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ORIGINAL PAPER

Patient Safety Culture in a Turkish Public Hospital: A Study of Nurses' Perceptions About Patient Safety

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Abstract The objective of this study was to investigate nurses' perceptions about the culture of patient safety in a Turkish public hospital. The study adopted a cross-sectional research design and utilized the hospital survey of patient safety culture. The population studied consisted of approximately 300 nurses from which 200 nurses were surveyed. The response rate was 66.6 % of the population. Nurses responded most positively to two dimensions, hospital management support for patient safety (80 %) and supervisor/manager expectations and actions promoting patient safety (79 %). Four dimensions with a positive response rate of <50 % ('Frequency of events reported', 'Nonpunitive response to error', 'Communication openness' and 'Hospital handoffs and transitions') were considered as potential targets for improvement in our study. This study revealed six significant predictors of Overall Perceptions of Safety: Organizational Learning-Continuous Improvement; Communication Openness; Teamwork within Units; Staffing; Frequency of Event Reporting; and the Patient Safety Grade (of the Hospital Unit). Additionally, four significant predictors of the Patient Safety Grade (of the Hospital Unit) emerged: Feedback and Communication about Error; Organizational Learning-Continuous Improvement; Hospital Management Support for Patient Safety; and Supervisor/Manager Expectations and Actions Promoting Safety. Interventions designed to improve the safety culture in Turkish hospitals should be focused on the concerns of staff nurses and the improvement of communication between these nurses and their managers. The determination and evaluation of the patient safety culture level in hospitals should be viewed as a continuous process in Turkey where a need for continuous improvements in the hospital patient safety culture exists. To improve the patient safety level, nurses' perceptions about patient safety appear to be essential. Nurses are important for the improvement of the patient safety culture in health care organizations. Moreover, some hospitals have recognized that providing

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patients with safe, high-quality care is fundamental to protecting the financial assets of the institution and therefore, falls within risk management's role. In this new landscape, risk management and patient safety professionals are engaged in a close working relationship.

Keywords Patient safety · Patient safety culture · Nurses · Risk management · Public hospital management · Turkey

Introduction

Healthcare is inevitably associated with an increased risk of threats to patient safety (Sandars 2007). In the past, the risk management and quality improvement functions often operated separately in healthcare organizations and individuals responsible for each function had different lines of reporting, resulting in an organizational structure that further divided risk management and quality improvement. In the 2000s, risk management and quality improvement efforts in healthcare organizations have rallied behind patient safety and are finding ways to work together more effectively and efficiently to ensure that their respective organizations deliver safe and high-quality patient care (ECRI Institute 2009).

A large number of patients are treated and cared for daily without incident by health care practitioners worldwide. Nevertheless, safety incidents occur during the course of medical care, placing patients at risk for injury or harm. In health care, much of the literature, and consequently our understanding of patient safety, has come from acute care medical settings (Brickell et al. 2009). A defining realization of the 1990s was that, despite the power of modern medicine to cure and ameliorate illness, hospitals were not safe places for healing and were instead fraught with risks of patient harm. Low reporting made learning from errors nearly impossible, and legal counsel often supported and encouraged this approach to minimize the risk of malpractice litigation (Ferlie and Shortell 2001).

Clinicians, governing boards, executive leaders, and middle managers of health care delivery organizations were increasingly encouraged to think in terms of building high-reliability organizations. This required a culture change to one that refrained from assigning "sharp-end" blame for mistakes; that incentivized learning by fully disclosing information about mistakes, failure, and near misses; that trained and provided support to clinicians involved in inherently risky work; and that disclosed all relevant facts to the injured parties (McElhinney and Heffernan 2003). Thought leaders from medicine and policymakers began to forge a new way of understanding risk, new ways to reaffirm relationships with patients, and a new way to address the shocking realities that epidemiologic studies, such as Leape's (1994) landmark study, *Error in Medicine*, had presented (Leape 1994). In 2006, Leape and Berwick (2005) revealed that while the attention paid to patient safety had expanded, the lines between the overuse, underuse, and misuse categories had become blurred. "It seems logical," they wrote, that "patients who fail to receive needed treatments, or who are subjected to the risks of unneeded care, are also placed at risk for injury every bit as objectionable as direct harm from a surgical mishap" .

Quality improvement and risk management had both developed as disciplines within health care, with an emphasis on health services delivery research and measurement. These and other developments produced a readiness to examine what might be learned and adapted from other high-risk industries and complex organizations. Patient safety advocates reject the traditions of the guild in which social standing and privileged knowledge shielded practitioners from accountability. They also reject the defensive posture of old risk management approaches in which physicians and leaders of health care organizations were advised to

admit no responsibility and to defend all malpractice claims, whether or not they were justified. Patient safety embraces organizational and personal accountability, yet it also recognizes the importance of moving beyond blame in both its organizational and its personal dimensions, while maintaining accountability and integrity in interactions with patients and families who have suffered avoidable adverse events (Emanuel et al. 2012).

According to the Agency for Healthcare Research and Quality (AHRQ), patient safety is a critical component of health care quality. While patient safety is defined in many ways, the Institute of Medicine (IOM) in "To Err is Human" (1999, p. 211) produced the most widely accepted definition of patient safety stating, "freedom from accidental injury; ensuring patient safety involves the establishment of operational systems and processes that minimize the likelihood of errors and maximize the likelihood of intercepting them when they occur". The patient safety culture is a subset of organizational culture that relates specifically to the values and beliefs concerning patient safety (Feng et al. 2008). Kizer (1998: 31) defines a patient safety culture as the "shared beliefs and values about the healthcare delivery system with patient safety in mind". Mustard (2002, p. 112) defines the patient safety culture as "a product of social learning; ways of thinking and behaving that are shared and that work to meet the primary objective of patient safety" Nieva and Sorra (2003, p. 17) define safety culture as a "performance shaping factor that guides the many discretionary behaviors of healthcare professionals towards viewing patient safety as one of the highest priorities". Patient safety seeks high reliability under conditions of risk. Risk and safety are flip sides of the therapeutic coin. Patient safety demands the design of systems that make risky interventions reliable (Emanuel et al. 2012). A safety culture would include the adoption of a systems-level approach and the inclusion of staff and patients in the examination of patient safety incidents. It would allow patients and their family/caregivers to play a more active role in decision-making, patient care, risk assessment and safety interventions (Brickell et al. 2009). The relationship between risk management and patient safety continues to evolve. Better collaboration and efforts to improve safety, quality, and risk will lead to safer patient care. In the end, safer systems make patient care safer, which benefits patients, providers, and insurers (Manuel et al. 2010).

As health care organizations strive to improve, there is a growing recognition of the importance of establishing a culture of safety. The ability to achieve a culture of safety requires an understanding of the values, beliefs and norms about what is important in an organization. It is also important to identify what attitudes and behaviors related to patient safety are expected and appropriate (Sorra and Nieva 2004).

A variety of stakeholders (especially nurses and physicians) are responsible for ensuring that patient care is safely delivered and that no harm occurs to patients. Nurses play a critical role in patient safety and reducing medical errors (Aboshaiqah 2010). Nurses, as the largest group of health care providers in the nation offering direct patient care, are vital to error-prevention efforts. Nurses have a significant role in improving care because of their broad yet intimate perspective. Nurses are an indispensable part of the endeavor to find innovative solutions to improve safety, and they constitute the largest health care professional group in the ongoing provision of health care (Nicklin and McVeety 2002). In 2003, the IOM focused attention on the critical role of nurses in patient safety (IOM 2003) and cross-national studies indicated the relationship between nursing care and patient safety (Aiken et al. 2001). However, little is known about nursing care and patient safety in developing or mid-level economies such as Turkey (Bahir and Herdman 2008).

While there is a plethora of literature on patient safety and medical errors, there is little information and few studies on the provision of patient safety and the patient safety culture in healthcare institutions from a nursing perspective in developing countries. Nurses'

perceptions of the existing culture of patient safety provide a description of the current status of patient safety and the nurses' approach to a safety-focused health care culture.

In Turkey, some hospitals (mostly private) attempt to improve patient safety to be accredited by an international accreditation organization. A performance-based supplementary payment system (PBSPS) was introduced in the Ministry of Health (MoH) hospitals in 2004 (OECD and World Bank 2008). The current PBSPS places great importance on safety and encourages patient safety efforts. Furthermore, a recent notification requires both public and private health institutions to implement patient and employee safety practices. To raise patient safety awareness and build a safety culture, patient safety congresses have been convened and in-service training has also been delivered. Yet, there is little empirical evidence regarding the safety culture in Turkey (Kaya et al. 2010).

Because health care is delivered by physicians, nurses, and other health care professionals, the concern for patient safety in the Turkish health system becomes a concern for all personnel groups, including nurses. However, as little is known about patient safety and the patient safety culture from the nursing perspective in Turkey, this study aims to shed light on patient safety from the perspective of hospital practicing nurses in the Turkish hospital sector. The research objectives of this study were developed from the Hospital Survey on Patient Safety established by the Agency for Health Research and Quality. The survey measures staff perceptions of patient safety in their work area/unit, as well as perceptions about patient safety in the hospital as a whole.

The concept of nurses' perceptions of patient safety culture is not well studied in the hospital sector. There appears to be a gap in the literature regarding perceptions of the patient safety culture from a nursing perspective and evaluation (Scherer and Fitzpatrick 2008; Kim et al. 2007; Aboshaiqah 2010). Despite the wealth of evidence on the culture of patient safety, limited evidence exists regarding the linkage between predictors and outcomes of a patient safety culture, especially in developing countries (El-Jardali et al. 2010). New studies in developing countries will strengthen and build the science, and when new knowledge about nurses' perceptions of patient safety culture is revealed and tested, the science will be informed by a more practical understanding of nurses' perceptions of patient safety culture. This study may assist in the evolution and development of nursing involvement within patient safety practices and culture. The resulting outcome of this study may improve nurses' awareness of safety practices. This study could be an initial step toward the proactive improvement in patient and staff safety in nursing.

This study employs a cross-sectional descriptive design to examine nurses' perceptions about the existing culture of patient safety at a public hospital in Turkey. The research design is cross-sectional because the data are collected from participants at a single point in time or during a single, relatively brief time period, and comparisons are made across the variables of interest. The purpose of this study is to investigate the nurses' perceptions about patient safety in a hospital setting. This study was planned and conducted to analyze nurses' perceptions of the culture of patient safety in their work unit and their perceptions about patient safety in the public hospital environment as a whole in Turkey. Another aim of this study is to analyze the relationships among certain patient safety dimensions.

The research questions of this study are listed below.

Q1 What are the mean levels of patient safety culture?
Q2 What are the relationships among the safety culture dimensions?
Q3 What are the predictors of the Overall Perceptions of Safety?
Q4 What are the predictors of the Patient Safety Grade (of the Hospital Unit)?

Q5 Are there significant differences among Nurses' Perceptions About Patient Safety Culture Dimensions according to the Hospital Units?

This study is the first to examine the dimensions of patient safety culture in terms of multivariate regression analysis in a developing country.

Method

The research study was conducted at a public hospital in a mid-sized city in Turkey. The population studied consisted of approximately 300 nurses. Convenience sampling was conducted. Convenience sampling relies on available participants, i.e., those who are close at hand or readily available (Berg 2004). The nurses work a variety of full- and part-time shifts, with 8 and 12 h shifts being the most common. The researchers recruited participants by visiting 20 nursing units within the hospital during a 5-day period; the resulting response rate was 66.6 % of the nursing population.

The participants were recruited from a hospital setting in Turkey through the nursing department. The data collection process was conducted and completed from October to November 2010. The first phase involved meeting with the nursing department director to describe the purpose and aims of the research. A memorandum was sent from the nursing department director to the nurses. The purpose of this memorandum was twofold—to explain the purpose of this study and to confirm management's approval to conduct this study. Once a unit was visited and survey packets were distributed, the unit was revisited or surveys were again distributed on that unit. Participation in the study was voluntary, and the participants were anonymous. The survey cover letter outlined the purpose and importance of the survey and stated that the data were to be reported only in aggregate.

The survey instrument utilized in this study, the HSOPSC (Hospital Survey on Patient Safety Culture), was developed by The AHRQ and prepared by Westat, Rockville MD in 2004. The HSOPSC is designed to assess the patient safety culture of a healthcare organization as a whole or to assess units within the hospital. The HSOPSC consists of 42 questions and measures 14 dimensions. The questionnaire is provided as an appendix (please see Appendix 1).

The patient safety question categories are measured by three or four survey questions for each area. The unit-level safety areas that are probed by the tool are overall perceptions of safety; frequency of events reported; supervision/manager expectation and actions promoting patient safety; organizational learning-continuous improvement; teamwork within units; communication openness; feedback and communication about error; non-punitive response to error; and staffing. The hospital-wide safety areas are hospital management support for patient safety; teamwork across hospital units; and hospital handoffs and transitions. Two other survey tool questions ask for the patient safety grade the participant would assign to the work area/unit and the number of events the participant has reported in the last 12 months. Most of the items uses agree/disagree or never/always response categories, enabling ease of response. The dimensions with an average percent of positive response >75 % are identified as strengths (Sorra and Nieva 2004; Sorra et al. 2008). The HSOPSC included both positively and negatively worded items. Items were scored on a five-point Likert scale. The scales used for the questions were (1) strongly disagree, disagree, neither, agree, or strongly agree and (2) never, rarely, sometimes, most of the time, always (Bodur and Filiz 2010). For positively worded items, the percent of positive responses is the combined percentage of respondents within a hospital who

answered "Strongly agree" or "Agree," or "Always" or "Most of the time," depending on the response categories used for the item. For negatively worded items, the percent of positive responses is the combined percentage of respondents within a hospital who answered "strongly disagree" or "disagree," "neither" or "never" or "rarely" or "sometimes" because a negative answer on a negatively worded item indicates a positive response. Forty-two items in the HSOPSC are statements that are rated using a five-point Likert scale used in previous studies in Turkey and other countries (Wagner et al. 2009; Bodur and Filiz 2010; El-Jardali et al. 2010).

The original HSOPSC was translated into Turkish by the first author. Then, an independent translator who had never seen the original version translated this Turkish version back into English. Because the independent translator concluded that of all items bore the same meaning, the Turkish translation was accepted as valid. A pilot study was performed on 30 nurses in the hospital where this study was planned. The HSOPSC has previously been used in Turkey for several studies (Çakır 2007; Filiz 2009; Bodur and Filiz 2010). Westat Rockville conducted the reliability and validity analyses on behalf of the AHRQ. Reliability analyses were examined for each of the 12 safety culture dimensions using the confirmatory factor analysis. Each of the 12 safety culture dimensions that make up the survey was found to have an acceptable reliability (defined as a Cronbach's $\alpha \geq .60$), with reliability coefficients ranging from .63 to .84 (Sorra and Nieva 2004). Bodur and Filiz demonstrated that the Turkish version of the HSOPS was valid and reliable in determining patient safety culture (2010). We observed that the 12 safety culture dimensions have reliability coefficients ranging from .74 to .82 and that the HSPSC total scale was .76. This is important to this research study, as it is the tool that will be used to assess the hospital's patient safety culture.

The survey also includes two questions that ask respondents to provide an overall grade of patient safety for their work area/unit and to indicate the number of events they have reported over the past 12 months.

Table 1 shows dimensions of the HSOPSC and Table 2 provides patient safety culture composites and definitions. The survey's toolkit materials are available from the AHRQ web site (www.ahrq.gov/qual/hospculture).

Microsoft Excel was utilized for data entry. Error-checking routines were created as part of the database application. The data were double entered and crosschecked. The Statistical Program for Social Sciences (SPSS, Version 15) was used for data analysis. Descriptive statistics were used to (a) characterize the nurse demographics and, (b) describe the safety cultural dimensions in the hospital setting. Additionally, the Hospital Survey on Patient Safety Culture is designed to measure overall perceptions of patient safety. Items were worded either positively or negatively. The negatively worded items were reverse-coded before the data analysis. Correlation analysis was used for determining the relationship among the dimensions of patient safety culture. Multivariate regression analysis (forward regression analysis) was used for the investigation predictors of the Patient Safety Grade (of the Hospital Unit) and Overall Perceptions of Safety. In multivariate regression, dependent variables are Patient Safety Grade (of the Hospital Unit) and Overall Perceptions of Safety. Independent variables are Supervisor/Manager, Expectations and Actions Promoting Safety, Organizational Learning-Continuous Improvement, Teamwork Within Units, Feedback and Communication about Error, Nonpunitive Response to Error, Staffing, Communication Openness, Hospital Management Support For Patient Safety, Teamwork Across Hospital Units, Hospital Handoffs and Transitions, and Frequency of Event Reporting. The internal consistency of scales was estimated using Cronbach's coefficient α.

Results

The average respondent was 34 years old with 3 years of experience in the current department and 5 years of experience at the current hospital. All nurses were female. One half of the respondents were in internal medicine at the hospital.

Table 3 was prepared for Research Question 1. Table 3 presents the average positive response rates for each of our 12 study dimensions. The average percent of positive responses for the two dimensions, supervisor/manager expectations and actions promoting patient safety (79 %) and hospital management support for patient safety (80 %), are >75 % and thus, both should be identified as strengths.

A correlation matrix among the dimensions of patient safety culture was built to address Research Question 2. The Pearson correlation coefficient was used to determine the relationships among the patient safety culture dimensions. The analysis revealed a significantly positive correlation among the dimensions of patient safety culture. The highest inter-correlation between *teamwork within units* and *organizational learning and continuous improvement* was $r = .47$ ($p < .001$). However, Staffing and Frequency of Event Reporting were significantly negatively correlated with certain patient safety culture dimensions (Teamwork within Units, Overall Perceptions of Safety, and Patient Safety Grade (of the Hospital Unit) (see Table 4).

Table 5 was prepared for Research Question 3. This aspect of the study involved multiple regression (forward regression) analysis using Overall Perceptions of Safety as a dependent variable and other dimensions of patient safety culture as independent variables. Forward regression produced six models. Model 6 reveals that independent variables account for approximately 12 % of the total variance in Overall Perceptions of Safety ($R^2 = .401$; $F = 21.548$; $p < .001$). The Durbin-Watson statistic was 1.746 (below 2.50), which did not indicate autocorrelation among residuals, confirming the suitability of using regression for analysis. Furthermore, the variance inflation factors (VIFs) were all below 10, indicating the absence of multicollinearity (Hair et al. 1998).

A multiple regression analysis produced 6 significant predictors of Overall Perceptions of Safety: Organizational Learning-Continuous Improvement ($\beta = .435$; $t = 7.203$; $p < .05$), Communication Openness ($\beta = .185$; $t = 2.836$; $p < .05$), Teamwork Within Units ($\beta = .159$; $t = 2.730$; $p < .05$), Staffing ($\beta = .140$; $t = 2.337$; $p < .05$), Frequency of Event Reporting ($\beta = -.110$; $t = -2.262$; $p < .05$), and Patient Safety Grade (of the Hospital Unit) ($\beta = .095$; $t = 2.006$; $p < .05$). There are negative relationships between Overall Perceptions of Safety and Frequency of Event Reporting. In this study, the main predictor of Overall Perceptions of Safety is Organizational Learning-Continuous Improvement.

Table 6 was prepared for Research Question 4. This study involved a multiple regression (forward regression) analysis using Patient Safety Grade (of the Hospital Unit) as a dependent variable and other dimensions of patient safety culture as independent variables. Forward regression produced 4 models. Model 4 reveals that independent variables account for approximately 12 % of the total variance in Patient Safety Grade (of the Hospital Unit) ($R^2 = .196$; $F = 11.867$; $p < .001$). The Durbin–Watson statistic was 1.536 (below 2.50), which did not indicate autocorrelation among residuals, confirming the suitability of using regression for analysis. Furthermore, the VIFs were all below 10, indicating the absence of multicollinearity (Hair et al. 1998).

A multiple regression analysis produced 4 significant predictors of Patient Safety Grade (of the Hospital Unit): Feedback and Communication about Error ($\beta = .204$; $t = 3.299$; $p < .05$), Organizational Learning-Continuous Improvement ($\beta = .298$; $t = 3.110$;

Table 1 Safety Culture Dimensions at Unit and Hospital Levels

Safety culture dimensions (unit level)	Safety culture dimensions (hospital level)	Outcome dimensions
1. Supervisor/Manager Expectations and Actions Promoting Safety	8. Hospital Management Support for Patient Safety	11. Frequency of Event Reporting
2. Organizational Learning-Continuous Improvement	9. Teamwork Across Hospital Units	12. Overall Perceptions of Safety
3. Teamwork Within Units	10. Hospital Handoffs and transitions	13. Patient Safety Grade (of the Hospital Unit)
4. Feedback and Communication about Error		14. Number of events reported
5. Nonpunitive Response to Error		
6. Staffing		
7. Communication Openness		

Table 2 Patient safety culture composites and definitions

Patient safety culture composite	Definition: *The extent to which…*
1. Communication openness	Staff freely speak up if they see something that may negatively affect a patient, and feel free to question those with more authority
2. Feedback and communication about error	Staff are informed about errors that happen, given feedback about changes implemented, and discuss ways to prevent errors
3. Frequency of events reported	Mistakes of the following types are reported: (1) mistakes caught and corrected before affecting the patient, (2) mistakes with no potential to harm the patient, and (3) mistakes that could harm the patient, but do not
4. Handoffs and transitions	Important patient care information is transferred across hospital units and during shift changes
5. Management support for patient safety	Hospital management provides a work climate that promotes patient safety and shows that patient safety is a top priority
6. Nonpunitive response to error	Staff feel that their mistakes and event reports are not held against them, and that mistakes are not kept in their personnel file
7. Organizational learning Continuous improvement	There is a learning culture in which mistakes lead to positive changes and changes are evaluated for effectiveness
8. Overall perceptions of patient safety	Procedures and systems are good at preventing errors and there is a lack of patient safety problems
9. Staffing	There are enough staff to handle the workload and work hours are appropriate to provide the best care for patients
10. Supervisor/manager expectations and actions promoting safety	Supervisors/managers consider staff suggestions for improving patient safety, praise staff for following patient safety procedures, and do not overlook patient safety problems
11. Teamwork across units	Hospital units cooperate and coordinate with one another to provide the best care for patients
12. Teamwork within units	Staff support one another, treat each other with respect, and work together as a team

Source: Sorra et al. (2008, pp. 13–14)

Table 3 Average Percentages of Positive Responses on the Patient Safety Culture Dimensions

Patient safety culture dimensions	Average % of positive responses in our study
Hospital management support for patient safety	80[a]
Supervisor/manager expectations and actions promoting patient safety	79[a]
Organizational learning-continuous improvement	72
Teamwork within units	70
Feedback and communication about error	67
Overall perceptions of safety	61
Staffing	54
Teamwork across hospital units	52
Nonpunitive response to error	49
Communication openness	46
Frequency of events reported	40
Hospital handoffs and transitions	32

[a] Strength area

$p < .05$), Hospital Management Support For Patient Safety ($\beta = .270$; $t = 3.085$; $p < .05$), and Supervisor/Manager Expectations and Actions Promoting Safety ($\beta = .170$; $t = 2.111$; $p < .05$). In this study, the main predictor of Patient Safety Grade (of the Hospital Unit) is Feedback and Communication about Error.

Table 7 was prepared for Research Question 5. We observed significant differences in nurses' perceptions about Teamwork Within Units ($\chi^2 = 26.349$; $p < .05$), Supervisor/Manager Expectations and Actions Promoting Safety ($\chi^2 = 14.429$; $p < .05$), Communication Openness ($\chi^2 = 16.291$; $p < .05$), Teamwork Across Hospital Units ($\chi^2 = 13.510$; $p < .05$), and Patient Safety Grade (of the Hospital Unit) ($\chi^2 = 17.718$; $p < .05$) in terms of working units at the hospital. The Patient Safety Grade of Dialysis unit is the highest mean score in the hospital. The emergency department has the lowest score for Patient Safety Grade.

Discussion

The HSOPSC is one of the most common survey tools being used to assess and determine the culture of safety in hospital settings. Studies that utilize this tool usually report the 12 composite scores and the scores for the patient safety grade and the number of events reported. However, the associations between the patient safety composite scores, the hospital and the respondent characteristics with the patient safety culture outcomes are not commonly explored in the literature (El-Jardali et al. 2011). To our knowledge, this is one of the few studies to examine such relationships among patient safety dimensions and composites in Turkish healyh system.

In this study, the Teamwork within Units mean score was found to be higher than the mean scores of other patient safety culture dimensions. The Overall Perception of Safety mean score was higher than the mean score for Patient Safety Grade (of the Hospital Unit). The frequency of event reporting about medical errors was low. Additionally, the hospital may be experiencing certain staffing problems with respect to patient safety. This study

Table 4 Correlations among patient safety culture dimensions

Patient safety culture dimensions	r p	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Teamwork Within Units	r	1													
	p														
2. Supervisor/Manager Expectations and Actions Promoting Safety	r	.28**	1												
	p	.000													
3. Organizational Learning-Continuous Improvement	r	.47**	.35**	1											
	p	.000	.000												
4. Hospital Management Support For Patient Safety	r	.063	.46**	.22**	1										
	p	.37	.000	.001											
5. Feedback and Communication about Error	r	.24**	.26**	.31**	.27**	1									
	p	.000	.000	.000	.000										
6. Communication Openness	r	.28**	.35**	.26**	.30**	.57**	1								
	p	.000	.000	.000	.000	.000									
7. Staffing	r	−.10	.23**	−.03	.20**	.021	.14*	1							
	p	.153	.001	.638	.004	.763	.035								
8. Nonpunitive response to error	r	.09	.04	.11	.16*	.26**	.42**	.06	1						
	p	.169	.525	.113	.019	.000	.000	.369							
9. Teamwork across hospital units	r	.10	.42**	.11	.52**	.28**	.28**	.14*	.16*	1					
	p	.129	.000	.100	.000	.000	.000	.045	.017						
10. Number of events reported	r	.21**	.19**	.24**	.29**	.22**	.17*	.05	.027	.45**	1				
	p	.002	.005	.001	.000	.001	.012	.433	.705	.000					
11. Hospital handoffs and transitions	r	.21**	.19**	.24**	.29**	.24**	.22**	.176*	.17*	.45**	.05	1			
	p	.002	.005	.001	.000	.000	.001	.012	.013	.000	.433				
12. Overall perceptions of safety	r	.33**	.37**	.51**	.32**	.32**	.37**	.166*	.22**	.29**	.24**	.02	1		
	p	.000	.000	.000	.000	.000	.000	.019	.001	.000	.000	.705			

Table 4 continued

Patient safety culture dimensions	r p	1	2	3	4	5	6	7	8	9	10	11	12	13	14
13. Patient Safety Grade (of The Hospital Unit)	r	.14*	.09	.30**	.27**	.32**	.18**	.026	.19**	.14*	.11	.11	.30**	1	
	p	.047	.197	.000	.000	.000	.008	.717	.005	.036	.112	.112	.000		
14. Frequency of Event Reporting	r	−.006	.14*	.24**	.22**	.45**	.26**	.111	.14*	.27**	.17*	.02	−.20**	−.17*	1
	p	.928	.040	.001	.002	.000	.000	.118	.048	.000	.013	.748	.003	.014	

** Correlation is significant at the .01 level (two tailed)

* Correlation is significant at the .05 level (two tailed)

Table 5 Predictors of overall perceptions of safety

Model (a)	R	R^2	Adjusted R^2	Durbin–Watson	F	*p*
1	.514	.264	.261		71.196	.000
2	.569	.324	.317		47.204	.000
3	.598	.357	.348		36.344	.000
4	.611	.373	.361		29.046	.000
5	.623	.389	.373		24.669	.000
6	.633	.401	.383	1.746	21.548	.000

Model	Unstandardized coefficients		Standardized coefficients	t	Sig. (*p*)	VIF
	β	*SE*	*β*			
6						
(Constant)	.511	.306		1.670	.097	
Organizational Learning-Continuous Improvement	.435	.060	.442	7.203	.000	1.211
Communication Openness	.185	.048	.172	2.836	.005	1.184
Teamwork Within Units	.159	.058	.160	2.730	.007	1.112
Staffing	.140	.060	.133	2.337	.020	1.043
Frequency of Event Reporting	−.110	.048	−.129	−2.262	.025	1.041
Patient Safety Grade (of The Hospital Unit)	.095	.047	.119	2.006	.046	1.130

(a) Dependent variable: overall perceptions of safety

VIF variance inflation factor

Table 6 Predictors of Patient Safety Grade (of the Hospital Unit)

Model (a)	R	R^2	Adjusted R^2	Durbin–Watson	F	*p*
1	.325	.105	.101		23.316	.000
2	.391	.153	.144		17.757	.000
3	.421	.177	.165		14.088	.000
4	.442	.196	.179	1.536	11.867	.000

Model	Unstandardized coefficients		Standardized coefficients	t	Sig. (*p*)	VIF
	β	*β*	*β*			
4						
(Constant)	1.284	.362		3.545	.000	
Feedback and Communication about Error	.204	.062	.230	3.299	.001	1.176
Organizational Learning-Continuous Improvement	.298	.088	.241	3.110	.001	1.214
Hospital Management Support For Patient Safety	.270	.088	.227	3.085	.002	1.318
Supervisor/Manager Expectations and Actions Promoting Safety	.170	.080	.161	2.111	.036	1.402

(a) Dependent Variable: Patient Safety Grade (of the Hospital Unit)

VIF variance inflation factor

identified several areas as areas of strength: Hospital management support for patient safety and Organizational Learning-Continuous Improvement, and Supervisor/manager expectations and actions promoting patient safety. These results are consistent with several studies (Filiz 2009; Bodur and Filiz Bodur and Filiz 2009, 2010; El-Jardali et al. 2010, 2011; Sorra et al. 2011; Aboshaiqah and Baker 2013). Two dimensions, Supervisor/manager expectations and actions promoting patient safety and Teamwork within units (Sorra et al. 2011, p. 30) had the highest percentages of positive response. However, in the AHRQ Study (conducted on and planned by physicians, nurses and other hospital personnel), the highest average percent of positive response of the two dimensions, Supervisor/manager expectations and actions promoting patient safety (75 %) and Teamwork within units (80 %), are >75 % and thus, these should both be identified as strengths. Four areas (Frequency of events reported, Nonpunitive response to error, Communication openness and Hospital handoffs and transitions) with <50 % positive response were considered as showing potential for improvement in our study. Moreover, two areas (Hospital handoffs and transitions and Nonpunitive response to error) were considered as potential for improvement in the AHRQ Study (Sorra et al. 2011). In our study, the frequency of event reporting about medical errors was low. Additionally, the staffing mean score may be low because the hospital may be experiencing certain staffing problems with regard to patient safety.

These findings were consistent with the reported benchmarks and are consistent with several previous results of studies related to patient safety culture (Aboshaiqah 2010; Bodur and Filiz 2009, 2010; Cefali 2011; Filiz 2009; Hughes and Lapane 2006; Firth-Cozens 2001; Al-Ateeq 2008). In effective patient safety cultures, supervisors and managers had more supportive leadership styles, initiated discussions about safety, and provided positive feedback on safety issues (Hofmann et al. 2003; Hoffman and Morgeson 1999). The results of our study support the conclusions of these studies in Turkey and in other countries.

This study revealed significantly positive correlations among some dimensions of patient safety culture. The highest inter-correlation between teamwork within units and organizational learning and continuous improvement was $r = .47$ ($p < .001$). However, Staffing and Frequency of Event Reporting were significantly negatively correlated with some of the patient safety culture dimensions (Teamwork within Units, Overall Perceptions of Safety, and Patient Safety Grade (of the Hospital Unit). These results are consistent with the results of the study of Aboshaiqah (2010) who observed that *Staffing* was the only dimension that was significantly negatively correlated with some of the patient safety culture dimensions. A high inter-correlation was observed between *teamwork across hospital units* and *hospital management support for patient safety* ($r = .57, p < .001$). This finding points to the important role that hospital management plays in the advancement of patient safety culture. Nurses gave their units higher patient safety marks when they felt that the hospital management actively supported safety. The HSPSC correlations' findings in this study were very similar to those reported by Sorra and Nieva (2004). Moreover, these results are consistent with studies related to patient safety in Turkey (Bodur and Filiz 2009, 2010; Filiz 2009).

In our study, there was a significantly positive correlation among dimensions of patient safety culture. The highest inter-correlation was between teamwork within units and organizational learning and continuous improvement. Moghri et al. (2012) revealed that the highest correlation was between supervisor/manager expectations and actions promoting patient safety and hospital management support for patient safety. They also

Table 7 Nurses' perceptions about patient safety culture dimensions by hospital units

Patient safety culture dimensions	Internal medicine branches (n = 52) Mean (SD)	Surgery medicine branches (n = 33) Mean (SD)	Intensive care units (n = 39) Mean (SD)	Emergency units (n = 17) Mean (SD)	Dialysis unit (n = 6) Mean (SD)	General surgery room (n = 7) Mean (SD)	Radiology and lab. units (n = 46) Mean (SD)	(χ^2) Chi square	Sig. (p)
Teamwork within units	3.90 (.590)	3.71 (.64)	3.99 (.66)	3.17. (.76)	4.08 (.46)	3.21 (.63)	3.80 (.48)	26.349	<.0001
Supervisor/Manager Expectations and Actions Promoting Safety	3.31 (.72)	3.09 (.85)	2.98 (.69)	2.95 (.84)	3.70 (.60)	3.21 (.46)	3.42 (.50)	14.429	.025
Organizational Learning-Continuous Improvement	3.69 (.51)	3.54 (.80)	3.73 (.66)	3.54 (.69)	3.72 (.38)	3.23 (.56)	3.66 (.50)	5.174	.522
Feedback and Communication about Error	3.42 (.57)	3.46 (.63)	3.15 (.62)	3.25 (.99)	3.61 (.87)	3.61 (.35)	3.57 (.48)	11.366	.078
Communication Openness	3.33 (.83)	3.48 (.87)	3.41 (.75)	2.76 (1.14)	4.22 (.77)	2.80 (.74)	3.19 (.72)	16.291	.012
Staffing	2.98 (.65)	3.08 (.68)	2.93 (.94)	2.60 (.90)	3.66 (.89)	2.61 (.59)	2.99 (.69)	10.677	.099
Nonpunitive Response to Error	2.92 (.46)	2.67 (.66)	2.60 (.67)	2.70 (.79)	2.54 (.43)	2.60 (.31)	2.85 (.42)	10.331	.111
Teamwork Within Units	2.40 (.59)	2.39 (.76)	2.41 (.90)	1.98 (.75)	2.94 (.64)	2.14 (.26)	2.52 (.80)	10.841	.093
Teamwork Across Hospital Units	3.10 (.62)	3.34 (.46)	3.10 (.67)	2.91 (.73)	3.20 (.43)	3.39 (.42)	3.41 (.54)	13.510	.036
Hospital handoffs and transitions	3.44 (.56)	3.74 (.490)	3.28 (.81)	3.26 (.37)	3.20 (.51)	3.39 (.73)	3.31 (.67)	11.846	.065
Overall Perceptions of Safety	3.50 (.53)	3.40 (.64)	3.67 (.54)	3.42 (.76)	3.91 (.78)	3.64 (.24)	3.65 (.62)	6.746	.345
Frequency of Event Reporting	2.51 (1.12)	2.30 (1.02)	2.29 (1.25)	2.09 (1.11)	2.44 (1.29)	2.61 (.89)	2.24 (.99)	3.442	.752
Patient Safety Grade (of The Hospital Unit)	3.28 (.66)	3.36 (.85)	3.69 (.76)	3.17 (1.01)	4.50 (.83)	3.57 (.78)	3.30 (.69)	17.718	.007

observed significantly positive inter-correlations among dimensions of patient safety culture. These results support our study findings.

This study revealed 6 significant predictors of Overall Perceptions of Safety: Organizational Learning-Continuous Improvement, Communication Openness, Teamwork within Units, Staffing, Frequency of Event Reporting, and Patient Safety Grade (of the Hospital Unit). Our study also indicated 4 significant predictors of the Patient Safety Grade (of the Hospital Unit): Feedback and Communication about Error, Organizational Learning-Continuous Improvement, Hospital Management Support for Patient Safety, and Supervisor/Manager Expectations and Actions Promoting Safety. These results are consistent with the study of El-Jardali et al. (2011). In their study, greater predictors of Overall Perceptions of Safety were supervisor/manager expectations and actions promoting safety, organizational learning and continuous improvement, teamwork within hospital units, non-punitive response to error, staffing, hospital management support for patient safety, proper communication across personnel, and hospital handoffs and transitions. El-Jardali et al. (2011) reported that lower predictors of the perception of patient safety were teamwork across hospital units. However, we did not observe that teamwork across hospital units was a significant predictor of the overall perception of safety and patient safety grade of the hospital unit.

El-Jardali et al. (2011) observed that patient safety culture predictors such as event reporting, proper communication, patient safety leadership and management, hospital size, and accreditation status were associated with the patient safety culture outcomes.

Staffing is a major predictor of patient safety in this study. Sanders and Cook (2007) stated that major catastrophes and problems have occurred in organizations with insufficient staffing. In general, health personnel in under-staffed hospitals are overworked (El-Jardali et al. 2011). Our study demonstrated that a more positive score for staffing increased the likelihood of having a more positive perception of safety among respondents. Strong leadership and management support are necessary for a patient safety program to succeed. Senior leaders and managers are the only individuals who are able to create the culture and forge the commitment needed to solve underlying systems causes of medical errors and harm to patients. Management support may be more important in emergency rooms, operating rooms, and intensive care units that in other units in the hospital setting (El-Jardali et al. 2011; Bodur and Filiz 2009). Several studies suggest that the attitudes of managers/leaders towards patient safety are important (Vogelsmeier et al. 2010; Mcfadden et al. 2009; Ginsburg et al. 2005). Leaders and managers must create a positive patient safety culture within their institutions and provide a positive work environment (Milligan 2007; Mcfadden et al. 2009; Türkmen et al. 2013). We observed that greater support of patient safety by hospital management increased the likelihood of attaining a better overall perception of safety among respondents and increased the likelihood of respondents to report a higher patient safety grade.

Proper communication within and across healthcare teams may be essential to eliminating any threats to the safety of patients in hospital settings. Communication problems have been identified as major contributing factors to adverse events and low patient safety (Sanders and Cook 2007). An analysis of 2,455 sentinel events reported to the Joint Commission on the Accreditation of Healthcare Organizations revealed that 70 % of the events were a result of failure in communication in hospital settings (Jones et al. 2008). In the absence of proper communication between the different hospital units, patient safety might be jeopardized and diminished (El-Jardali et al. 2011). Our results revealed that higher scores on communication openness in hospital units increased the overall patient safety.

These results suggested that certain improvement strategies can be planned to create a culture of learning, including staffing, communication, management support, teamwork, supervisor/manager expectations and actions promoting safety. The empirical results demonstrate that the hospital management plays an important role in the patient safety culture. Nurses could give their full fledge work on patient safety only when the management supports them and teamwork exists among nurses.

In Turkey, Filiz (2009) found that there are significant differences in several dimensions of patient safety culture (i.e., Frequency of Event Reporting, Supervisor/Manager Expectations and Actions Promoting Safety, Feedback and Communication about Error) among the divisions of internal medicine, surgery, and other medical specialties as well as the general surgery operating room, and emergency and intensive care units. We found that there are significant differences in several dimensions of patient safety culture (teamwork within units, supervisor/manager expectations and actions promoting safety, communication openness, teamwork across hospital units, and patient safety grade of the hospital unit), depending on the hospital units.

Determining and evaluating the patient safety culture level in hospitals should be a continuous process in Turkey. Hospitals in Turkey must continue to make improvements in their patient safety culture. The first step should be to obtain the support of the administration and to assume a non-punitive approach to those who make and report medical errors. If the problem of personnel not reporting events is to be resolved, any barriers to reporting should be identified and addressed (Bodur and Filiz 2010). Improvements for patient safety in Turkish hospitals may be realized through the following: reporting of adverse events, non-punitive policies with respect to error reporting, open communication, management support for safety culture, and staffing improvements. The potential benefits and use of a safety culture survey for nurses and other health workers to provide an empirical measure of the concept may help to guide proactive strategies to decrease errors and incidents in patient care and in the workers' environment. An evaluation of the safety culture, or the underlying values and norms in an organization related to safety, will provide a context for action and improvement within health systems (Cooper 2000; Helmreich 2000).

The European Commission for Health and Consumer Protection aims to improve patient safety in Europe and has proposed three policy areas for future action on this important issue. The policy areas proposed for action (henceforth referred to as action areas) include the following: (a) the establishment of "an effective reporting and learning mechanisms"; (b) the establishment of "redress mechanisms" for fair compensation to injured patients; and (c) the "development and use of knowledge and evidence" (Conklin et al. 2008). Turkey must implement the policies to improve patient safety. With regard to Turkey, the "Governmental response to patient safety, in the form of regulation and financial incentives/disincentives, can provide sufficient impetus to hospital organizations to improve a culture of patient safety with the ultimate goal of preventing patient harm" (Sammer et al. 2010, p. 164).

Conclusion

In recent years, sensitivity towards patient safety has increased among physicians, nurses and other healthcare personnel in the Turkish health system. With the publications of the Directive of Performance and Quality in Health by the Turkish MoH, Worker Health and

Patient Safety Announcement and Hospital Service Quality Standards of the MoH, patient safety has become an important field of inquiry (Türkmen et al. 2013).

The results from this study may add to the body of knowledge regarding patient safety culture research and nursing management. Patient safety culture assessments are useful tools for measuring organizational conditions that lead to adverse events and harm to patients in healthcare organizations, especially in hospitals. The assessment of the safety culture by nurses is viewed as the starting point for improving health safety and reducing malpractice (Nieva and Sorra 2003). This study will provide additional information for nursing administrators to identify opportunities for improvement in their participating institutions and to establish a baseline for assessing future patient safety improvement efforts. Improving the culture of patient safety requires a vision and a systematic long-term plan and programs that are well communicated throughout hospitals and other health care organizations. More importantly, this vision must be mutually shared among all the healthcare professions, especially hospital managers, physicians and nurses.

Similar to the malpractice crisis of the 1970s, the patient safety movement today is forcing a great deal of change in health care risk management. One of the greatest catalysts has been the 1999 IOM report, *To Err Is Human: Building a Safer Health System*, known as the IOM Report (Kohn et al. 2000), which shed light on the growing problem of medical errors.

Most important, risk managers today must assist health care professionals in meeting an unprecedented high standard of care. Providers must prove that they acted as any other reasonably prudent provider would have acted in defending themselves in malpractice lawsuits. The evidence determining reasonableness now includes highly prescriptive Joint Commission standards, such as the requirement that every procedure be preceded by a "time-out." Even more challenging, to help providers implement new approaches, the risk management professional must work with other managers to transform a traditionally hierarchical health care environment into a "culture of patient safety." Risk management professionals today have additional responsibilities to help their employers satisfy patient safety reporting requirements and to stay abreast of new patient-safety-related legislation (Murphy et al. 2009, p. 88).

Reducing risk and ensuring safety require greater attention to systems that help prevent and mitigate errors. Hospital managers recognize that poor-quality care and a low patient safety culture can affect the organization's bottom line and that failure to integrate risk management and quality efforts can lead to incomplete and ineffective solutions. Consequently, "healthcare organizations are realigning their risk management, quality activities" (ECRI Institute 2009, p. 1) with patient safety implications. Most important, patient safety efforts and the efforts of risk management professionals who participate in studies related to patient safety may help restore social trust in a health care system whose safety track record is being closely scrutinized by decision makers, legislators, payers, and consumers in health systems.

Our results demonstrate that patient safety should be a top strategic priority in health care systems. There should be blame-free systems for identifying threats to patient safety, sharing information and learning from events. In addition, a collaborative environment should exist that allows all health workers in the healthcare organization to share and exchange information about patient safety in Turkey. Hospital management should assess and redesign their current patient safety system, including governance and reporting structures and perceptions of personnel in the Turkish health system and other countries. Moreover, hospital management should provide their health professionals with comprehensive training on patient safety concepts, tools, and implementation methods. Along with

the responsibility of nurses in patient safety, the improvement of the patient safety culture should be the main priority in hospital settings in Turkey and in other countries.

Limitations

This study has several limitations. Participants were from one healthcare organization in Turkey, which prevents generalizability to other hospital organizations. The unit or organizational patient safety culture may be the result of multidisciplinary efforts. This study is limited to the nurse population and may not adequately reflect the entire picture of patient safety culture in an organization. The culture of safety on some units where the returned rate was low may have influenced participants' decisions. In consideration of these limitations, care must be exercised in applying these findings.

Future Research Directions

To date, little research on nursing or other healthcare worker perceptions about patient safety culture has been conducted in Turkey. Although the results of this study provide new insight into nursing staff perceptions about safety culture on their respective units in one Turkish healthcare organization, additional studies are needed. Further research may be needed to replicate this study in other health care systems and organizations. Data from other health care systems and organizations can provide opportunities for statistical testing of differences across individual units, departments, facilities, and organizations within a health care system. The planning of similar studies in other areas and cities of Turkey is necessary to determine hospital patient safety culture from nurses' and physicians' perspectives. To deliver a high quality of care in Turkey, it is important to assess patients' perceptions of hospital patient safety culture and to compare them with the nurses' perceptions. Additionally, further research is needed to study the association between patient safety culture and clinical outcomes, financial indicators, effectiveness, quality of services, patient satisfaction and job satisfaction.

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Appendix 1

Hospital Survey on Patient Safety

*An **"event"** is defined as any type of error, mistake, incident, accident, or deviation, regardless of whether or not it results in patient harm.*

***"Patient safety"** is defined as the avoidance and prevention of patient injuries or adverse events resulting from the processes of health care delivery.*

Section A: Your Work Area/Unit

In this survey, think of your "unit" as the work area, department, or clinical area of the hospital where you spend *most* of your work time or provide *most* of your clinical services.

Please indicate your agreement or disagreement with the following statements about your work area/unit.

1—Strongly Disagree, 2—Disagree, 3—Neither, 4—Agree, 5—Strongly Agree
Think about your hospital work area/unit…

1. People support one another in this unit.
2. We have enough staff to handle the workload.
3. When a lot of work needs to be done quickly, we work together as a team to get the work done.
4. In this unit, people treat each other with respect.
5. Staff in this unit work longer hours than is best for patient care.
6. We are actively doing things to improve patient safety.
7. We use more agency/temporary staff than is best for patient care.
8. Staff feel like their mistakes are held against them.
9. Mistakes have led to positive changes here.
10. It is just by chance that more serious mistakes don't happen around here.
11. When one area in this unit gets really busy, others help out.
12. When an event is reported, it feels like the person is being written up, not the problem.
13. After we make changes to improve patient safety, we evaluate their effectiveness.
14. We work in "crisis mode" trying to do too much, too quickly.
15. Patient safety is never sacrificed to get more work done.
16. Staff worry that mistakes they make are kept in their personnel file.
17. We have patient safety problems in this unit.
18. Our procedures and systems are good at preventing errors from happening.

Section B: Your Supervisor/Manager

Please indicate your agreement or disagreement with the following statements about your immediate supervisor/manager or person to whom you directly report.
1—Strongly Disagree, 2—Disagree, 3—Neither, 4—Agree, 5—Strongly Agree

1. My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures.
2. My supervisor/manager seriously considers staff suggestions for improving patient safety.
3. Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts.
4. My supervisor/manager overlooks patient safety problems that happen over and over.

Section C: Communications

How often do the following things happen in your work area/unit?
1—Never, 2—Rarely, 3—Sometimes, 4—Most of the time, 5—Always
Think about your hospital work area/unit…

1. We are given feedback about changes put into place based on event reports.
2. Staff will freely speak up if they see something that may negatively affect patient care.
3. We are informed about errors that happen in this unit.

4. Staff feel free to question the decisions or actions of those with more authority.
5. In this unit, we discuss ways to prevent errors from happening again.
6. Staff are afraid to ask questions when something does not seem right.

Section D: Frequency of Events Reported

In your hospital work area/unit, when the following mistakes happen, *how often are they reported?*

1—Never, 2—Rarely, 3—Sometimes, 4—Most of the time, 5—Always

1. When a mistake is made, but is caught and corrected before affecting the patient, how often is this reported?
2. When a mistake is made, but has no potential to harm the patient, how often is this reported?
3. When a mistake is made that *could harm the patient*, but does not, how often is this reported?

Section E: Patient Safety Grade

Please give your work area/unit in this hospital an overall grade on patient safety.

☐	☐	☐	☐	☐
A	**B**	**C**	**D**	**E**
Excellent	Very Good	Acceptable	Poor	Failing

Section F: Your Hospital

Please indicate your agreement or disagreement with the following statements about your hospital.

1—Strongly Disagree, 2—Disagree, 3—Neither, 4—Agree, 5—Strongly Agree

Think about your hospital…

1. Hospital management provides a work climate that promotes patient safety.
2. Hospital units do not coordinate well with each other.
3. Things "fall between the cracks" when transferring patients from one unit to another.
4. There is good cooperation among hospital units that need to work together.
5. Important patient care information is often lost during shift changes.
6. It is often unpleasant to work with staff from other hospital units.
7. Problems often occur in the exchange of information across hospital units.
8. The actions of hospital management show that patient safety is a top priority.
9. Hospital management seems interested in patient safety only after an adverse event happens.
10. Hospital units work well together to provide the best care for patients.
11. Shift changes are problematic for patients in this hospital.

Section G: Number of Events Reported

In the past 12months, how many event reports have you filled out and submitted?

☐ a. No event reports
☐ b. 1 to 2 event reports
☐ c. 3 to 5 event reports
☐ d. 6 to 10 event reports
☐ e. 11 to 20 event reports
☐ f. 21 event reports or more

Section H: Background Information

This information will help in the analysis of the survey results.

1. How long have you worked in this hospital?

☐ a. Less than 1 year
☐ b. 1 to 5 years
☐ c. 6 to 10 years
☐ d. 11 to 15 years
☐ e. 16 to 20 years
☐ f. 21 years or more

2. How long have you worked in your current hospital work area/unit?

☐ a. Less than 1 year
☐ b. 1 to 5 years
☐ c. 6 to 10 years
☐ d. 11 to 15 years
☐ e. 16 to 20 years
☐ f. 21 years or more

3. Typically, how many hours per week do you work in this hospital?

☐ a. Less than 20 hours per week
☐ b. 20 to 39 hours per week
☐ c. 40 to 59 hours per week
☐ d. 60 to 79 hours per week
☐ e. 80 to 99 hours per week
☐ f. 100 hours per week or more

Source: http://www.ahrq.gov/legacy/qual/patientsafetyculture/hospscanform.pdf

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