

# A Tertiary Care Hospital Survey on Patient Safety Culture

<sup>1</sup>Dhanya Michael

Asst. Professor, Lourdes Institute of Postgraduate Studies & Research, Kochi, Kerala

<sup>2</sup>Dr. Sijo Joseph Pakalomattom

Assoc. Professor, Govt. Medical College, Ernakulum, Kerala

<sup>3</sup>Dr. Sharon Jose

Intern- Hospital Administration, Tata Institute of Social Studies, Mumbai

**Abstract:-** According to the World Health Organization, patient safety is characterized as the absence of preventable harm to a patient during the delivery of health care and the reduction of the risk of unnecessary harm associated with health care to an appropriate level. The collective notions of provided existing knowledge, services available, and the sense in which care was administered weighed against the likelihood of non-treatment or other treatment are referred to as acceptable minimums.<sup>1</sup> Because of the staggering number of health-care-related accidents and deaths in both developed and low- and middle-income countries, patient safety is becoming a public health issue.<sup>3</sup> The patient safety culture study will give institutions a strong picture of areas that need to be addressed in order to improve their patient safety culture and recognize unique patient safety issues within clinical units. Patient safety analysis will aid in the staff awareness of patient safety, assessing the current state of patient safety culture, identifying strengths and areas for improvement in patient safety culture, examining trends in patient safety culture change over time, evaluating the cultural impact of patient safety initiatives and interventions, and conducting comparisons within and across organization.

## ➤ Objectives

The study's main goal is to determine the current state of a tertiary care hospital's patient safety culture in southern India.

## ➤ Methodology

The research was performed over a one-month period in a tertiary centre hospital in south India as a descriptive, cross-sectional study. 160 nurses and 14 doctors participated as subjects. The information was gathered through an AHRQ (Agency for Healthcare Research) survey on patient safety culture. Teamwork within units, staffing, non-punitive reaction, input & communication about the mistake, organisational learning, communication, my leader, handover, team work across units, role of accreditation, and frequency of reporting were among the 48 items on the questionnaire. The outcome variable was chosen to be overall perception. After receiving approval from the participants, the questionnaire was distributed to them.

## ➤ Result

The 71.83 percent of the respondents were between the ages of 25 and 35. About 36.2% of the respondents had an overall work experience of more than 9 years, of which 28% had more than 9 years working in the same organization. The patient safety committee in the hospital decided that the criteria with a score of more than 75% could be considered strength areas of the organisation. The institution's main focus areas were as follows: -

SL NO	PARAMETERS	SCORE
a)	Organizational Learning	92.72%
b)	Accreditation programme	91.15%
c)	Feedback & communication about the error	90.61%
d)	Leader	79.72%
e)	Teamwork across the unit	78.4%
f)	Frequency of reporting	75.74%

As a result, it is clear that the institution's organisational learning is systematised, and NABH accreditation has played a crucial role in the hospital's improvement in patient safety practices. However, the organisation must enhance patient safety at the departmental and unit levels, including transitional safety steps and contact transparency, in order to improve the overall patient safety process and foster a positive patient safety culture.

## I. INTRODUCTION

Patient safety is characterised as avoiding or preventing patient accidents or adverse effects as a result of healthcare delivery processes. Because of the staggering number of health-care-related accidents and deaths in both developed and low- and middle-income countries, it is increasingly recognised as a global health issue.<sup>3</sup>

When hospitals strive to improve patient safety and efficiency, hospital leadership understands the importance of fostering a safety culture.

Patient protection in health care encompasses both the safety of patients and the safety of health-care providers. In the health-care system, it is a clinical, fiscal, administrative,

and organisational concern. Patient safety culture is an important factor in determining health-care quality. Patient safety focuses on the reporting, study, and avoidance of medical errors, which often result in negative health outcomes. The majority of adverse outcomes are avoidable and arise as a result of a flaw in the system or organization's design rather than bad performance by healthcare providers.<sup>2</sup>

An organization's safety culture is made up of person and community beliefs, behaviours, perceptions, competencies, and habits of action that define an organization's commitment to, and style and proficiency in, health and safety management. Leadership, physicians, and employees must understand their organisational values, views, and norms on what is necessary and what attitudes and actions are expected and appropriate in order to develop such a community.<sup>4</sup>

Communication based on mutual trust, common perceptions of the value of safety, and faith in the effectiveness of preventive measures identify organisations with a positive safety culture. Improved workplace health and safety, as well as organisational success, may be the product of a positive safety culture.<sup>3</sup> It is critical that we continue to discuss culture of health care, ideally for the benefit of patients and the quality of care they receive.

#### **Common Causes for Adverse Events**<sup>5</sup>

- a) **Human factors:** Patient diversity, unfamiliar environments, and time pressures; variations in healthcare providers' training and experience; exhaustion, depression, and burnout; and diverse patients, unfamiliar settings, and time pressures result in inability to recognise the prevalence and severity of medical errors.
- b) **Poor communication:** At clinical handovers, there is miscommunication between departments, health-care teams, hospital facilities, and the community. Physicians, nurses, and other care professionals with uncertain lines of authority, medications with identical names/lookalikes/soundalikes, and inadequacies in the framework for sharing information about errors obstructing the investigation of contributing factors and the creation of improvement strategies.

#### **Burden of the unsafe care**

- a) **Healthcare Associated Infections (HCAI):** 5 million HCAI cases are expected to occur in European hospitals each year, with 5-15 percent of hospitalised patients contracting the infection - around 40% in ICUs. At any given time, 7 out of every 100 hospitalised patients in developed countries and 10 out of every 100 in developing countries will contract at least one HCAI.
- b) **Medication errors:** In the United States in 2006, 15 million people were injured and thousands were killed as a result of drug errors. In certain countries, 70% of patients' prescription records contain mistakes.

c) **Unsafe surgeries:** Although there are 234 million surgical procedures performed globally per year, 7 million result in complications, resulting in 1 million deaths.

d) **Unsafe Injections:** Although over 70% of injections in primary care are said to be unnecessary, unsafe injections are responsible for 33% of new HBV infections, 42% of new HCV infections, and 2% of all new HIV infections globally. According to many medical error reports, one out of every ten patients were affected when seeking hospital treatment. According to global reports, the incidence of adverse effects ranged from 3.2–16.2 per 100 hospital admissions.

In a teaching hospital in Riyadh, a survey on patient safety culture research was conducted. The survey revealed that organisational learning and continuous improvement, as well as teamwork within departments are areas of strength, while hospital non-punitive response to error, staffing, and communication openness are areas that need improvement.

Another analysis of patient safety culture in 42 Taiwanese hospitals found that hospital workers in Taiwan had a positive attitude toward patient safety culture in their work place. "Teamwork inside units" earned the highest positive response rate, which was comparable to the findings recorded in the United States.

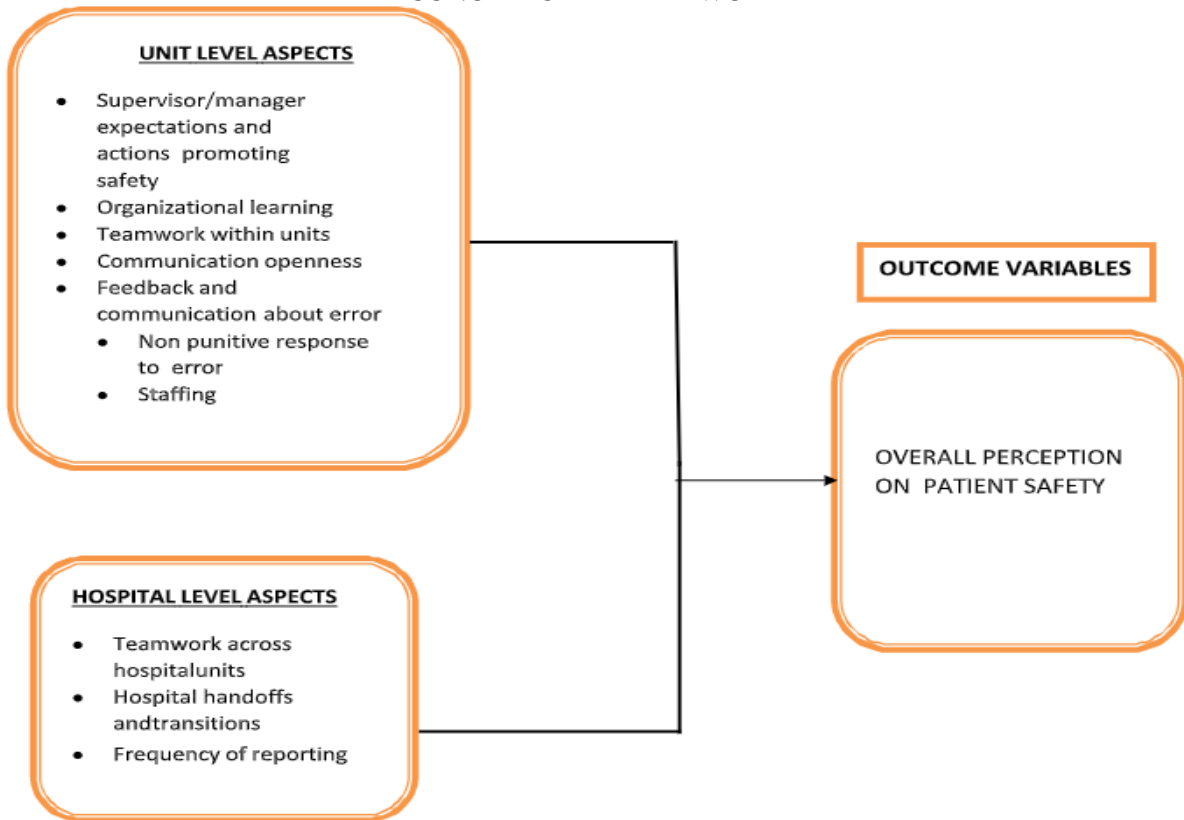
A study of patient safety culture among medical interns in a teaching hospital found evidence of teamwork. Within units, Organization learning had a positive response rate of more than 60%, while reporting frequency, non-punitive response to mistakes, and overall perceptions of patient safety were all less than 50%.

In contrast, a Patient Safety Culture Analysis conducted among Doctors, Nurses, and Technicians in a Tertiary Hospital in Srinagar revealed the highest positive response of 77.3 percent for departmental teamwork and 76.1 percent for organisational learning – continuous improvement. Staffing, on the other hand, received the lowest answer (34.6%). 42.8 percent of participants said their work unit's dimension patient safety grade was very high, and 84.5 percent said there had been no incidents in the previous 12 months.<sup>10</sup>

The nurses in the sample, which took place in a tertiary care hospital in Puducherry, ranked teamwork within units as the most important dimension (80.2 percent), followed by supervisors' behaviour prompting patient safety (74.7 percent), and nonpunitive response to errors (42.7 percent).<sup>11</sup>

India also lacks a regulatory framework for medical error prevention and mandatory reporting. There hasn't been a comprehensive survey of staff from all branches and work categories in Indian hospitals.

**CONCEPTUAL FRAMEWORK**



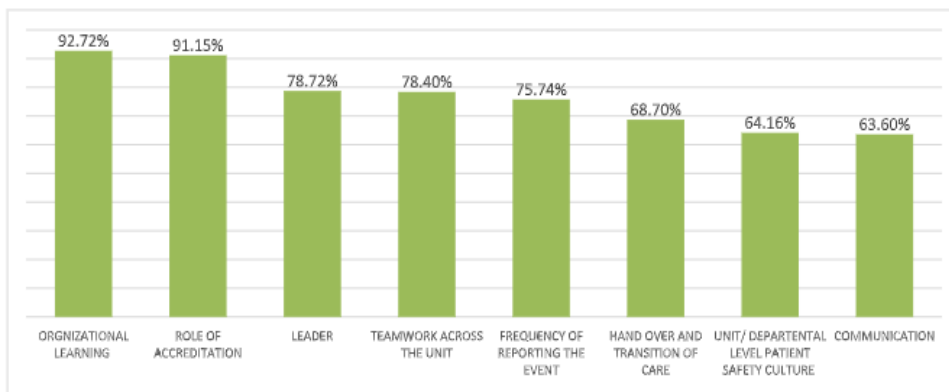
**II. RESEARCH METHODOLOGY**

This research was carried out in a tertiary care hospital with 650 beds in the county's south. The hospital has nearly 500 in-patients and 1700 out-patients on a regular basis, as well as 14 operating rooms with cutting-edge technology and 66 ICU beds. Nursing personnel from IPD, OPD, emergency, critical care, and operation theatre departments, as well as physicians from various specialty facilities, were included as subjects. Just 160 nurses out of a total of 300 responded to the survey, yielding a response rate of 53.33 percent. Just 16.7% of the 90 doctors had responded. The research was carried out using a cross-sectional method. The study enlisted the participation of 174 staff, including doctors and nurses. The survey was performed using the Patient Safety Culture Questionnaire from the AHRQ (Agency for Healthcare Research). The questionnaire had 48 elements with 11 different variables. Both favourably and negatively worded questions/items were included in the survey. Teamwork inside units, personnel, non-punitive reaction, feedback & communication about the mistake, organisational learning, communication, my leader, handover, team work across units, role of accreditation, and frequency of reporting were among the topics covered. The investigator added the function of accreditation to better understand how the NABH accreditation programme had influenced the workers to learn more about patient safety measures. The internal consistency of each variable was measured using Cronbach's alpha. The

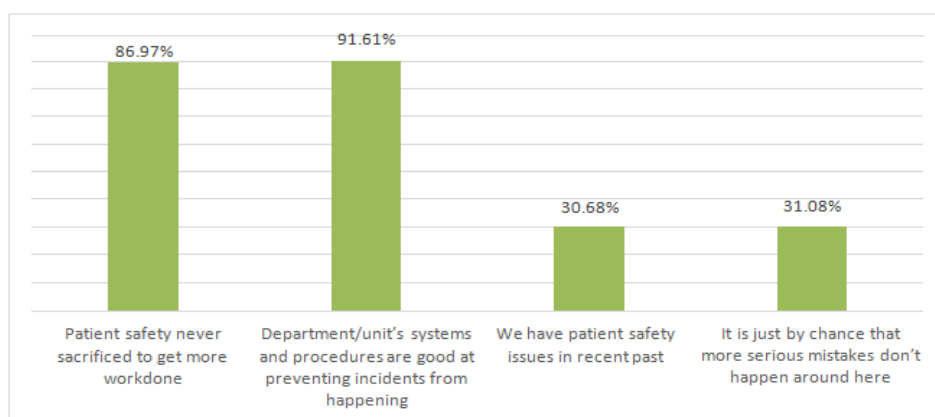
outcome variable was chosen to be overall perception. After receiving approval from the participants, the questionnaire was distributed to them. After a week, the response was gathered. There were no reminders provided. A 5-point Likert scale was used to grade the products. The number of incidents was registered as "None," "1-2," "3-5," "6-10," and "More than 10," with the outcome of patient safety graded as "Bad," "Fair," "Reasonable," "Good," and "Excellent." The data was analysed with Microsoft Excel software at a significance level of 0.05. Areas of strength and potential will be described as dimensions with a positive response rate of more than 75%. Areas of weakness will be described as dimensions with a positive response rate of less than 50%.

**III. RESULT**

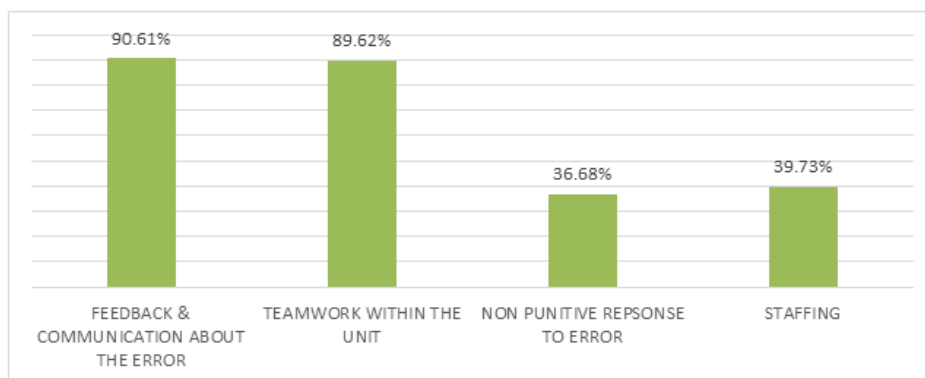
The majority of the respondents (71.83%) were between the ages of 25 and 35. Around 36.2 percent of the respondents had more than 9 years of work experience, followed by 14.94 percent with 7-9 years of work experience, 28.7 percent had 3-6 years of work experience, 16.1 percent who had 1-2 years of work experience and around 4% had less than 1 year of work experience. Further details of the work experience in the same organization showed that 28 percent of respondents had more than 9 years of experience, 8 percent had 7-9 years of experience, 25 percent had 3-6 years of experience, 27 percent had 1-2 years of experience, , 11 percent had less than 1 year of experience.



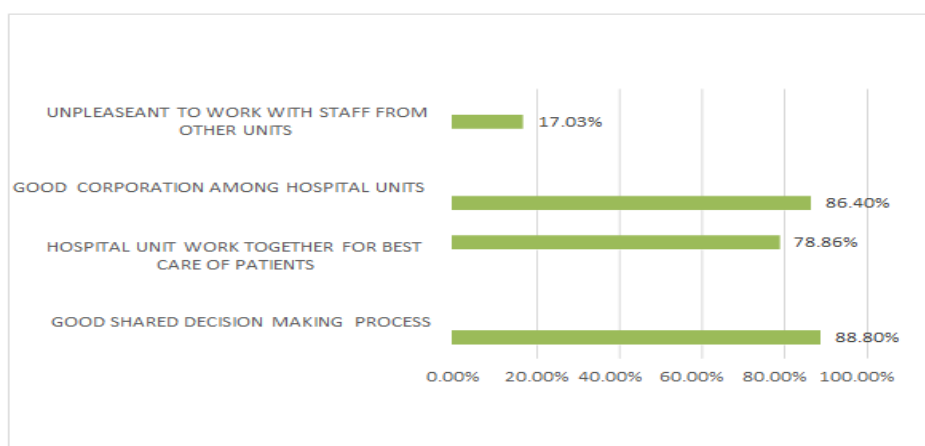
Graph 1: Dimensions of Patient Safety Culture



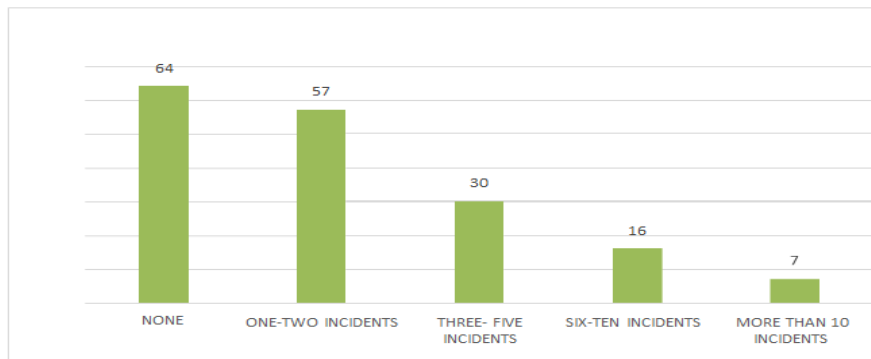
Graph 2: Overall Perception of The Patient Safety



Graph 3: Unit / Departmental Level Patient Safety Culture



Graph 4: Teamwork across the Hospital Unit



Graph 5: Number of Patient Safety Events / Incidents Reported In the Last 12 Months

The patient safety committee, which is made up of a multidisciplinary team, reviewed the study findings. The physicians, on the other hand, had a poor response rate. The proportion of staff nurses providing patient care services was higher. In this report, no attempt was made to include technicians. According to the findings, the average rate of unit/department patient protection is 91.03 percent.

The study's findings are consistent with those of a few other national and international studies on the topic.

#### IV. CONCLUSION

According to the findings, the company has a strong organisational learning, feedback, and communication mechanism, as well as good coordination inside and across units. However, the study found shortcomings in staffing and the non-punitive approach to errors. The institution's hiring strategy and retention strategies must be reconsidered so that current workers do not become overworked and burnt out, and can perform their duties as efficiently as possible. In addition, the institution must find ways to create a non-punitive atmosphere for healthcare providers. The management and employees' mindset should be to learn from the negative incidents. The institution should include training sessions to raise awareness among managers and staff about the value of creating a non-punitive atmosphere for reporting accidents or mistakes, as well as how to do so. There should be a strong distinction made between accidents that occur as a result of poorly engineered structures and incidents that occur as a result of unsafe human behaviour. Policies that promote patient safety culture, such as disclosing adverse injuries, close calls, and dangerous conditions, need to be clearly communicated. The study has been an eye opener to understand overall patient safety process to determine the strategies to shape the safety culture.

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