



ORIGINAL RESEARCH PAPER

Dentistry

A STUDY ON PATIENT SAFETY CULTURE AMONG DOCTORS AND NURSES IN A DISTRICT HOSPITAL OF WEST BENGAL

KEY WORDS: Patient safety culture health care quality, Nurse.

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ABSTRACT

Background: Patient safety is an important component of health care quality. Patient safety, including the measurement of patient safety culture is a top priority in developed countries today . It was amide to study the patient safety behaviour among the doctors and nursing care personnel of a distric hospitalof west bengal.

Objective: To assess the safety culture is prevailing among doctors working in Indian setting and nurses perception of safety culture in their respective working units.

Methods: A cross sectional study was conducted at the District Hospital of Tamluk, Purba Medinipur, ,India. A systematic random sampling technique was employed doctors and nurses was selected randomly over a three month period from 1st March 2017 to 31st May 2017. A "Hospital Survey On Patient Safety Culture (HSOPSC) Questionnaire was be used to collect the information from the doctors and nurses.

Results: Most of the respondents were staff nurse (44.0%) followed by doctors (38.0%) which were significantly higher than that of other occupation (p=0.038).

Conclusion: Most of them (88.0%) opined that hospital management provides a work climate that promotes patient safety and also giving top priority to patient safety. Thus the results of this study revealed that both the hospital authority and staff are aware about the patients' safety and are taking adequate measurements related to patients' safety.

INTRODUCTION:

Patient safety is defined as "the prevention of harm to patients". Patient safety practices have been define as a 'those that reduces the risk of adverse events related to exposure to medical care across a range of diagnoses or conditions'¹

Patient safety is an important component of health care quality. Patient safety, including the measurement of patient safety culture is a top priority in developed countries today .¹

Research shows that safety and efficient care requires all the various elements of a health care system be well integrated and coordinated .^{10,6}

Patient safety in the context of health care organizations was highlighted following the Institute of Medicine (IOM) report "To Error is Human: Building a Safer Health System."⁷ This report argued for a safety culture in which adverse events can be reported without people being blamed and that when mistakes occur that lessons are learned.

Therefore, if hospitals want to improve patient safety, it is important to know more about the views of their staff in relation to the culture of patient safety. Patient safety culture, also referred to patient safety climate, is the overall behaviour of individuals and organizations, based on a common set of beliefs and values that are aimed at reducing the opportunities for patient harm .^{13,11} Related research shows that when a positive patient safety culture exists, it will promote patient safety and help to improve patient safety standards, including the capacity and willingness to report minor errors, self-reporting errors, safety behaviours and safety audit rating .^{2,14,15}

This study aimed to determine the safety culture is prevailing among doctors working in Indian setting and Nurses Perception of Safety culture in their respective working units.

MATERIALS AND METHODS:

In this cross sectional study doctors and nurses was selected randomly at the District Hospital of Tamluk, Purba Medinipur, India, over a period of three month from 1st March 2017 to 31st May 2017.

"Hospital Survey On Patient Safety culture (HSOPSC)

Questionnaire was used to collect the information from the doctors and nurses. The HSOPSC Questionnaire consist of both open ended and close ended questions which will be used to get information from the respondents under study.

The questionnaire was drafted in English with a **5-point Likert response scale** ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was **validated and pretested** prior to data collection.

Ethical consideration: The Institutional Ethics Committee of the District Hospital of Tamluk, Purba Medinipur, West Bengal, approved this study.

Statistical analysis:

Statistical Analysis was performed with help of Epi Info (TM) 7.2.2.2. EPI INFO is a trademark of the Centers for Disease Control and Prevention (CDC).

Descriptive statistical analysis was performed to calculate the means with corresponding standard deviations (s.d.). Test of proportion was used to find the Standard Normal Deviate (Z) to compare the difference proportions and Chi-square (2χ) test was performed to find the associations. t-test was used to compare the means. p<0.05 was taken to be statistically significant.

RESULTS:

The mean age (mean ± s.d.) of the respondents was 43.60±10.86 years with range 25 - 60 years and the median age was 41.5 years. The ratio of male and female respondents was 1.0:1.4. Proportion of female respondents (58.0%) was significantly higher than male respondents (42.0%) (p=0.023). t-test showed that there was no significant difference in mean age of the male and female respondents (p=0.08). Thus male and female respondents more or less equally distributed over age.

Most of the respondents were staff nurse (44.0%) followed by doctors (38.0%) which were significantly higher than that of other occupation (p=0.038). 28.0% of the respondents were from Department of Dentistry followed by emergency (20.0%).

The mean length of service (mean ± s.d.) of the respondents

was 93.00±91.89 months with range 2 – 317 months and the median was 62 months. The mean length of duty hours per week in current hospital (mean ± s.d.) of the respondents was 45.12±6.76 hours with range 28 – 54 hours and the median was 48 hours.

Opinion of the respondents regarding work area/unit of the respondents:

84.0% of the respondents agreed that their colleagues helped each other (p<0.0001). 62.0% answered that there was enough staff to handle the workload (p=0.0007). Also 88.0% of them opined that they worked as a team to finish work load (p<0.0001).

All of them (100.0%) agreed that their colleagues respected each other (p<0.0001). Most of them (76.0%) agreed that they worked longer hour for the patient service. (Z=7.35;p<0.0001). 100.0% of them agreed that they were actively doing things to improve patient safety. 52.0% were disagreed to use more agency/temporary staff for patient care (p=0.57). 92.0% of the respondents agreed that mistakes had led to positive changes (p<0.0001).

Opinion of the respondents regarding Supervisor/ Manager:

As per 84.0% of the respondents the supervisors/managers were friendly to establish patient safety procedures and seriously suggested for improving patient safety. 72.0% answered that their supervisors/managers wanted them to work faster at the time of huge patients' load.

Opinion of the respondents regarding communications:

48.0% agreed that they were given feedback about changes put into place based on event reports. As per 88.0% of the respondents staff would freely speak up if they saw something that might be negatively affected patient care. 80.0% of the respondents agreed that staff felt free to question the decisions or actions of those with more authority.

Opinion of the respondents regarding frequency of events reported:

92.0% of the respondents were agreed with the answer that when a mistake is made, but is caught and corrected before affecting the patient. 88.0% of the respondents were agreed with the answer that when a mistake is made, but has no potential to harm the patient.

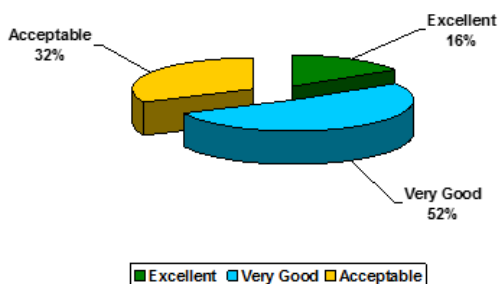
Opinion of the respondents regarding their hospital:

The mean number of event reports filled out and submitted (mean ± s.d.) by the respondents was 0.92± 1.82 with range 0 - 6 and the median was 0.

60.0% were staff nurse. 92.0% of the respondents had direct interaction or contact with patients. Most of them suggested for need of more doctors and more staff.

Opinion of the respondents regarding patient safety grade:

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



DISCUSSION:

Many developed countries now have initiated the research into the role played by patient safety culture. But in a India research in this vital area is still limited. India has faced several high-profile incidents in which the safety of patients was grossly neglected. These include the in the J.J. Group of Hospitals deaths of 14 patients following the administration of contaminated glycerol, an incident that was probed by the 1997 Lentin Commission (Visvanthan, 1999), the report of which held the physicians liable; the Hepatitis B epidemic in the district of Sabarkantha, Gujarat in which 94 persons died³ at Umaid Hospital in Jodhpur the deaths of 18 pregnant women;⁴ and most recently in West Bengal, the fire at the AMRI hospital and administration of Hepatitis Vaccine instead of Polio Vaccine.⁸

Investigating these incidents alone may not help in reducing these adverse events in future. It is very important to know the attitudes and belief of the health works in relation to patient's safety first. A strong patient-safety culture has been shown to be a successful predictor of medication errors and falls injuries outcomes for AHRQ-patient-safety indicators treatment errors, and accidents and injuries in the work place.

It is very important to assess the safety culture of our hospital to plan intervention programme to curtail adverse events related to patient safety. Doctors and Nurses being the front line care provider, spend most of their time in direct patient care activities than any other professionals. Hence it's in important to understand the safety culture behavior prevailing among our doctors and nurses to ensure patient safety.

CONCLUSION:

The median age of the respondents was 41.5 years so they were having adequate knowledge about the patients' services provided by the hospital. All sorts of medical and paramedical staff participated in the study. As per the respondents good relationship is prevailing among the staff and also with their respective higher authorities. They graded their working unit as very good. Most of them (88.0%) opined that hospital management provides a work climate that promotes patient safety and also giving top priority to patient safety. Thus the results of this study revealed that both the hospital authority and staff are aware about the patients' safety and are taking adequate measurements related to patients' safety.

REFERENCES:

1. Aspden P, Corrigan J and Wolcott J. Patient Safety, Achieving a New Standard for Care 2nd edition (The National Academies Press, Washington DC). 2004:251-263.
2. Clarke S. Perceptions of organizational safety: implications for the development of safety culture. Journal of Organisational Behavior.1999 ;20(2):185-198.
3. Gandhi SJ. Hepatitis B outbreak investigation report in Sabarkantha District, Gujarat State(online). Available: www.academicjournals.org/ijmms/PDF/Pdf2011/May/Gandhi.pdf [Accessed on 2 Jun 2012].
4. Gupta N and Srinivasan S (2012). Serial maternal deaths in a tertiary care hospital:Somequestions(online).A available:http://www.issuesinmedicalethics.org/192ed70.html. [Accessed on 2 Jun 2012].
5. Hala A Abdou and Kamilia M Saber. A Baseline Assessment of Patient Safety ulture among Nurses at Student University Hospital. World Journal of Medical Sciences. 2011;6(1):17-26.
6. Hughes RG and Clancy CM. Working conditions that support patient safety. Journal of Nursing Care Quality.2005;20(4) :289-292.
7. Kohn LT, Corrigan JM and Donaldson MS. To Err Is Human: Building a Safer Health System (National Academy Press, Washington DC). 1999:345-356.
8. Nagral S. Fire in a hospital. Indian Journal of Medical Ethics. 2012;9:76-7.
9. Neal MA and Hart PM. The impact of organizational climate on safety climate and individual behavior. Safety Science. 2000;34 :99-109.
10. Reid PR, Compton WD, Grossman JH and Fanjiang G (2005). Building a Better Delivery System. A New Engineering/Health Care Partnership 1st edition (National Academies Press Washington DC). 2005:15-17.
11. Ronald GS. Developing and operationalizing a culture of safety. Chinese Hospitals. 2005;9(12):7-8.
12. Balamurugan E, Flower JL. A study on patient safety culture among nurses in a Tertiary care hospital of Puducherry. International Journal of Basic and Applied Medical Sciences ISSN: 2277-2103 (Online) An Open Access, Online International Journal Available at http://www.cibtech.org/jms.htm. 2014; 4(2)May-August:93-98.
13. Schein E (1985). Organizational Culture and Leadership San Francisco (Jossey-Bass publishers, San Francisco) 263-265.

14. Zohar D (1980). Safety climate in industrial organizations: theoretical and applied implications. *Journal of Applied Psychology* 65(1) 96-102.
15. Zohar D (2000). A group-level model of safety climate: testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology* 85(4) 587-596.