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Research Article

Examining Key Factors Influencing Perception Of Nurses Towards Patient Safety Culture

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Abstract
Hospitals' major focus is on delivering patient care in a resource-constrained and competitive market, allowing them to provide treatment in a complex and changing environment. To provide contemporary medical therapy, medical workers must be able to make choices swiftly. In such conditions, errors are likely to occur, and patients may be hurt accidentally. Errors in medical treatment are becoming more common in the healthcare sector, and in many cases, these errors cause severe harm to patients. The goal of this study is to gather data from nurses working in hospitals on their views of the factors that impact the implementation of patient safety cultures. The goal of this descriptive cross-sectional study was to look at healthcare personnel' perceptions on the culture of patient safety inside the organization, as well as the factors that affected the culture of patient safety among nurses. A representative sample of 200 nurses from various departments completed a designed survey questionnaire for patient safety culture. SPSS is used to conduct analyses. The study's findings were obtained using statistical approaches such as descriptive statistics, factor analysis, Chi-square, analysis of variance, and regression. When it comes to nurses' perceptions of patient safety culture, the findings show significant differences across a wide range of characteristics, including collaboration, job satisfaction, reporting errors, management support, communication openness, and stress recognition.

Keyword: Patient safety culture, Medical errors, Nurses' perceptions, Error reporting, Management support

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1. Introduction

Health care quality has been debated and studied since the late 20th century. Patient safety has just lately entered 21st-century discourse. Most studies consider patient safety a component of healthcare quality, but during the last decade, it has proven essential. Safety is a health discipline that emphasizes the prevention, reduction, reporting and analysis of medical errors that often lead to adverse healthcare events .

The medical sector assures clinical safety, and the Institute of Medicine (IOM) book Err is Human is a pioneering attempt to make medicine safer. We understand the need for action. Many of the research in this paper show that malpractice kills more people annually than accidents, cancer, and AIDS. Before the 1990s, unfavorable patient outcomes were not acknowledged or addressed. After extensive study, patient safety is becoming a worldwide concern impacting all nations. However, wealthy nations provide most statistics. The WHO estimates that 1 in 10 patients globally experience health mistakes and is concerned

about patient safety. Patient safety is largely the provider's responsibility. It addresses clinical, economic, administrative, and organizational safety. Quality medical treatment and patient safety measures are key to patient safety culture. It also addresses incident reporting, analysis, and medical malpractice prevention, which mostly harms health events. Building positive connections between hospitals, healthcare personnel, and patients is crucial to maintaining a safe culture. Considering Indian patient safety culture. India is young. India is creating a malpractice and military reporting regulatory framework. Overcrowding and finances are hospitals' major issues. Hospitals have utilization gaps and poor treatment quality.Patient safety risk assessment and management: A study of Indian hospitals. Chronicles of Young Scientists. 2011 Oct 1;2(4):186. Looking at healthcare efforts in India, the constitution provides various laws relating health care services, mostly categorizing them as state and central government responsibilities. State and federal governments oversee health. Our National Health Policy was developed by the Indian Parliament in 1983 and modified in 2002 and 2017. Government agencies have also set safety and quality standards for patient treatment. Nursing Homes and State Drug Control Act was passed by the Indian government to provide excellent treatment in private medical facilities. The 1986 Consumer Protection Act gave individuals sole access to high-quality medical treatment. Several healthcare regulations and standards aim to enhance treatment in India. Healthcare organizations and professions accredit services and facilities to improve quality. It sets a minimal standard for patient care for all medical/healthcare organizations and practitioners.

Quality committees also supervise healthcare compliance and quality authorities. If applied properly, it will greatly enhance and guarantee medical assessment and therapy. The 2015 health policy addresses health care adequacy and approaches population health holistically. Despite Indian government policies and laws, quality assurance or improvement is still lacking and difficult to apply.

Patient safety is crucial in all healthcare settings worldwide. It is known to improve patient care. Patients also help prevent patient safety problems. Patient empowerment and education improve safety culture by engaging patients. Patient knowledge and perceptions are key components in patient safety culture, recognizing accidents and minimizing harmful behaviors. Several studies suggest that patients know they are at risk for patient safety issues. Many healthcare blunders also affect people' understanding and faith in health treatment.

Despite attempts to enhance healthcare quality, our professionals are continually learning about quality and safety. This necessitates more thorough assessment and strategy development. Identifying hazardous treatment and its effects may not be successful without standardizing medical record-keeping and clinical documentation. Hospital accreditation has helped this. Sustainable transformation involves a cultural shift among stakeholders. Established culture helps a business maintain standards without conscious effort, ensuring quality and safety. Thus, examining an organization's safety views and behaviors helps it start and prioritize safety efforts.

The term patient safe environment refers to measurable aspects of a safety culture like management behavior, safety systems, and staff safety perceptions. Employees' safety views, opinions, and values make up safety culture. Safety culture is the way we do things here in corporate culture. According to the Institute of Medicine, Changing the culture of blaming people for errors into one where mistakes are not failures is the primary obstacle in creating a safer health care system. people but a chance to fix the system and stop damage.

Creating a good patient safety culture to increase safe operations and strengthening healthcare companies' cultural practices boost patient safety. Patient safety culture may be examined using self-administered questionnaires and surveys. Self-completed surveys were mostly sent to hospital workers and other healthcare professionals, according to Fleming and Hartnell (2007). Analysis of worker input added realism to the research. Staff reported favorable and bad patient safety culture, treatment, and recovery performance. These surveys are critical for safety evaluations and identifying patient safety culture improvement measures. The surveys also evaluate health services and the harmful impact of unsafe behaviors on patients. Surveys confirm organizational procedures and increase patient safety in care and organizational processes. The poll also influences healthcare organizations' patient safety culture perceptions.

2. Statement of the Problem

While it is the obligation of each hospital and healthcare institution to achieve the twin objective of protecting its patients' health and safety, they must also offer medical treatment to those patients. There is still an association between patient safety culture and patient safety practice. This is because the patient safety culture has a direct impact on the patient's health outcomes. This research seeks to obtain information from nurses working in hospitals on the elements that influence the establishment of patient safety cultures. The data will be gathered over the course of this investigation. To provide suitable solutions, it is vital to be fully aware of the elements that have a significant impact on the culture of patient safety. This is due to the reasons described above.

3. Scope of the Study

Future study will determine the reliability and validity of data and facts to answer research questions by identifying the research topic. The current research focused on developing a healthcare-specific measure to evaluate patient safety culture and nurse opinion of patient safety. It also lists communication, safety protocols, error reporting, learning, working environment, and staff engagement as factors in patient

safety culture. patient. It also shows how these characteristics impact patient safety measures. The research summarizes patient safety culture by amplifying and molding it. It helps firms assess their security culture and prioritize improvements.A modest sample size is used in this single-site investigation. Consequently, survey results cannot be more broadly applied. Nurses in this research may have been socially and institutionally impacted and answered questionnaire questions on patient safety appropriately. Patient safety culture is essential to the health care business and must be implemented in our system. Thus, the hospital's safety culture, gaps, and shortcomings must be examined. To achieve a healthy hospital safety culture, human resource attitudes, beliefs, and values should be changed.

4. Research Objectives

1. Create a Patient Safety Framework for Hospitals.
2.Determine which factors of patient safety culture impact the nurse's patient safety perspective.
3. Determine the link between the influencing components of patient safety culture and the perspective of patient safety culture.

5. Hypotheses for the study

H1- Teamwork has no significant link with nurses' perceptions of patient safety culture.
H2: There is no significant difference in job satisfaction and nurses' perceptions of patient safety culture.
H3- There is no significant difference between open communication and nurses' perceptions of patient safety culture.
H4-No significant difference exists between stress recognition and nurses' perceptions of patient safety culture.
H5-There is no substantial difference between blame culture and nurses' perceptions of patient safety culture.
H6: There is no significant difference between the reporting of mistakes and the impression of patient safety culture among nurses.
H7: There is no significant difference in management support and nurses' perceptions of patient safety culture.

6. Research Methodology

The research methodology refers to the techniques and processes used to gather and analyze data on the variables indicated in the research topic. The descriptive research design uses a structured questionnaire to obtain data from respondents. It basically explains the existing situation by identifying aspects over which the researcher has no control and is involved in the study process. It is a good research design that uses research study procedures to find and report facts. By using data collecting, it empowers existing concerns in research projects so they may be addressed fully. This research study is a descriptive study that assesses a sample of nurses from a given location of study based on their perspective of patient safety culture, which can then be projected onto all Kerala nurses.

A structured questionnaire was circulated to private university management students to obtain primary data. SPSS analyzes the data. Data sets and parameters are methodically analyzed. Stratified random sampling is used in this survey. Stratified random sampling divides a population into strata. Stratified random sampling or stratification uses members' common traits to build strata. A dataset's sample size is its number of data points. It helps assess research correctness and dependability. The questionnaire was indirectly given to 250 respondents. Out of 250 responses, 200 were engaged and interested in replying, while the remainder were not. Thus, 200 respondents are surveyed. Primary data comes from first hand research. It incorporates data from a standardized questionnaire issued to respondents. SPSS analyzes the data. Data were rigorously analyzed and parameters evaluated. Secondary data—Data obtained by someone other than the user. Researchers utilized Pro-Quest, Emerald, and Google Scholar for secondary data. Statistical Tools
Tools for analysis and interpretation include reliability tests, factor analysis, regression analysis, chi square test, and ANOVA analysis.

7. Literature Review

According to Julia Hiromi Hori Okuyama et al. (2018), communication openness priorities needed improvement. Inefficient communication promotes undesirable events. Poor communication lowers care quality. Hospitals with an open route for supervisors and workers to share patient safety recommendations, questions, and feedback had higher quality, motivation, and culture rankings.

According to Shiu Yee Wong et al. (2021). Regular assessments and surveys indicated clinical service shortcomings such poor handover and inter department communication breakdown that might pose clinical hazards.

Farhan Alshammari et al. (2019) recommend improving communication and patient safety culture in this research. Due to cultural and national differences, the healthcare staff may have had trouble communicating. Healthcare workers' continual, bidirectional contacts need a structured approach to open communication to ensure patient safety.

Ülkü Yapucu Günes et al. (2015) advise that management support patient safety by communicating openly, training staff, delegating risk identification and correction, expressing that patient safety is a shared duty, and providing necessary resources. .Thus, open communication, trust, shared safety values, and confidence in preventive actions should produce a healthy safety culture.

According to Jee-In Hwang and Jeonghoon Ahn (2015), team communication is the sole important component in mistake reporting. This suggests that communication improves patient safety. Error reporting is usually formal, upward communication. Better team communication fosters open, all-channel communication (including clinical mistakes and patient safety issues).

The nurses in this research understood the significance of trust, a notion discussed in nursing for decades, according to Patricia S. Groves et al. (2021). The reason trust is essential may be more relevant to safety and security. Hospitalized patients cannot fulfill their own requirements, thus nurses must be trustworthy to meet their expectations. Patients' safety in critical care. This shows that the nurses in our research were right that a trustworthy reply was crucial to open communication for safety.

Julia Hiromi Hori Okuyama et al. (2018) advise improving personnel due to a shortage of experts with severe workloads.

Chih-Hsuan Huang et al. (2018) reveals that doctors and nurses consider working circumstances the worst patient safety factor. Physicians and nurses get varied results, which is noteworthy. Working circumstances adversely affect nurses' stress recognition. Nurses reported more stress and difficulty than doctors due to hospital staffing shortages, complicated, and multitasking situations. Hospital structure is dominated by nurses, who labor under inadequate circumstances, according to research. To promote patient safety, hospital administrators should restructure stress management and enhance nursing work environments. Regular stress-reduction and staff training programs should be implemented. According to Ebru Önlera et al. (2019), nurses with lesser workloads perceive patient safety better, and vice versa. To promote patient safety, nurse staffing policies are crucial.

Management aid:
Shiu Yee Wong et al. (2021) recommends a clinical meeting feedback mechanism to help prescribers learn from their mistakes. Management should address nurse concerns and educate staff on safety methods to encourage staff engagement.

According to Ülkü Yapucu Günes et al., management may promote patient safety by communicating openly, training staff, delegating risk identification and correction, emphasizing shared responsibility, and providing sufficient resources.

work experience Ülkü Yapucu Günes et al. found that hospital job experience affected patient safety culture. Years of nursing experience increased patient safety culture score. Institutional safety policies become more apparent with experience. However, several research found that seniority impacted patient safety culture ratings. Ling-Na Kong et al. (2019) observed that older students may be more professional and prioritize patient safety. Higher results were achieved by students having job experience. Their job experience may have improved their patient care, collaboration, and safety attitudes. Önlera et al. (2019) found that older, experienced nurses with longer tenure in the same institution had higher favorable safety attitudes. Long-term clinical experience increased patient safety competence in senior nurses. These outcomes were good, and our findings imply that as staff age and experience improve, knowledge, skills, position, and belonging may lead to these results. Lorraine Thompson et al. (2021) found that clinical coaches needed point-of-care clinical assistance and 'just in time' interventions due to unfamiliarity with the setting or inexperience in practise. Clinical coaches required more direction and assistance to keep patients safe when new nurses, medical interns, or personnel joined a clinical unit.

Rolsanna R. Ramos et al. (2018) found that nurses in units had the greatest favorable reaction on collaboration (91.50%), indicating its relevance to patient safety. Because personnel must cooperate and coordinate to provide a happy and safe environment for patients, they saw unit collaboration as a hospital strength. collaboration among units was the most positively rated strong area, according to Ülkü Yapucu Günes et al. Most health care mistakes are caused by poor collaboration. Teamwork is needed to coordinate numerous team members' performances. In this research, collaboration among units (48.8%) was weaker than inside units. Our research found that nurses collaborated effectively inside their units but graded increased collaboration across units poorly, indicating that each team was independent of the others.

Jee Hye Hana et al. (2020) note that nurses' impression of collaboration affects patient safety and helps reduce significant adverse events, enhance patient safety, and report mistakes. Brig Abhijit Chakravarty et al. (2015) found that post-graduate residents, nurses, and paramedical workers have a lower perception of teamwork climate than clinicians, likely due to poor cooperation and interpersonal skills.

Job satisfaction:
According to Jiali Liu et al. (2019), half of nurses were pleased with their professions, while most felt moderate burnout and some reported poor patient safety. This showed that nurses' work satisfaction and patient safety had not increased.

In their 2020 research, Kellie M Kaczorowski et al. discovered that nurses at all study locations were concerned about emergency department layout. They felt exposed and insecure in waiting rooms and treatment rooms. Emergency rooms with poor layout and congestion provide inferior patient care, according to previous research. Masoud Behzadifar et al. (2019) found that Iranian hospital workers underreport mistakes compared tos other nations. Fearing repercussions and punishing measures. In many Iranian health care institutions, administrators penalize mistake-makers without addressing the core reasons. A qualitative research found that fear of management punishment, heavy workload, personal responsibility, and report abuse are major causes of under-reporting. Nurses disclose mistakes less often because of fear of institutional repercussions. Patients should be taught on early reporting to effectively manage medication mistakes, according to Nana Sarponmaa Ampadu Cofie et al. (2021). National Pharmacovigilance Centre ads should emphasize how ADE reporting saves lives.

Future research should create and apply preventive measures targeting PEs and ADEs' most probable causes. Patient safety may be improved by screening prescriptions at hospital pharmacies and educating doctors in prescription writing and adverse medication event reporting. Julia Hiromi Hori Okuyama et al. (2018) say that methods should prevent mistakes, notify of potential issues, and remedy them before they harm patients.

Xue Wang, Ke Liu et al. (2014) indicated that event reporting frequency inversely correlated with AE rate. Nurses may have avoided reporting faults that were not detected to avoid penalties and errors that had nothing to do with them to avoid difficulty due to blameculture and the none of my business mentality. Because near-miss and genuine faults were not identified or addressed, the same problems happened again. Nasser Ibrahim Abu-El-Noor et al. (2016) found that 41.1% of participants reported at least one incident in the last year. This figure is lower than previous research. Hamdan attributes the hesitancy of health care professionals to disclose unfavorable occurrences to the system's punishing attitude, the absence of a robust reporting structure, and social and liability concerns.

8. Data Analysis and Discussions

8.1 Demographic profile of the respondents

Working hours of nurse per week is clear that most of the respondents (26%)work for 20 to 39 hours per week and 40 to 59 hours per week. 20% of the respondents work for 60 to 79 hours and less than 20 hours per week . only 6% of the respondents work for 80 to 99 hours per week and 100 hours per week.

Thirty-two percent of the respondents have worked in the hospital for sixteen to twenty years, thirty-one point five percent of the respondents have worked in the hospital for one to five years, twenty-six point five percent of the nurses have worked in the hospital for six to ten years, and ten percent of the respondents have worked in the hospital for eleven to fifteen years.

8.2 Exploratory Factor Analysis

8.2.1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.714
Bartlett's Test of Sphericity	Approx. Chi-Square	5.365E3
	Df	465
	Sig.	.000

Table 3

• The Kaiser-Meyer-Olkin (KMO) metric indicates the suitability of sample data for factor analysis. It's the ratio of the total of all variables' squared correlations to their squared correlations + squared partial correlations. KMO is less than one because the denominator grows with partial correlations, which are specific to pairs of variables. Factor analysis may not work for data with low KMO levels. In Kaiser (1974), numbers above.9 are good and below.5 are bad. In this research, the KMO measure is more than 0.5 (0.714), indicating factor analysis data validity.

• Bartlett's test of sphericity tests the null hypothesis of an identity matrix, indicating no relationships between variables and no basis for factor analysis. We reject this hypothesis with a significant test. The Chi-square value (2760.8) is significant ($p<0.05$) at the 5% level, supporting the validity of the KMO measure.

8.2.2 Total Variance Explained

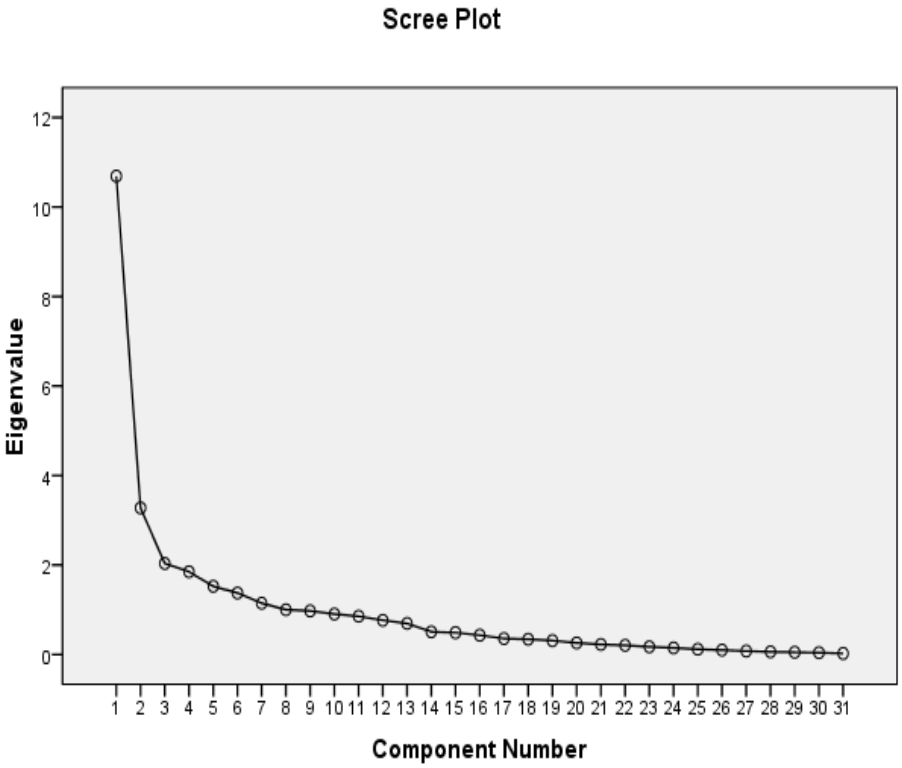
Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.69	34.49	34.49	8.13	26.21	26.21
2	3.28	10.57	45.06	2.49	8.02	34.23
3	2.04	6.56	51.62	2.42	7.80	42.03
4	1.85	5.97	57.59	2.13	6.86	48.89
5	1.53	4.92	62.51	2.09	6.73	55.62
6	1.38	4.44	66.94	2.06	6.66	62.27
7	1.15	3.70	70.64	1.82	5.88	68.16

Above table shows that the variation explained by each component and total variance by all components. This table defines variance explained as the component(s)' contribution to the overall set of variables/items. Component 7 accounts for 5.882% of the items' variance-covariance matrix. The 7 retrieved components explained 68.155% of our items' variation.

• Eigenvalues of linear components (Factors) before, after, and after rotation. Before extraction, SPSS found 31 linear components in the data set (we know there should be as many eigenvectors as variables, therefore equally many factors).

SPSS shows the eigenvalues of each linear component in percentage of variance explained (factor 1 explains 34.486% of total variance). The first few components explain a lot of variation (particularly factor 1), whereas later ones explain less.

8.2.3 Scree Plot



or precise computations, measure the extracted components using a screen plot, a line graph. This is important for proper calculations. The component number, sometimes called the factor, is shown along the X-axis. Along the axis is this depiction. This illustration is on the axis. This graphic shows the Eigen value next to the Y' axis, essential to the topic. The following example illustrates one interpretation of these facts. Noting the elbow's termination and extending the line to the triangle's axis are crucial. Both processes must be done. This will need seven components from the graph shown above. This count will be needed later.

8.2.4 Rotated Component Matrix

Factor analysis shows the association between observable variables and their underlying components using your rotatable component matrix. The loadings show each variable's intensity and direction with a factor. Higher absolute values (usually over 0.5) imply a strong variable-factor connection.

This component seems to represent team chemistry and support (0.642, 0.702, 0.611, etc.). This element may reflect unit support, communication, and collaboration based on the factors that load high. F2 (0.681, 0.617, 0.526, etc.) may signify supervisor support and resource availability. Items loading heavily imply supervisor support and availability of resources to fulfill assignments. The connection between personnel and management or physicians is represented by Factor 3 (0.789, 0.736, 0.775, etc.). Trust, respect, and open communication between personnel and physicians or management are shown by high loadings. Under pressure, factor 4 (0.629, 0.749, etc.) may indicate mistake management and decision-making. This variable loading concerns incorrect reporting and severe workload issues.

- Factor 5 (0.674, 0.522, 0.562): This factor may reflect a blame-free culture and error reporting trust. The factors indicate staff confidence in reporting errors without penalties.

Factor 6 (0.788, 0.700, etc.): Reporting mistakes and near-misses may affect this factor. The large loadings show it targets the hospital's error reporting culture.

- Factor 7 (0.793, 0.575, 0.750): This shows management's commitment to patient safety. High loadings show it emphasizes patient safety management and communication

8.3 Descriptive Statistics

	Mean		Variance	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
TW1	1.62	.053	.557	.736	.172	-.845	.342
TW2	1.6000	.05112	.523	.774	.172	-.710	.342
TW3	1.7800	.06694	.896	1.028	.172	.043	.342
TW4	1.7400	.05983	.716	.726	.172	-.667	.342
TW5	1.7400	.06771	.917	1.236	.172	1.139	.342
JS1	2.4200	.09088	1.652	.380	.172	-1.074	.342
JS2	2.3200	.08075	1.304	.574	.172	-.564	.342
JS3	2.3400	.08695	1.512	.571	.172	-.717	.342
JS4	2.3600	.09162	1.679	.704	.172	-.579	.342
CO1	1.7400	.05456	.595	.485	.172	-1.165	.342
CO2	1.6600	.05950	.708	1.121	.172	.452	.342
CO3	1.7600	.06108	.746	.675	.172	-.829	.342
CO4	1.9000	.06536	.854	.509	.172	-.992	.342
CO5	2.5000	.08175	1.337	-.039	.172	-1.166	.342
CO6	2.0400	.06644	.883	.507	.172	-.700	.342
SR1	2.7000	.06536	.854	-.139	.172	.507	.342
SR2	2.6000	.05491	.603	.312	.172	-.571	.342
SR3	2.4200	.05322	.566	-.010	.172	-.336	.342
SR4	2.5600	.07389	1.092	.640	.172	-.086	.342
NPRE1	2.0400	.06793	.923	.606	.172	.001	.342
NPRE2	2.3600	.05628	.634	.710	.172	1.252	.342
NPRE3	2.6200	.06162	.759	-.466	.172	-.454	.342
ER1	2.3800	.05997	.719	-.018	.172	-.652	.342
ER2	2.5200	.05713	.653	.166	.172	-.484	.342
ER3	2.9400	.05916	.700	-.302	.172	.344	.342
ER4	1.9600	.06940	.963	.725	.172	.012	.342
ER5	2.0200	.05580	.623	-.036	.172	-1.390	.342
MS1	2.0000	.05305	.563	.577	.172	.355	.342
MS2	2.4600	.06976	.973	.112	.172	-1.001	.342
MS3	1.8600	.05673	.644	.259	.172	-1.400	.342
MS4	2.0600	.07005	.981	.505	.172	-.332	.342
PPSC1	2.2800	.05678	.645	-.080	.172	-.709	.342
PPSC2	2.2600	.05637	.636	-.262	.172	-.956	.342
PPSC3.	1.9400	.06712	.901	.833	.172	.437	.342
PPSC4	1.9600	.06173	.762	.444	.172	-.765	.342
PPSC5	2.0000	.07502	1.126	.816	.172	-.168	.342
IPSC1	1.8600	.06017	.724	.272	.172	-1.569	.342
IPSC2	1.9000	.05715	.653	.415	.172	-.747	.342
IPSC3	1.0200	.00992	.020	6.909	.172	46.197	.342
IPSC4	2.1000	.06688	.894	.230	.172	-1.117	.342

Table 5

Description statistics summarize a data set, which may be the full population or a sample. The data is normal based on kurtosis and skewness, thus additional testing may be performed. • The skewness direction is indicated by the symbol. Zero denotes no skewness.

• A negative number indicates a negatively skewed distribution, whereas a positive value indicates a favorably skewed distribution.
• The coefficient compares sample distribution to normal distribution. Larger values deviate from normal distribution.

8.4 Regression Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.720[a]	.511	.500	1.78261

R-value shows dependent-independent correlation. Analysis continues with a result over 0.4. In this case,.720 is excellent.
R-square displays the total variance in the dependent variable explained by the independent variables. A number over 0.5 indicates that the model can determine the connection. In this case,.500 is fine. Adjusted R-square displays the sample findings' variance from the population in multiple regression. A difference between R-square and Adjusted R-square minimum is necessary. This number is.500, close to.511, therefore it's excellent.The model explains 51.1% of the dependent variable.

8.5 Chi Square Test

Relationship Between The Factors Influencing Patient Safety Culture And Perception Of Patient Safety Culture:

Factors	Chi square	Sig.	Result
Teamwork	74.713	0.023	Accept
Job satisfaction	39.77	0.014	Accept
Communication openness	11.877	0.002	Accept
Stress recognition	26.438	0.038	Accept
Non punitive response to errors	74.539	0.049	Accept
Error reporting	41.187	0.011	Accept
Management support	38.808	0.040	Accept

It is significant from the above table that the variables Teamwork (p=0.023), Gender satisfaction (p=0.014), Communication openness (p=0.002), Stress recognition (p=0.038), Non punitive response to errors (p=0.049), error reporting (p=0.011) and Management support (p=0.040) are significant and hence there is a relationship between the factors influencing patient safety culture among nurses and their perceptions on patient safety culture.

8.6 ANOVA

Association	**F**	**Sig.**
Teamwork and perception of patient safety culture among nurses.	8.419	0.013
Work satisfaction and the perception of patient safety culture among the nurses.	13.289	0.016
Openness of communication and the perception of patient safety culture among the nurses.	26.505	.045
Stress recognition and the perception of patient safety culture among the nurses.	22.847	.028
Non-punitive response to error and the perception of patient safety culture among the nurses.	7.969	.032
Reporting of errors and the perception of patient safety culture among the nurses	9.710	.049
Management support and the perception of patient safety culture among the nurses	5.942	0.022
Number of years of work experience and the perception of patient safety culture among the nurses.	1.147	0.034

The H1 hypothesis says that nurses' patient safety culture views do not affect teamwork. This F value has a very modest p-value of 0.013. These values determine whether independent variables may accurately predict the dependent variable. The p-value is significant if it is less than the alpha level, usually 0.05. It seems that nurses' views on patient safety culture and workplace cooperation are statistically significant. Hypothesis 2: Job satisfaction and patient safety culture perception are similar among nurses. This F value makes the p-value (0.016) low. These values determine whether independent variables may accurately predict the dependent variable. The p-value is significant if it is less than the alpha level, usually 0.05. This suggests that nurses' job satisfaction and patient safety culture attitudes vary statistically.
The communication openness hypothesis H3 suggests that nurses' assessments of patient safety cultures and openness are similar.
The F value makes the p-value (0.045) incredibly low. These values determine whether independent variables may accurately predict the dependent variable. The p-value is significant if it is less than the alpha level, usually 0.05. Thus, nurses' impressions of patient safety

culture and open communication vary statistically. The fact that nurses' assessments of patient safety culture and stress recognition are similar supports the idea that they are similar.
This F value has a tiny p-value of 0.028. These values determine whether independent variables may accurately predict the dependent variable. The p-value is significant if it is less than the alpha level, usually 0.05. A statistically significant difference exists between nurses' judgments of patient safety culture and their own stress levels.

Hypothesis: H5: Nurses' patient safety culture views and non-punitive error response are similar. The non-punitive mistake-handling philosophy. The F value makes the p-value (0.032) exceedingly low. These values determine whether independent variables may accurately predict the dependent variable. The p-value is significant if it is less than the alpha level, usually 0.05. This discrepancy suggests a statistically significant divergence between nurses' patient safety culture beliefs and their non-punitive error reaction. Hypothesis: H6: Nurses' patient safety culture and mistake reporting are consistent. This is error reporting theory. This F value has a tiny p-value of 0.049. These values determine whether independent variables may accurately predict the dependent variable. The p-value is significant if it is less than the alpha level, usually 0.05. Nurses' view of patient safety culture and their mistake rate vary statistically.
Help with management: Hypothesis: H7 shows no change in nurses' assessments of patient safety culture and managerial help.
This F value has a tiny p-value of 0.022. These values determine whether independent variables may accurately predict the dependent variable. The p-value is significant if it is less than the alpha level, usually 0.05. This suggests that nurses' opinions of patient safety culture and management support vary statistically.
Experience in Operations: This F value has a tiny p-value of 0.034. These values determine whether independent variables may accurately predict the dependent variable. The p-value is significant if it is less than the alpha level, usually 0.05. Based on years of work experience, nurses' evaluations of patient safety culture vary statistically.

8.7 Bank the effectiveness of PSC in your hospital

	Frequency	Percent	Valid Percent
Excellent	40	20.0	20.0
Good	72	36.0	36.0
Average	60	30.0	30.0
Bad	12	6.0	6.0
Poor	16	8.0	8.0
Total	200	100.0	100.0

From the table its clear that 36% of the respondents affirms that they follow good patient safety culture in their hospital unit while 30% of them ranked the effectivenss of patient safety culture to be average in their hospital and 20 % of them ranked their hospital excellent interms of patient safety culture followed. Only 8% and 6% of the respondents ranked poor and bad respectively of their hospital.

9. FINDINGS

Demographical Profile Analysis: • 26% of respondents work 20-39 hours per week and 40-59 hours per week.
•32% of responders had worked at the hospital for 16-20 years.
•The majority of responders work in lab, pediatrics, and surgical units.

Factor analysis:
Factor analysis identified 7 variables affecting nurses' patient safety culture perceptions. We observe 'job satisfaction' in factor 2 and 'teamwork' in factor 1. Factor 3 is Stress recognition, factor 4 is Communication openness, factor 5 is Non punitive response to error, factor 6 is error reporting, and factor 7 is Management support.

CHI SQUARE TEST:
Teamwork, Gender satisfaction, Communication openness, Stress recognition, Non-punitive response to errors, Error reporting, and Management support are significant factors affecting nurses' perceptions of patient safety culture ($p<0.05$).
ANOVA ANALYSIS: • The F value has a very modest p-value. The p-value is compared to the alpha level (usually 0.05) and $p<0.05$. collaboration contributes to patient safety, as shown by the statistically significant association between collaboration and nurses' opinion of patient safety culture. The nurses saw unit collaboration as a hospital strength because they believe cooperation and coordination are essential to patient safety.
• The p-value for F (13.289) is quite low. The p-value is compared to the alpha level (usually 0.05) and $p<0.05$. The statistically significant difference between work satisfaction and nurses' opinion of patient safety culture shows the relevance of job satisfaction in patient safety culture. Positive work environments diminish unfavorable opinions of nurses, improving patient safety in healthcare.
• The p-value for this F value is low. The p-value is compared to the alpha level (usually 0.05) and $p<0.05$. This suggests that nurses' perceptions of patient safety culture vary statistically from communication openness. Open communication is vital because nurses who can communicate well may minimize mistakes and improve patient safety.
• The p-value for this F value is low. The p-value is compared to the alpha level (usually 0.05) and $p<0.05$. A statistically significant difference exists between

nurses' stress recognition and patient safety culture perceptions. Healthcare workers are stressed. This may increase medical mistakes, compromising patient safety. The research found that stress awareness among nurses improves patient safety culture perception.

•This F value has a low p-value. The p-value is compared to the alpha level (usually 0.05) and $p<0.05$. A statistically significant difference exists between nurses' perceptions of patient safety culture and their non-punitive mistake reaction.The findings show that no-blame culture and non-punitive mistake reaction reduce detrimental occurrences.

•This F value has a low p-value. The p-value is compared to the alpha level (usually 0.05) and $p<0.05$. This suggests that nurses' mistake reporting and patient safety culture perspective vary statistically. The study explored whether mistake reporting helped nurses minimize adverse occurrences. Error reporting reduces personal failures and improves the system to avoid injury, according to nurses.

• The F value has an extremely low p-value (0.0000). The p-value is compared to the alpha level (usually 0.05) and $p<0.05$. This means that there is a statistically significant difference between management support and nurses' perception of patient safety culture. It is important to note that promoting the hospital's safety culture requires the change in the values, beliefs, and behavior of organization staff in line with the safety culture's values.

Patient safety culture effectiveness:

• 36% of respondents report a strong patient safety culture in their hospital unit.

• 20% rated their institution as outstanding for patient safety culture maintained.

• 30% rated patient safety culture effectiveness as average in their institution.

• Only 8% and 6% of respondents rated their hospital as poor or awful.

10. RECOMMENDATIONS:

Considering the above and subsequent information, hospitals must foster a culture of safety among its providers.

•Management and supervisor involvement, formal and transparent communication, policy implementation and monitoring, proper error reporting, training activities, role clarity and teamwork, patient participation in care, and collecting and analyzing patient feedback affect an organization's safety culture.

• Patient safety education is crucial for hospital staff to offer safe treatment. • Leadership with open management practices and frequent engagement with frontline providers is vital to a learning and information sharing culture. Regular safety talks at management rounds and staff meetings will promote compliance with safety procedures, monitoring, and reporting.

•Annually at organizational and administrative levels, safety culture evaluation tools may evaluate safety culture characteristics and identify weaknesses.

• The research found that patient involvement helps organizations adopt a safe mentality.

• The research pioneers the first comprehensive examination of the Framework in Indian healthcare, emphasizes patient involvement as a key factor in patient safety culture, and examines how cultural aspects impact patient safety practices.

•The continuing patient safety improvement program is improved by making appropriate modifications.

•A safety culture evaluation that tracks cultural shifts to evaluate clinical outcomes is also necessary.

• By improving information availability, safety cultures improve and standardize healthcare systems. It prevents and mitigates faults. Organizational safety culture alters the negative mindset towards errors and promotes a proactive approach to recognizing potential dangers. It will also promote patient engagement in treatment as a right and a way to guarantee that all patients get competent medical care.

11. CONCLUSION:

Our results may help hospital administration improve the patient safety culture among nurses. They may also help shape the hospital's strategy for managing the possible hazards and opportunities associated with patient safety implementation. Hospitals should pay close attention to the shortcomings revealed in this research because they pose a danger to patient safety. Understanding hospital nurses' impressions of the patient safety culture is critical for hospital policymakers seeking to enhance the patient safety culture from the perspective of the nursing workforce. Nurses with lesser workloads had a greater view of patient safety, and vice versa. As a result, regulations regarding nurse staffing are critical to improving the patient safety culture. These dimensions include variables that may have an impact on patient safety at the hospital, either favorably or adversely. Errors and unanticipated occurrences are caused by a lack of cooperation across hospital units.Good communication and a prompt reaction to staff ideas to enhance patient safety may help prevent mishaps. The suggestions made in this evaluation may assist improve the patient safety culture, help nurses make decisions, and execute patient safety measures.

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