



Patient Safety is the Need of the Hour: A Study in Nursing Department of a Tertiary Care Teaching Hospital

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ABSTRACT

Introduction: Patient safety is an important aspect of health care and is an issue of high concern globally. It was aimed to study the patient safety behavior among the nursing personnel of a tertiary care teaching hospital of North India.

Materials and methods: A descriptive, cross-sectional study was conducted over a period of 6 months in a tertiary care teaching hospital of North India. Study population included the 200 nursing officers, both clinical and administrative (very few). The data were collected using structured questionnaire using Hospital Patient Safety Survey Questionnaire of Agency for Health Research and Quality, USA. The questions were predominantly close-ended with very few open-ended questions and used five-item Likert scale. It had approximately 45 items on various aspects of patient safety, viz., teamwork across hospital units, patient safety during handoffs and transition of care, staff perception about patient safety, reporting of adverse events, etc. Overall patient safety grade for hospital was taken as outcome variable. The questionnaires were distributed in sealed envelopes in the work areas of the study population and collected after a period of 2 weeks.

Results: The questionnaire yielded a response rate of only 66.5%. There was no patient safety committee in the hospital; however, two-thirds (63.9%) of respondents believed that the hospital provides a work environment that promotes patient safety. Almost half (54.83%) of the respondents agreed that their supervisor/managers' actions/behavior promotes patient safety. Nursing department promotes continuous learning that was agreed by 82.6%. Majority (72.5%) of the nursing staff are afraid to ask questions or speak up if they see something that negatively affects patient care. Only 66% staff agreed that they communicate and discuss errors/adverse events. Most (80.4%) of the staff believe that punitive action would be taken against them if they commit any error. Majority (90%) of the staff believe that they do not have enough staff to handle workload. Two-thirds of the nursing staff think that actions of hospital management promote patient safety. Only 59.2% of staff agreed that there is good cooperation/teamwork across different hospital departments. Almost half of the nursing staff

believe that patient safety is compromised during hospital hand-offs and transition. Only 26% of the nursing staff rated overall hospital safety as very good and above. Only 9.1% reported any errors/adverse events happening in the unit. By analyzing the data, prevalence of patient safety behavior in the nursing department is found to be 52.6%.

Conclusion: Structured system for implementation of patient safety measures is missing and hospital has to work a lot when it comes to delivering the patient care services in a safe environment.

Keywords: Nursing department, Patient safety, Safe care.

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INTRODUCTION

Patient safety is defined as "the prevention of harm to patients." Emphasis is placed on the system of care delivery that prevents errors; learns from the errors that do occur; and is built on a culture of safety that involves health care professionals, organizations, and patients. Patient safety practices have been defined as "those that reduce the risk of adverse events related to exposure to medical care across a range of diagnoses or conditions".¹ Patient safety is an important aspect of health care and is an issue of high concern globally, since the magnitude of the harm done to patients by preventable errors is alarming. It is essential for every health care institution, and hence, instilling patient safety culture among all staff involved in health care delivery is of vital importance.² Patient safety climate of health care organizations can be effectively assessed using validated questionnaires like safety attitude questionnaire, and capturing respondent variations in different dimensions of safety culture brings out focus areas for sustained quality improvement efforts.³

Nursing has clearly been concerned with defining and measuring quality long before the current emphasis on quality improvement. Florence Nightingale analyzed mortality data among British troops in 1855 and accomplished significant reduction in mortality through organizational and hygienic practices.⁴ These were the earliest measures

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taken which can be related to quality and patient safety. As the primary caregivers in hospitals, nurses are best positioned to improve quality and patient safety. Nurses spend 20 to 30% of their time in direct patient care. The nurse/patient relationship is a pivotal component of any patient safety culture.⁵⁻⁷ Hence, this study was conducted to observe the patient safety behavior among the nursing professionals of a tertiary care hospital, which would help to deliver quality care in safe environment.

MATERIALS AND METHODS

A descriptive and cross-sectional study was conducted among the nursing professionals of a tertiary care government hospital of North India from May 2010 to December 2010. Study population included nursing professional involved both in patient care services and those having administrative responsibilities. The data were collected using structured questionnaire using Hospital Patient Safety Survey Questionnaire of Agency for Health Research and Quality, USA.⁸ The questions were predominantly close-ended with very few open-ended questions and used five-item Likert scale. It included both positively and negatively worded questions to remove any kind of bias. It had 45 items on various aspects of patient safety, viz., teamwork across hospital units, patient safety during handoffs and transition of care, staff perception about patient safety, reporting of adverse events, etc. Overall patient safety grade for hospital was taken as outcome variable. The questionnaires were distributed to respondents in sealed envelopes (to maintain confidentiality) in the respective work area of the respondents and collected after 1 week. No reminder was given to nonrespondents. Patient safety strengths were defined as those positively worded items that about 75% of respondents endorsed by answering "Strongly agree/Agree" or "Always/Most of the times" (or those negatively worded items that 75% of respondents disagreed with). Similarly, areas needing improvement are identified as those items that respondents did not answer positively (they either answered negatively or "Neither" to positively worded items or agreed with negatively worded item). Basic statistical measures were calculated.

RESULTS

This study was conducted in a tertiary care government teaching hospital having more than 500 beds and located in the northern part of the country. It has got round the clock emergency services in all the major specialties, daily outpatient department (OPD) of approximately 1,300 to 1,500 patients, state-of-the-art 22 fully equipped operation theaters with latest technology equipment, 27 critical care beds, and 52 private rooms for the patients.

Study population included nursing staff from OPD, inpatient department (IPD), emergency department, operation theater, intensive care unit, cardiac care unit, neonatal intensive care unit, labor room, and other support services departments. Study involved nursing staff from all the shifts. Of the 200 nursing staff to whom the questionnaires were given, only 133 responded, yielding a response rate of 66.5%. Out of the total 133 respondents, there were 85.7% (114) females and rest 14.3% (19) were males. Study population included 117 (88%) staff nurses, 13 nursing sister, 2 assistant nursing superintendent, and nursing superintendent. Almost half (54.88%) of the respondents were from IPD, followed by operation theater 21.05% (28), critical care areas 15.03% (20), OPD 6.01% (8), and only 3% (4) from the administrative cadre.

Median age group of respondents was 30 to 40 years, which comprised 58% (77) of the study population followed by 21 to 30 years (38.3%), 41 to 50 years (2.3%), and 51 to 60 years (1.5%). Nursing staff having more than 10 years of experience constituted 51.1% of all the respondents. Only 28.6% of nursing staff possessed experience <6 years.

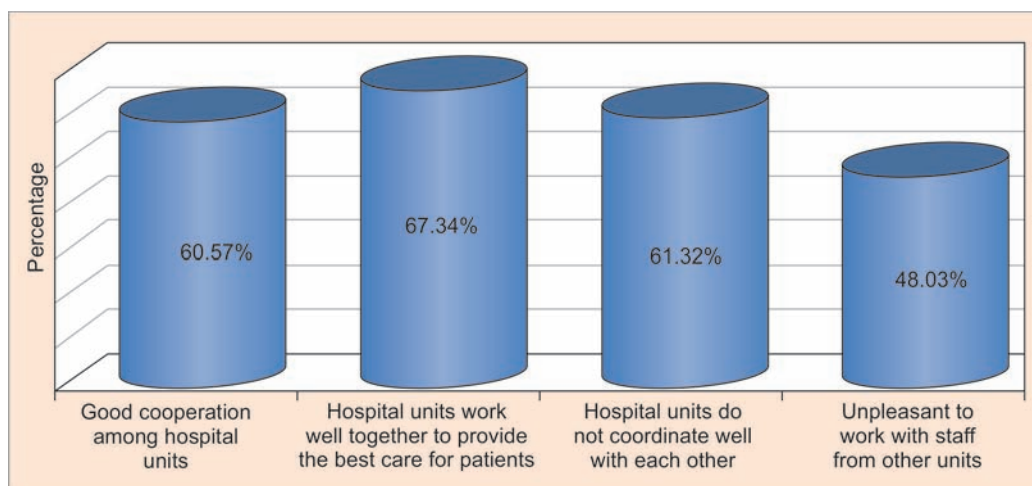
There is no patient safety committee in the hospital but there are other committees like hospital infection control committee, antibiotic committee, drugs committee, etc., which deliberate and address the important components of the patient safety. Also, medical superintendent round is convened on every first and third Thursday of the month to review the hospital situation. The responses of the questionnaire have been depicted in Graphs 1 to 6, which are self-explanatory.

Analyzing the data by composite frequency matrix, prevalence of patient safety behavior in the nursing department was found to be 52.6%.

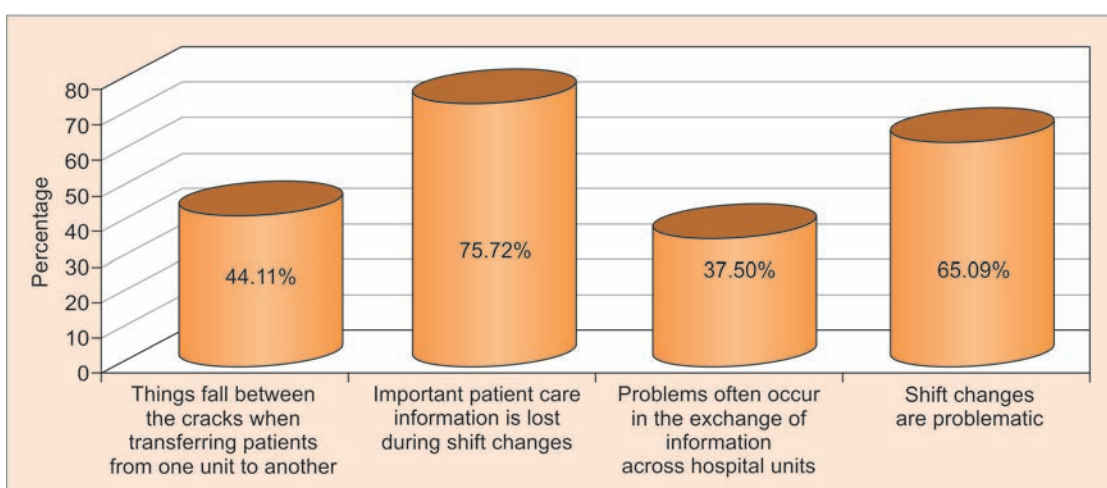
DISCUSSION

The present study is an attempt to understand the patient safety behavior among the nursing staff; however, it would have been much more meaningful had it included other categories of health care workers, e.g., doctors, paramedics, group D staff, etc., to capture holistic picture of the patient safety behavior of the hospital/teaching institute. Staff nurses delivering patient care services formed a large proportion of our study population and this was beneficial for our study as they are directly involved with patient care. No attempt was made to understand the concepts held by the different study participants with regard to patient safety and their responses were analyzed as it is without making any changes/modifications.

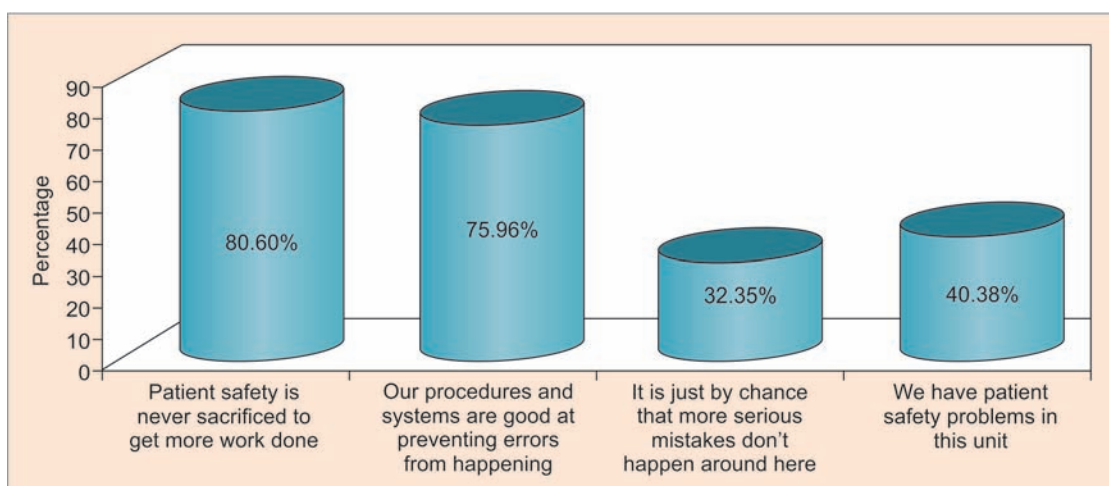
In this study, the prevalence of patient safety behavior among the nursing professionals was found to be 52.6%. In a study conducted in a teaching hospital of India,



Graph 1: Teamwork across hospital units



Graph 2: Patient safety during hospital handoffs and transition

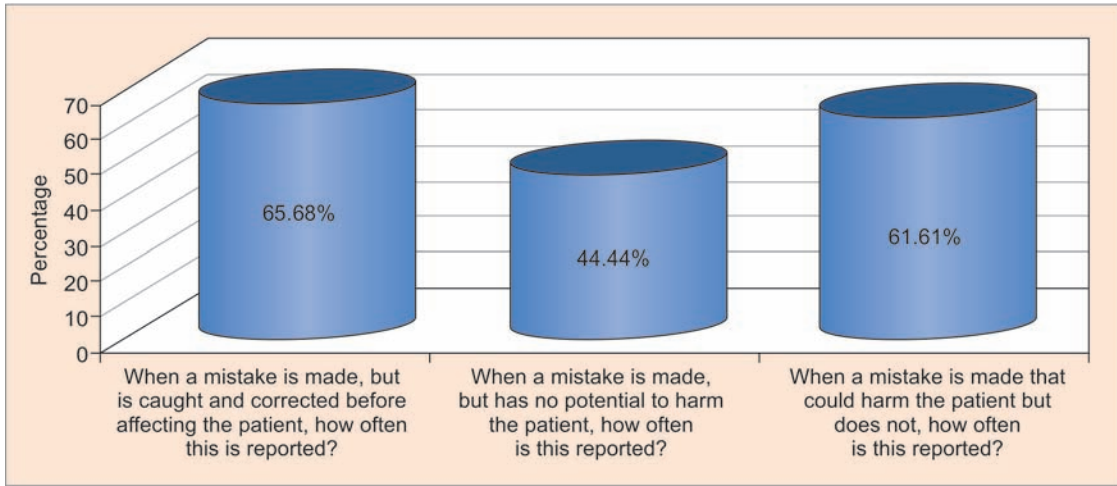


Graph 3: Overall perception of patient safety

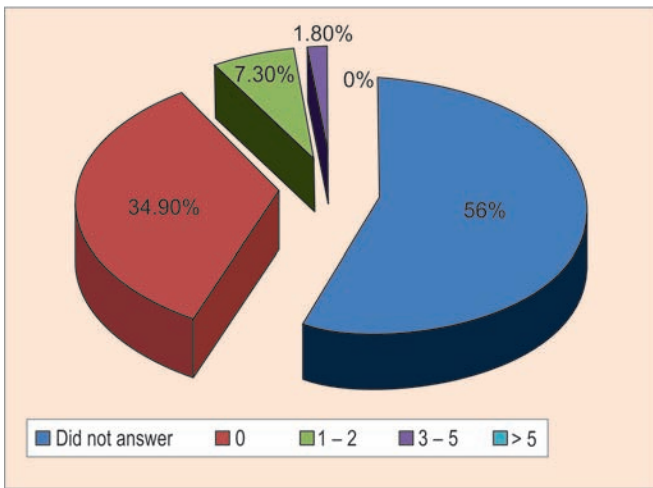
average patient safety culture among the survey category of the hospital staff, across all items of dimensions and levels of culture, was measured to be 48%.² Hence, our findings were better than the earlier conducted study in India. It is also relevant to mention that there have

been very few studies conducted on the subject, either at national level or at the hospital level.

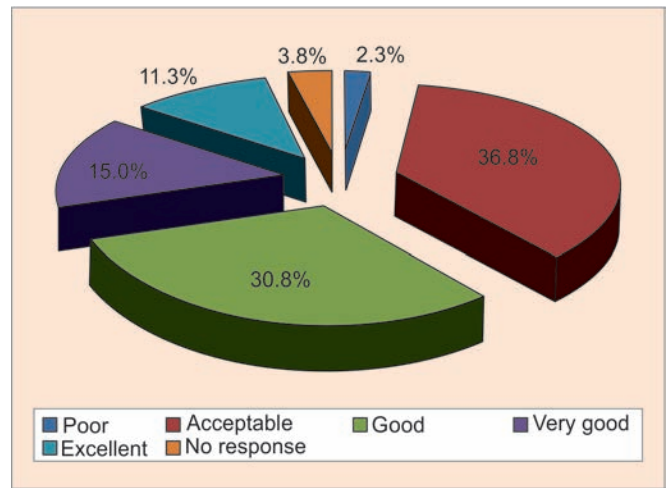
The study setting is a public health care facility where achieving quality standards in patient safety is perceived to be much more difficult than private sector hospitals,



Graph 4: Frequency of event reporting



Graph 5: Number of events reported



Graph 6: Overall patient safety grade to hospital

but still according to the study, 26% of the respondents rated the patient safety as very good and above. In a study conducted among the nursing staff in a tertiary care hospital in Puducherry having comparable sample size and health care setting, only 12.7% of the nurses reported excellent level of safety culture in their units, whereas majority reported only acceptable level of safety culture, i.e., 31.9%.⁹ The findings of this study are comparable with similar studies conducted and are evidence to the fact that provisioning of patient care services in a safe environment needs massive improvement. There is a dire need to conduct similar kind of studies on a much larger scale involving multiple institutions, which helps us understand patient safety in the Indian context as there have been very few studies in this area.

Although inadequate resources are likely to be a substantial challenge to the improvement of patient safety in India, other patient safety barriers, such as health systems changes, training, and education could be addressed with fewer resources. While initial approaches to improving patient safety in India and other low- and middle-income

countries have focused on implementing processes that represent best practices, this study suggests that multi-faceted interventions that also address more structural problems (such as resource constraints, systems issues, and medical culture) may be important.¹⁰

CONCLUSION

The study findings reflect a very grim picture of the patient safety culture among the nursing professionals, which may be considered as a surrogate indicator for the entire hospital. The patient safety measures seem to be missing right from top to bottom, which is evident with the fact that there is no patient safety committee/patient safety program within the institution. The patient's safety needs to be implemented in order to provide patient care services in a safe environment.

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