

## Original Research

### Evaluation of Patient Safety Management Visits

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#### Abstract:

##### Background:

Patient safety management visits are a suitable way for the participation and cooperation of senior managers and other staff to provide a safe environment in hospitals. By conducting weekly patient safety management visits on a weekly basis, senior managers can Create a culture of safety. The aim of this study was to evaluate the patient's safety management visits performed in Shahid Hasheminejad Hospital in Mashhad in 2021.

##### Methods:

This study was a combined (quantitative and qualitative) study. All minutes of safety management visits held in Shahid Hasheminejad Hospital in 2021 were analyzed by content method and the effectiveness of the measures taken was evaluated with a researcher-made form.

##### Results:

Total of 32 management visits were conducted, 200 safety problems were identified. The corrective measures taken resulted in the complete elimination of 68% of the cases and 32% of the ongoing cases.

##### Conclusion:

Patient safety management visits are a useful way to demonstrate senior management commitment to safety and to attract the cooperation of other staff to address safety issues.

**Keywords:** Patient Safety Management Visits, Accreditation

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## Introduction

To address the issue of patient safety, a 1999 report by the Medical Care Quality Committee of the American Medical Institute entitled "Humans are erroneous creatures: "Creating a healthier health system"(1). According to numerous reports, the insecurity of the health system at the forefront of the patient's safety contract has become a challenging issue in the health system. The World Health Organization reported in 2009 that tens of millions of patients worldwide suffer from debilitating injuries or deaths from unsafe health services. In 2010, the Joint National Commission reported that more than 956 cases of erroneous surgery, five percent of hospitalizations for infections caused by health services, bedwetting in the elderly hospitalized, and the annual death toll of 98,000 were the most serious medical malpractice cases in the United States. Following what has been said, two basic questions arise: under the heading of how can regular measures be taken to avoid preventable errors? And how can these measures be identified and prioritized? (2). Ensuring the quality of health services is a global challenge and a constant effort of health systems. People expect health services to be of the highest quality (3).Maximum quality refers to a broad concept and includes several aspects such as service effectiveness, efficient use of resources, fair delivery of services, safety, timely and appropriate services and attention to the cultural and religious demands and expectations of the people(4). What is clear is the need to improve the efficiency, effectiveness and safety of the patient. To this end, the responsibility of health care centers should be increased to reduce the heterogeneity of services provided to patients (5).This can be established in hospitals by implementing the governance framework with Linney and using the accreditation program (6).

Accreditation pays special attention to patient safety, with the Joint Accreditation

Commission (JCA) expressing its vision that "all people in all health care organizations receive the safest, highest quality and most valuable services (7). These programs try to create a culture of patient safety in health centers by laying the groundwork and anticipating the required structures (8).Many hospitals use process-enhancing techniques and programs to achieve these goals, but unfortunately change activities often fail, largely due to the lack of senior management involvement (9). However, there is little scientific evidence on how effective senior management participates in process promotion activities (10). One technique for engaging senior

Program managers is to visit them from the front line to observe and talk to employees while they are at work. The innovation of this technique is that managers and front-line employees work together to identify and remove barriers to productivity, quality and safety (11). This technique in principle Refers to the concept of "visit management" (12). Which is known in hospitals as safety management visits (13). Safety management visits have been introduced as an effective tool in promoting safety culture. Among the goals of these visits are to show the commitment and responsiveness of senior management to the safety of patients, staff and society, increase employee participation and create a culture of free communication, identify, appreciate and share the best practices and staff training on patient safety concepts(14).

Patient safety management visits were first performed in January 2001 at Boston Women's Hospital (BWH). The results of the pilot showed; If the information obtained during the visits is properly analyzed, it can lead to safety changes (15). The program promotes patient safety on two levels: First, it is a complete demonstration of senior managers 'commitment to accepting employees' opinions, which motivates employees to participate more

in service quality improvement activities (16). Second, service collaboration processes are improved during collaboration to identify safety issues by front-line staff and their resolution by managers (17). A study of four hospitals that conducted safety management visits between years 1 and 2; Showed that the continuity of the visit program had improved the attitude of front-line staff to safety compared to before its implementation (18). In a study of the results of safety management visits to the Boston Women's Hospital complex, it is noted that during the one-hour visit sessions, 28 during the three months, 8 safety issues were identified, of which 1% related to equipment, 1% to communications, 1% to medicine. And 6% was related to work pressure (19). Also, the results of a study by Lukewich et al in Hamilton Health Science (HHS) show that after one year of patient safety management visits in all clinical and support departments, Face care visits 984 Which led to the identification of 1351 safety issues in various issues, of which 64-80% were completely resolved or projects were underway. 93% of employees mentioned that they had open and honest discussions with senior managers during the visits to resolve safety issues (20). Considering the mentioned cases and the fact that safety management visits have been introduced as an effective tool in promoting safety culture, the purpose of this study was to investigate safety management visits in 2021 in Shahid Hasheminejad Hospital to study the effect of these visits on safety promotion and safety level. On various topics.

## Methods

This study is a combined study (quantitative and qualitative). Minutes and reports of safety management visits held in 2021 in Shahid Hasheminejad Hospital as a data collection tool in the form of content analysis were analyzed. The study environment was Shahid Hasheminejad Hospital and the sample of the

study includes all the reports and minutes of safety management visits held in 2021 in Shahid Hasheminejad Hospital. To increase the consistency of the data, the data extraction was also controlled by the second colleague and their classification and prioritization were also examined by the second colleague. Also, the form related to extracting the identified safety cases from the minutes was used separately for the subject of the cases and the form for evaluating the status of the actions taken.

## Results

All forms of safety visits were reviewed in the hospital (100%). Table 1 shows the general status of patient safety management visits performed at Shahid Hasheminejad Hospital. Findings show that in general, 68% of the identified safety problems in Shahid Hasheminejad Hospital have been resolved, 18% of these problems have been resolved to some extent and no action has been taken to address 14% of these problems. Demonstrates patient's safety management in resolving identified safety problems.

Table 2 is classified according to various safety issues, which show the details and the extent to which the identified cases have been resolved. Most of safety issues identified in patient safety management visits from the beginning to the end of 1398 were related to medical equipment, manpower, error management, physical space and environmental issues, and the least were in communications and waste management, which is expected due to the completion of this development project. Hospital and allocation of necessary funds for equipping and establishing this center can be an important step towards removing barriers to improving patient safety

## Discussion

Based on the findings of this study; Patient safety management visits are a useful and effective tool for creating and developing a patient safety culture by establishing a direct

relationship between front-line staff and managers and leaders. In addition, this strategy promotes teamwork, opens communication channels, and provides an opportunity for teams to participate in safety promotion activities. The results of the present study showed that during one year of patient safety management visits, 32 visits were made in different treatment and support wards, which, of course, taking into account similar studies by Zimmerman et al. And 223 Visits to the Boston Hospital complex are very low (20)

However, this difference can be explained by the fact that the statistics of the present study are related to a 320-bed hospital and at the end of February 2019, we faced a crisis of Covid disease that the schedule of these visits has changed. Based on the findings of this study, in total managerial visits, 236 cases of safety issues in different issues have been identified from different departments. Based on the findings of this study, in total managerial visits, 236 cases of safety issues have been identified in various subjects from different departments. Newton-Wellesley Hospital, 924 cases, Spaulding Rehabilitation Hospital, 89 cases and Shaughnessy-Kaplan 221 Cases and Rehab Hospital, 199 cases.

Also in Corina study In Hamilton Hospital complex, patient safety management visits led to the identification of 1351 safety issues in various subjects. The results of the present study are consistent with the results of the studies mentioned in the number of identified cases. Elimination of safety issues identified in safety visits can provide a basis for improving patient safety (21).

Comparing the statistics of Frankel's studies with the results of the present study, it can be concluded that the studies are almost consistent in terms of identified topics. Also, paying attention to the statistics of the subject's shows that the percentage of the frequency of safety cases identified in the physical space, medical equipment and manpower are almost at the

same level. Also, the difference between the frequency of education subjects and methods and instructions and its high in the present study can be due to the new concept of patient safety management visits as well as the concepts of clinical governance, accreditation and newness of safety-friendly hospitals program in the hospital under Be a study. Overall, the results of the study show that 68% of the identified issues in the patient's safety management visits have been completely resolved, the promotion program of 18% of the identified issues is underway and have been partially resolved, about 14% of No specific action has been taken on the identified issues. In general, it can be said that about 86% of the identified safety issues have been resolved in safety management visits, which is consistent with Corina study.

## Conclusion

The results indicate that patient's safety management visits play an important role in identifying and resolving safety problems. The participation of senior managers and front-line staff provides a good platform for promoting safety, which promotes carte blanche, mutual understanding between the two groups, support for the ideas and activities of front-line staff by senior managers, and support for senior managers' strategies by front-line staff. These factors ultimately lead to a safer environment for patients and staff, which increases the positive outcomes for patients.

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## Declaration of Competing Interest

The authors report no declarations of interest

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**Ethics statement:**

Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable data included in this article.

**References**

- Haslinda H, Rachmawaty R, Saleh A. Strategies to improve patients' involvement in achieving patient safety goals: A literature review. *Enfermería Clínica*. 2021;31:S609-S13.
- Guspianto, Ibnu IN, Solida A. Predictors of hospital patient safety culture outcomes in Jambi Province. *Enfermería Clínica*. 2021;31:S722-S9.
- Funabashi M, Holmes MM, Pohlman KA, Salsbury S, O'Beirne M, Vohra S, et al. "Doing our best for patient safety": An international and interprofessional qualitative study with spinal manipulative therapy providers in community-based settings. *Musculoskeletal Science and Practice*. 2021;56:102470.
- Paisley AM. Patient safety for the surgical trainee. *Surgery* (Oxford). 2021;39(12):816-28.
- Choi EY, Pyo J, Ock M, Lee H. Second victim phenomenon after patient safety incidents among Korean nursing students: A cross-sectional study. *Nurse Education Today*. 2021;107:105115.
- Smith C, Miller DC, Saffarian M, McCormick ZL. FactFinders for patient safety: Antithrombotics and interventional pain procedures -- lumbar transforaminal epidural steroid injections and lumbar medial branch radiofrequency neurotomy. *Interventional Pain Medicine*. 2021;1(1):100008.
- Eskici GT, Kanig M, Ugur E, Seren AKH. The Turkish version of the Patient Safety Competency Self-Evaluation Tool: A validity and reliability study. *Nurse Education in Practice*. 2021;57:103229.
- Sümen A, Ünal A, Aksoy S. Nursing students' self-reported experiences and attitudes regarding patient safety: A cross-sectional study comparing the classroom and clinical settings. *Collegian*. 2021.
- Xiang Z, Liu H, Gao X, Jin Q, Qiao K, Li X, et al. The willingness and its influencing factors on patients to participate in patient safety spontaneous reports: A cross-sectional online study in China. *Health Policy and Technology*. 2021;10(2):100522.
- Al-Ghunaim TA, Johnson J, Biyani CS, Alshahrani KM, Dunning A, O'Connor DB. Surgeon burnout, impact on patient safety and professionalism: A systematic review and meta-analysis. *The American Journal of Surgery*. 2021.
- Faridah I, Setyowati S, Lestari F, Hariyati RTS. The correlation between work environment and patient safety in a general hospital in Indonesia. *Enfermería Clínica*. 2021;31:S220-S4.
- Dias CP, Chrispim Silva MA, Souza MS, Lopes Ferreira F, de Carvalho VP, Alves M. The interdisciplinary team experiences of managing patient safety during a fixed-wing inter-hospital aeromedical transport: A qualitative study. *International Emergency Nursing*. 2021;58:101052.
- Rahmani P, Molaei Tavani F, Sheikhalipour Z, Behshid M, Khodayari MT, Zadi akhuleh O. The relationship between attitude of nurses toward the patient safety and missed nursing care: A predictive study. *Journal of Healthcare Quality Research*. 2021.
- Hammond Mobilio M, Paradis E, Moulton C-a. "Some version, most of the time": The surgical safety checklist, patient

- safety, and the everyday experience of practice variation. *The American Journal of Surgery*. 2021.
15. Aini Q. Model of patient safety behavior influenced by culture and attitudes of safety patients: Case study of PKU Muhammadiyah Hospital in Bantul. *Enfermería Clínica*. 2020;30:272-5.
  16. Lee Ym, Oh H. The Influence of Patient Safety Culture and Patient Safety Error Experience on Safety Nursing Activities of Emergency Nurses in South Korea. *Journal of Emergency Nursing*. 2020;46(6):838-47.e2.
  17. Annisa F, Maidin A, Mangilep AUA, Irwandy. Performance evaluation of patient safety committee in the regional general hospital of Makassar city. *Enfermería Clínica*. 2020;30:5-8.
  18. Ünver S, Yeniğün SC. Patient Safety Attitude of Nurses Working in Surgical Units: A Cross-Sectional Study in Turkey. *Journal of PeriAnesthesia Nursing*. 2020;35(6):671-5.
  19. Simsekler MCE, Qazi A, Alalami MA, Ellahham S, Ozonoff A. Evaluation of patient safety culture using a random forest algorithm. *Reliability Engineering & System Safety*. 2020;204:107186.
  20. Lukewich J, Edge DS, Tranmer J, Raymond J, Miron J, Ginsburg L, et al. Undergraduate baccalaureate nursing students' self-reported confidence in learning about patient safety in the classroom and clinical settings: An annual cross-sectional study (2010–2013). *International Journal of Nursing Studies*. 2015;52(5):930-8.
  21. Corina I, Abram M, Halperin D. The Patient's Role in Patient Safety. *Obstetrics and Gynecology Clinics of North America*. 2019;46(2):215-25.

## Tables

**Table 1. General Status of Patient Safety Management Visits at Shahid Hasheminejad Hospital – 2019**

Number of hospital beds	320 beds
Frequency of hits	Weekly Basis
Number of visits	32
Number of Participants (by day)	300
Visit the main members of the Team	Head of Hospital, Hospital Manager, Nursing Services Manager, Quality Improvement Officer, Laboratory Officer, Safety Coordinator and Ward Officers as Process Owner
Number of Cases Identified	200 items



**Table 2. Identified safety cases and the extent of their elimination in the patient's safety management visits of Shahid Hasheminejad Hospital – 2019**

Issue	Completely fixed		No action taken		Somewhat elevated		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
communications	5	100%	0	0%	0	0%	5	<b>2.5%</b>
Physical space	5	27%	10	55%	3	16%	18	<b>9%</b>
Participant	12	48%	6	24%	7	28%	25	<b>%12.5</b>
Non-medical equipment	10	64%	2	13%	3	20%	15	<b>7.5%</b>
Environmental issues	8	%47	5	29%	4	23%	17	<b>8.5%</b>
Other	6	66%	0	0%	3	33%	9	<b>4.5%</b>
Supervision	6	75%	0	0%	2	25%	8	<b>4%</b>
Error management	20	83%	0	0%	4	16%	24	<b>12%</b>
Safety training	8	100%	0	0%	0	0%	8	<b>4%</b>
Methods and instructions	16	100%	0	0%	0	0%	16	<b>8%</b>
Waste management	5	100%	0	0%	0	0%	5	<b>2.5%</b>
Infection control	8	80%	0	0%	2	20%	10	<b>5%</b>
Medical Equipment	27	67%	5	12.5%	8	25%	40	<b>20%</b>