Original Research

A study of patient safety culture in Jahrom Motahhari Hospital in 2019

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Abstract

Introduction: Patient safety is one of the main components of the quality of health services, and means avoiding any harm to the patient while providing health care. Despite advances in healthcare, patient safety and patient-centered safety in healthcare systems around the world is still a matter of concern. Therefore, the present study was conducted to evaluate the status of safety culture in hospital staff affiliated with Jahrom University of Medical Sciences.

Method: In this descriptive cross-sectional study, using the staff of hospitals affiliated to Jahrom University of Medical Sciences, it was performed by census method (n =). The instrument used to assess patient safety culture was the Standard Patient Safety Culture Survey Questionnaire (HSOPSC), which consisted of 42 questions and 12 dimensions. Analysis of patient safety information was performed according to descriptive statistics and independent t-test and one-way analysis of variance.

Results: In the present study, 124 people from different wards of Jahrom Motahhari Hospital participated in the study. There were 20 people from screen ward, 11 person from children ward, 15 people from maternity ward, 31 people from internal wards, 10 people from laboratories, 14 people from NICU wards and 23 people from operating rooms. The average score of the overall safety culture was 132.12. In terms of patient safety culture in Motahhari Hospital staff, 68.93% were at the desired level and 31.07% were not at the desirable level. Among the clinical wards, the operating room and the internal ward, with an average of 142.61 and 137.1, respectively, had the highest average score of the patient's immune culture status. The findings indicated that the patient's safety culture in Motahhari hospital is at the desired level and also the patient's safety culture decreases with age. Patients' safety culture was also higher in women than in men and in married staffs than in single staffs. The highest patient safety culture was observed in undergraduate and graduate staff.

Conclusion: In general, improving the patient's safety culture should be an important priority for medical center managers in order to reduce patient errors and events. It is hoped that by improving this culture between staff and self-reporting without any fear of punishment, the rate of error in patients will be significantly reduced.

Keywords: Safety Culture, Staff, pateint.

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Introduction

Patient safety is a top priority in the health care system. The World Health Organization's increasing emphasis on reducing accidents, tracing and eliminating the causes of errors and preventing them has become a focal point. One of the factors that play an effective role in improving the

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safety of the patient at the level of health centers is the existence of safety culture in these centers(1). Culture refers to a set of beliefs, faiths, and group values of individuals that are manifested in their behavior (2). Safety culture basically represents the values and attitudes of managers and staffs regarding risk and safety management. The dimensions of organizational safety culture include commitment to safety management, safety-related work methods, relative safety prioritization, and adherence to safety rules, risk management, error and accident reporting (3). There is a significant relationship between safety culture and reduction of adverse events, medication errors, hospital stay, readmission and mortality (4). The rise of clinical governance in health care centers, one of its columns being the issue of patient safety shows the importance of this issue(5). Although much progress has been made in patient safety over the past decade, the number of injuries to patients due to errors is still very high (6). In developed countries, one in ten patients receiving hospital care suffers from medical malpractice, while in developing countries this rate is much higher(7). Inpatients in hospitals are exposed to medical malpractice from 7.5 to 12.7 percent(8). Annually, 1.5 million preventable accidents occur in hospitals (9) and there are no accurate statistics on the incidence of these medical accidents in the country's care systems, but due to evidence such as increase in reported cases of errors made by physicians (10) or the occurrence of 19.5% of medical errors by staffs in a period of 3 months (11), the occurrence of such accidents in the country's health care system can be considered serious. Factors such as the insufficient number of staffs, the high volume of staffs' working hours, the low percent of error reporting, and the staffs' worries about registering their mistakes in the their files have reduced the level of safety culture(12-14). Researchers are not looking for a zero percent error rate, but rather a way to minimize these errors (15). Because the most important challenge for hospital service providers is to minimize errors (16). At present, patient safety leaders recommend safety culture as a key and vital component of health care organizations to promote and improve patient safety (17). Studies in Iran indicate that there is a relative gap in the patient safety between the studied hospitals and medical centers in other countries. Identifying and reducing errors and mistakes is one of the priorities of all medical centers, whose main goal is to provide high quality services to patients and managers and officials of health centers are required to make the necessary efforts in this regard. Studies have shown that most studies on patient safety are conducted in developed countries, and less attention has been paid to this issue in developing countries, including Iran. In our country, Iran, in the face of increasing medical errors and subsequent public attention to this issue, the Ministry of Health, Treatment and Medical Education has made the issue of patient safety a priority. The establishment of a clinical quality improvement office in health care centers, one of the axes of which is the issue of patient safety, shows the importance of this issue. Therefore, the study was conducted to evaluate the status of patient safety culture in hospital staff affiliated with Jahrom's University of Medical Sciences.

Method

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The present study is a descriptive-cross-sectional study that was conducted in 1398 by census method on the staff of hospitals affiliated to Jahrom University of Medical Sciences. After getting the permit from ethics committee, presentation of the written introduction and checking with experiment surrounding authorities, all the staff was invited to participate in the study. If they wish to participate in the study, the written and informed consent form was completed by them under the supervision of safety intermediary at the hospital, followed by a personal profile questionnaire and a Hospital Survey on Patient Safety Culture (HSOPSC) published by the Agency for Quality and Health Research of America (6). Individual profile questionnaire includes questions to evaluate some variables such as age, gender, field and degree, job category, type of employment, work experience in the hospital, work experience in the recent unit, working hours per week, professional work experience and type of contact with patients. The Patient Safety Quality Assessment Questionnaire has 42 questions that assessed 12 different safety dimensions of the patient. These dimensions include: staff's general understanding of patient safety, staff understanding of error reporting and non-punitive response to errors, staff's understanding of the activities of their direct managers in relation to safety promotion in work units and in hospitals, staff's understanding of relevant information to improve the quality of the organization, staff's understanding of teamwork within the work unit and at the hospital level, staff's understanding of open communication in the work unit and in the hospital, staff's 'understanding of feedback and communication with mistakes, staff's understanding of the proportion of nurses and volume of work, staff's understanding of how the patient is transferred from one unit to another and it also includes two questions, one about what scores respondents consider for patient safety and the other about how many cases they have reported errors over the past 12 months. In this questionnaire, a 5-point Likert scale was used to obtain the respondents' opinions. The score of the patient safety culture scale is between42-210. A low score indicates a low patient safety culture and a high score indicates a high patient safety culture. In the present study, the qualitative division of patient safety score was done, so that equal scores and more than 50% of the total were considered (scores of 105 and above) as "optimal safety culture" and scores less than 50% of the total (scores less than 104) were considered an "undesirable safety culture." The Persian version of this questionnaire has been validated in Iran and its reliability has been confirmed with 0.86 (18) and has been used in several studies in Iranian medical universities (18-20). The questionnaires were completed in the presence of the questioners and if there were any ambiguities or questions, they were answered appropriately. After checking the accuracy of the information, the questionnaires were analyzed using SPSS software version 19. The distribution of frequency and mean were used to report the individual and occupational characteristics of participants and the status of safety culture in different areas.

Results

In the present study, 124 people from different wards of Jahrom Motahhari Hospital participated in the study. There were 20 people from screen ward, 11 people

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from children ward, 15 people from maternity ward, 31 people from internal ward, 10 people from laboratory, 14 people from NICU ward and 23 people operating rooms.

The total score of the safety culture was 132.12. In terms of patient safety culture status of staff, 68.93% were at the desired level and 31.07% were at the undesirable level. Among the clinical wards, the operating room and the internal ward with an average of 142.61 and 137.1 had the highest average score of the patient's immune culture status, respectively (Figure 1).

In the staff of Jahrom Motahhari Hospital, among the dimensions of patient safety culture, organizational learning with a score of 86.65, communication and feedback on errors with a score of 84.44 had the highest rank (Table 1).

Table 2 shows the status of patient safety culture dimensions in staff of different wards of Jahrom Motahhari Hospital.

In terms of expectations and managerial measures for patient safety, the operating room ward was at the top and the maternity ward at the bottom.

In terms of organizational learning, the screen ward was at the top and the maternity ward was at the bottom.

In terms of teamwork within organizational units, the operating room section was at the top and the lab was at the bottom.

In terms of the Non-punitive response to the error event, the operating room ward was at the top and the maternity ward was at the bottom.

In terms of the issues related to the staff, the operating room ward was at the top and the lab was at the bottom.

In terms of overall understanding of patient safety, the operating room ward was at the top and the internal ward at the bottom.

In terms of communications dimension and error feedback, the operating room ward was at the top and the lab ward was at the bottom.

In terms of the openness of the communication channels, the screen ward was at the top and the NICU ward was at the bottom.

In terms of the frequency of reporting, the maternity ward was at the top and the internal ward was at the bottom.

In terms of patient safety management support, the operating room ward was at the top and the NICU ward was at the bottom.

In terms of the exchange and transfer of information, the internal ward was at the highest rank and the laboratory ward was at the lowest rank.

In terms of teamwork among organization wards, internal ward ranked the first and laboratory ward ranked last.

The results of statistical analysis indicated that the patient immune culture decreases with age. Patient safety culture was also higher in women than in men and in married staff than in single staff. The highest patient safety culture was observed in undergraduate and graduate staff (Table 3).

Discussion

In the present study, the findings showed that from patient safety dimensions, organizational learning with a score of 86.65 and communication and error feedback with a score of 84.44 had the highest rank; then, non-punitive response to the error occurrence with an average score of 45.82 holds the lowest rank that is line with Faghih Zadeh et al's study findings (21). The results of the present study

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suggest that the overall patient safety culture score was 132.12. In terms of patient safety general situation in Jahrom Motahari Hospital, 68.93 % were at a desirable level and 31.07 % were at an undesirable level, but in Ebadifard et al study, 22 % of the staff got a desirable score and 60 % got an acceptable score that is indicative of the importance of clinical centers management in patient safety issues (18). The study findings suggest that patient safety score in different dimensions is desirable, while Abdi et. al's study indicates that patient safety in 10 dimensions and 2 outcomes of patient safety with low score are mediocre that is suggestive of patient safety perspective difference in different clinical centers.

Conclusion

Patient safety is a very important and vital constituent of health care quality that has received growing attention by health realm researchers. According to the expert opinion of this realm, patient safety is one of the contributing factors in the creation of patient safety in hospitals and clinical centers, weak immune culture in hospitals has increased errors in this environment. The present study indicated that the hospital under study requires the patient safety in some dimensions. For this reason, the creation of patient safety should be a fundamental priority for managers and the assessment of patient safety level should become a continuous activity that can be fulfilled by authorities support through adopting a non-punitive approach to error reporting. It is suggested that with regard to the descriptive nature of future studies on patient safety, required interventions and the effect of interventions on patient safety are studied.

Acknowledgments

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Figure 1: Status of patient safety culture in staffs of different wards

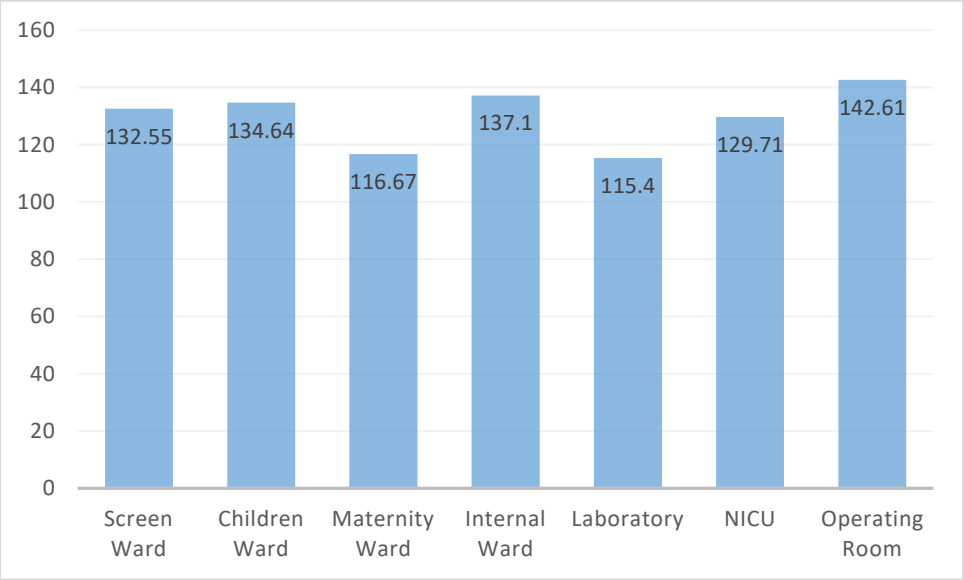


Figure 2: The status dimensions of patient safety culture in the staff

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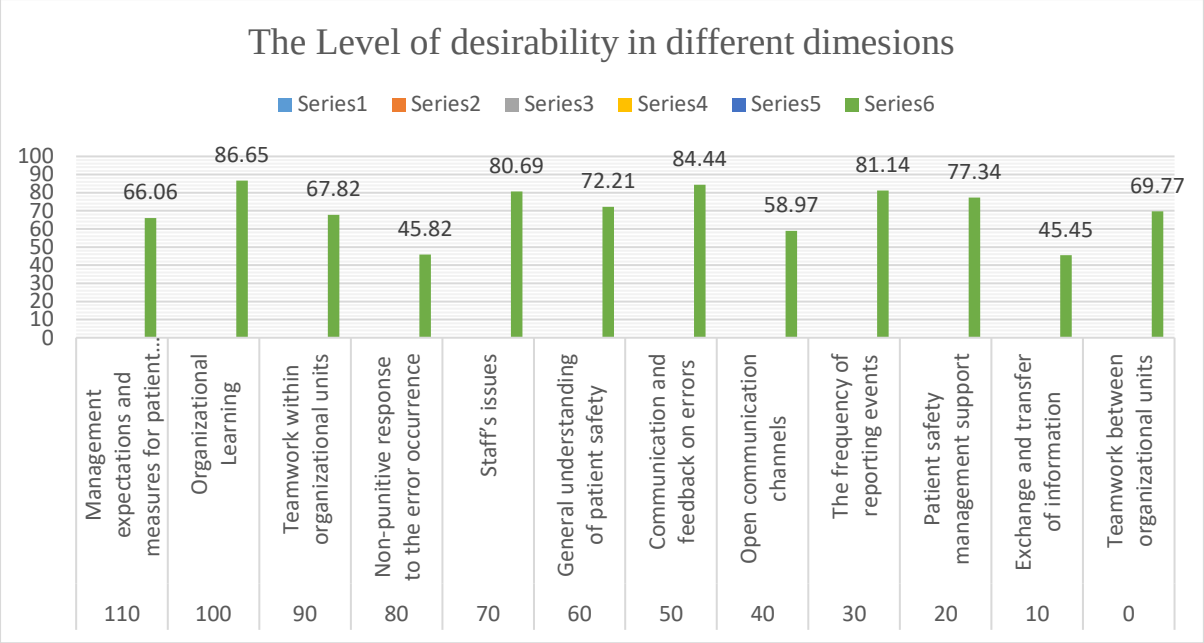


Table 1: The status of dimensions of patient safety culture in the staff

Undesirable	Desirable	
33.94	66.06	Managerial expectations and measures for patient safety
86.65	13.35	Organizational Learning
67.82	32.18	Teamwork within organizational units
45.82	54.18	Non-punitive response to the error occurrence
80.69	19.31	Staff's issues
72.21	27.79	General understanding of patient safety
84.44	15.56	Communication and feedback on errors
58.97	41.03	Open communication channels
81.14	18.86	The frequency of reporting events
77.34	22.66	Patient safety management support
56.45	43.55	Exchange and transfer of information
69.77	30.23	Teamwork between organizational units

Table 3: Status of patient safety culture in terms of demographic variables in staff of different wards

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	Screen ward	Childre n ward	Maternity ward	Internal ward	Laborator y	NICU	Operating Room
Managerial expectations and measures for patient safety	11.35	11.00	8.67	11.94	10.00	11.43	12.39
Organizational Learning	11.40	10.45	9.00	11.00	9.90	11.00	11.22
Teamwork within organizational wards	12.70	13.09	12.43	14.68	11.70	12.14	15.05
Non-punitive response to the error occurrence	7.55	7.55	4.73	8.29	7.10	8.71	9.35
Staffs' issues	13.80	14.64	13.33	14.90	13.00	14.71	15.04
General understanding of patient safety	12.80	14.27	12.38	12.13	13.00	12.15	15.64
Communication and feedback on errors	10.00	10.27	10.92	9.97	8.33	10.54	11.36
Open communication channels	8.80	8.36	8.17	8.07	7.89	7.85	8.77
The frequency of reporting events	9.50	10.55	11.92	9.40	8.78	10.23	10.29
Patient safety management support	10.21	10.50	9.64	10.27	8.89	8.85	10.74
Exchange and transfer of information	10.84	11.60	12.07	12.67	9.89	11.92	11.35
Teamwork within organizational units	10.84	11.60	12.07	12.67	9.89	11.92	11.35

Table 3: Status of patient safety culture in terms of demographic variables in staff of different wards

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p-value	Standard Deviation	Average		
0.016	16.39	138.70	Age	Below 30
	19.09	130.93		30-35
	24.04	131.31		36-40
	29.63	118.46		Above 40
0.021	22.07	134.43	Gender	Male
	19.89	123.31		Female
0.0137	23.27	128.61	Marital Status	Single
	21.07	134.73		Married
0.001	34.66	95.00	Education	Associate's degree
	17.01	134.68		Bachelor
	29.81	130.58		M.S
	11.34	139.00		P.H.D
0.004	14.43	140.71	Employment	Intern
	23.65	102.60		Temporary-to permanent
	17.70	131.38		Contractual
	25.13	131.31		Semi-Contractual
	23.50	129.88		Permanent

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