32.95% had 5 years and more. The response rate in our study was 80%. Based on the result of this study, the mean age of participants was  $29.5 \pm 2.86$  years, ranging 22-45 years and most

of them were women ( $n=78$ , 88.64%) (Table 1).

Most common reasons for refusing to report the medication errors are fear of the impact of reporting of errors on the personnel's annual evaluation, fear of the impact of reporting of errors on their salary and benefits, fear of being blamed by nursing heads, fear of producing side effects in patients, fear of judicial issues

following reporting on medication errors and fear of being labeled as incompetent nurses and inadequacy, respectively. Figure 2 shows the percent of the degree of agree in refusing to report the medication errors about managerial factors, factors related to the process of reporting and the consequences of reporting between nurses.

Table 1) Characteristics of the Nurses

Characteristics		Number (Percent)
Age	Less than 25	12 (13.64)
	25-35	64 (72.72)
	35 years and more	12 (13.64)
Gender	Female	78 (88.64)
	Male	10 (11.36)
Years of work experience	1-5 years	59 (67.05)
	5 years and more	29 (32.95)
Education level	Diploma	7 (7.95)
	Bachelor's degree	67 (76.14)
	Master of sciences	14 (15.91)

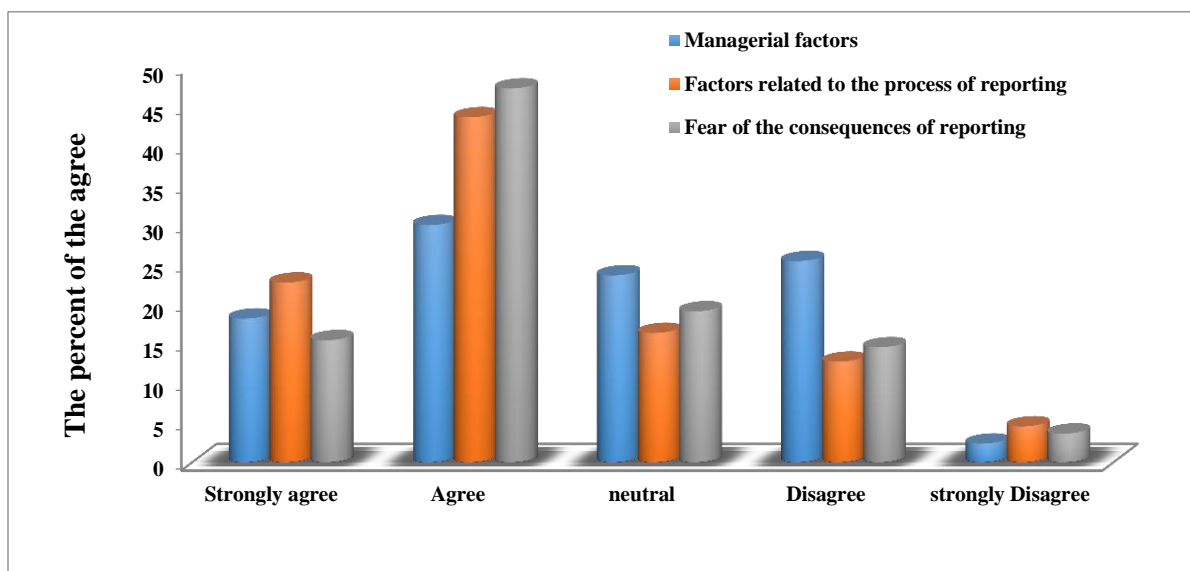


Figure 2) The percent of the degree of agree the refusing to report the medication errors

## Discussion

According to the results of this study, the most important reasons for refusing to report the medication errors in nurses were related to the fear of the consequences of reporting, factors related to the process of reporting and managerial factors, respectively. The results showed that the highest mean scores in the domain of the managerial factors was related to the lack of receiving positive feedback from the nursing heads following to report on medication errors ( $3.85 \pm 1.512$ ). Fear of the decrease of annual evaluation was the highest mean score in the fear of the consequences of reporting ( $3.80 \pm 1.301$ ) and in the domain of factors related to the process of reporting was associated with forgetting to report the medication errors ( $3.21 \pm 1.231$ ). In another study conducted in 4 hospitals of Mashhad, nurses estimated that only 45% of all the medicinal errors were reported, and they cited a lack of knowledge about unit policies and routines (59.8%) and negligence to report (59.8%) as the most important reasons for the failure to report the errors (48). This can be explained by the fact that nurses with different methods of report the medication errors. Tol et al reported the factors related to the process of reporting as the most important reason for not reporting the medication errors, do not confirm the present study results in the mentioned domain (49). The reason for this conflict can be due to the changes in process of answer the question and different methods of report the medication errors between nurses. Hosseinzadeh et al showed that the consequences of reporting factors as the most important reason for not reporting the medication errors (34). Observation of our study is in agreement with the findings of their result. (33). In Hesari et al study in 2015, the main reasons for not reporting the medication errors were authorities' focusing on the person who has made the error regardless of other

factors involved ( $3.86 \pm 1.06$ ), fear of legal issues ( $3.79 \pm 1.07$ ), and the lack of clarity of the definition of medication error ( $3.34 \pm 1.13$ ) (50). Finally, it should be mentioned that the present study had some limitations such as small sample and studying only on one hospital. It should be noted that, similar studies should be carried out on other public and private hospitals, using large samples. Also, it can prevent and reduce the medication errors with having a medication protocol and education. We recommended to authorities in the field of patient's safety to perform several feasible strategies toward producing low medical errors to decrease the threats for patients which were admitted in hospital.

## Conclusion

According to the results of the study, the highest role in the refusal of reporting the medication errors is the fear of the consequences of reporting in Razi hospital. Therefore, effective communication with nurses, responsibility and professional ethics to be practical, positive nursing managers reaction to nurses' reporting, training nurses, retaining courses on pharmacological information, design of drug information questions related to personnel and encouraging nurses to report the medical errors should be taken into account seriously in reducing medication errors occurrence and improving patient health and safety. Publishing the results of these researches in the scientific journals, preparation of educational bulletins and increasing the knowledge of authorities about these refusing to report the medication errors can be considered as a major step in the management and control of medication errors.

## Footnotes

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#### Conflict of Interest:

The authors declared no conflict of interest.

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