Patient Safety Culture: Nurses' Attitude in Marvdasht Shahid Motahary Hospital, 1392

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ARTICLEINFO	ABSTRACT
Article type: *Original Article* **Article history:** Received: 26-Oct-2013 Accepted: 8-Dec-2013 **Keywords:** Attitude Error Patient safety Safety culture	**Introduction:** Improving the safety culture has been implemented as a key strategy to improve patient safety in health care systems. Several surveys have shown that assessment of patient safety attitude and examining to what extent these attitudes exist could be used as an effective tool for promoting patient safety and such data meet the managers' information needs over time. Thus, considering the importance of patient safety as a basic principle in improving the quality of clinical services and patient satisfaction, this study was aimed to examine nurse's attitudes towards the safety culture. **Materials and Methods:** In this cross-sectional study the study population included nurses who were working in Marvdasht Shahid Motahary hospital, 2013. The sample size was selected by using a stratified randomization method as 114. The data were collected through HSOPSC questionnaire that has been introduced by the Health Care Research and Quality agency in 2004. The questionnaire is composed of eight parts. One part is about demographic and career information and other parts are about different dimensions of the patient safety culture. The collected data were then analyzed using the SPSS software and descriptive statistical tests. **Results:** The obtained results showed that the manager and supervisor expectations and actions in order to promote patient safety and the overall understanding of patient safety dimensions received the highest rating. On the other hand, staffing and non-punitive response to errors dimensions received the lowest score among the 12 dimensions of patient safety culture. Nonetheless, 44% of the studied population considered the patient safety status in their units as acceptable. However, 39% of the population had not reported any errors in the past 12 months. **Conclusion:** Based on the results of the present study, the need to improve the safety culture at different dimensions seems necessary. Also, the culture of error reporting without any fear of censure or punishment should be institutionalized in future.

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Introduction

Adverse events and medical errors are among the challenges that health systems in all countries are grappling with, trying to minimize them and reduce the damage caused by them. In overall, one-fifth of the general population are subjected to medical errors, thus, millions of people may die or suffer from preventable medical injuries each year.

The extent of damage caused by these errors and events are so immense that many countries are seriously looking for solutions to prevent or reduce such errors and promote safety (1).

Patient safety issues were taken into consideration by the researchers and experts in the field of health, after the United States Institute of Medical Reports was established in 1999, which addressed the prevalence of medical errors in this country (2).

Patient safety is a major concern in hospitals and is considered as one of the main components of health services quality, meant to avoid the patient from getting in to any kind of injury during care. In fact, unsafe services in addition to having unpleasant consequences for the patient and his family, cause stress on both health workers and the society and finally impose a huge economic burden on the health care system (2).

Different definitions of patient safety culture have been presented. In general, patient safety culture reflects the patient safety priorities among hospital staff (3). Safety culture is the result of individual and group values, attitudes and perceptions, competencies and patterns of behavior which define the commitment, methods and skills of an organization in improving safety management (4).

The patient safety culture can be defined as accepting patient safety as the first priority and a common value in an organization and also as an integrated pattern of individual and organizational behavior based on shared values and beliefs which continuously seek to minimize injury to the patient during the care process (1).

In summary, safety culture is one of the dimensions of organizational culture that has a positive safety culture, and all staffs in different levels appreciate the patient safety and consider it as a priority. On the other hand, the first step to improve patient safety culture is evaluation of its existing levels in the hospital (5).

Improving the safety culture has been implemented as a key strategy to improve patient safety in health care systems and evaluation of the safety culture is recommended as a patient safety strategy (1). Several surveys have shown that assessment of patient safety attitude and examining to what extent these attitudes exist could be used as an effective tool for promoting patient safety and such data meet the managers' information needs over time (6).

Thus, considering the importance of patient safety as a basic principle in improving the quality of clinical services and patient satisfaction (7), this study was aimed at investigating the nurses' attitudes (who are a large group of health care providers in hospitals) towards the safety culture.

Materials and Methods

In this cross-sectional study, the study population consisted of all nurses who worked in Marvdasht Shahid Motahary hospital in 2013. The studied sample was selected using the simple randomization sampling method as 114. Data were collected through a questionnaire assessing patient safety culture in hospitals [hospital survey on patient safety culture (HSOPSC)] (that was introduced by the agency for health care research and quality in 2004). This questionnaire is the most commonly used tool for assessing patient safety culture and is used in several countries including America, Britain, Netherlands, Turkey, etc (5). In this questionnaire, patient safety culture is viewed from 12 different dimensions and 2 aspects of patient safety rating and the number of errors reported by hospital staff.

Also, it should be noted that the mentioned questionnaire was previously studied in a study entitled "Validation of the Persian translation of hospital patient safety culture questionnaire using the confirmatory factor analysis technique". It revealed the translated questionnaire with 12 dimensions as the right tool for the assessment of patient safety culture in our hospitals (5).

The questionnaire scale is of Likert-type, ranging from strongly agree to strongly disagree and from never to always. The questionnaires were distributed among different wards of the hospital where head nurses asked nurses to fill them in, so that nurses from different work shifts entered in, the study. After data collection, SPSS16 software and descriptive statistics (average, percent and etc) were used for data analyzes.

Results

After collecting the questionnaires and data analysis, the following results were obtained. 91% of the participants were female, 3% were male and 6% of participants had not responded to this question. 39% of the participants were single, 56% were married, and 5 % gave no response. In addition, the educational degree of 89% of

Participants was, bachelor of nursing, 2% were master and above, and 9% had not responded.

The mean age of participants in this study was 28 years, ranging from 23 to 46 years.

The study sample was selected from the nurses who worked in different wards, considering the total number of nurses in each ward.

Also, nurses' job information was as follows.

Table 1: Demographic characteristics of the study population

Age	Minimum	23
	Maximum	46
	Mean	28
	Standard deviation	4.59
Education	Bachelor	89
	Master and above	2
	No response	9
Marital status	Single	39
	Married	56
	No response	5
Gender	Male	91
	female	3
	No response	6

Table 2: Number of participants from each ward

Ward	Number of participants	Percent
Internal Medicine	7	6.1
Surgery	7	6.1
Obstetrics and gynecology	19	16.7
Pediatrics	7	6.1
Neurology	8	7
Intensive care units	38	33.3
Emergencies	18	15.8
Other wards	5	4.4
No response	5	4.4

Table 3: Job information

Variables	percent				
	< 1	1-3	4-9	10-24	No response
Period of preoccupation in the present job(yrs)	25	29	22	14	10
Period of preoccupation in the current hospital (yrs)	29	28	22	11	11
Period of preoccupation in the present ward (yrs)	39	24	23	4	11
Workweek in the current hospital (hrs)	36-42	43-49	50-100		
	25	29	23		24

Because all participants in this study were nurses, therefore, they were in direct contact with the patients.

The obtained results showed that the manager and supervisor expectations and actions in order to promote patient safety (mean: 11.49) and the overall understanding of patient safety (mean: 10.58) dimensions received the highest rating among the 12 dimensions of the patient safety culture, whereas the staff (mean: 5.07) and non-punitive response to errors (mean: 5.63) dimensions received the lowest rating.

Table 4: Summarizes the scores of each of the 14 items

	Mean	Standard deviation
Managers and supervisor expectations and actions in order to promoting patient safety	11.49	3.213
Overall understanding of patient safety	10.58	2.234
Teamwork within units	10.07	2.977
Organizational learning / continuous improvement	9.76	1.441
Teamwork across hospital units	9.31	3.379
Hospital hand offs and transitions	9.15	2.845
Feedback and communication about errors	8.57	2.218
Hospital management support to patient safety	8.48	2.146
Frequency of events reported	7.68	2.526
Communication openness	6.96	2.082
Non-punitive response to errors	5.63	1.766
Staffing	5.07	2.193

Regarding the dimension of error reporting, 39% of participants had not reported any errors in past 12 month, 16% reported 1-2 errors, 12%, 3% and 1% reported 3-5, 6-10 and 11-20 errors, respectively; while 4% had reported more than 21 errors.

Moreover, 44% of the participant considered the patient safety status as acceptable, 23% considered it strongly good, and 19% as excellent, whereas 2% defined it as poor and 12% did not respond to this question.

Discussion

In a similar study entitled "patient safety culture among nurses in Shiraz educational hospitals", among the 12 dimension of patient safety culture, manager and supervisor expectations and actions in order to promote patient safety and staffing were regarded as fair, hospital hand offs and transitions were considered in good condition whereas the remaining dimensions were reported as poor (8).

In another similar study conducted in Isfahan, managers and supervisor expectations and actions in order to promote patient safety dimensions, achieved the highest score while hospital hand offs and transitions dimension, obtained the lowest score (7). Moreover, in marvdasht shahid motahary hospital the latter mentioned dimensions, achieved the highest score among all others. In a study performed in Tehran, teamwork within units dimension, achieved the highest and non-punitive response to errors dimension, obtained the lowest score between different dimensions (1).

In a study carried out in the US in 382 hospitals in 2007 and 419 hospitals in 2008, non-punitive response to errors dimension, achieved the lowest score, similar to the current study, whereas teamwork within units dimension, achieved the highest score (9).

In a study carried out in Saudi Arabia, non-punitive response to errors and staffing dimensions were reported as the lowest scores (10). These findings are consistent with our study results. Also, in a similar study in Turkey, hospital hand offs and transitions dimension got the highest score (11).

Conclusion

The patient safety status in the related wards or domains was defined as acceptable by 44% of the participants. As a result, the need for improving the safety culture in this center seems essential.

Also, considering the number of reported errors and the mean obtained scores in non-punitive response to errors dimension, a system should be designed in which staff can report the errors without any fear of punishment and negative reactions.

This will prevent the error from recurring and will help the system to find a perfect solution for eliminating such errors.

Acknowledgment

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