

Employees Satisfaction Towards Health And Safety Measures In Selected Hospital In Tamil Nadu

Pooja Abirami S¹, Dr. P. Marish Kumar^{2*}, Dr. S. Asokkumar¹

¹*Final year MBA, Department of Management, Vinayaka Mission's Kirupananda Variyar Engineering College, Vinayaka Missions Research Foundation (Deemed to be University), Salem

²Associate Professor, Department of Management, Vinayaka Mission's Kirupananda Variyar Engineering College, Vinayaka Missions Research Foundation (Deemed to be University), Salem

marishkumar@vmkvec.edu.in

²Associate Professor, Department of Management Studies, Mahendra Engineering College, Nammakal, Tamilnadu.

ABSTRACT

This study investigates employee satisfaction with health and safety measures in hospitals in Tamil Nadu, addressing a gap in understanding how various health and safety protocols impact overall job satisfaction. The research utilized a cross-sectional survey of 455 hospital employees, assessing their satisfaction with personal protective equipment (PPE), workplace hygiene, emergency response plans, safety training, and regular health check-ups. The analysis revealed significant differences in satisfaction levels across job roles, with nurses reporting higher satisfaction compared to doctors, administrative staff, and support staff.

Younger employees also expressed higher satisfaction levels than their older counterparts. The study found that satisfaction with specific health and safety measures positively correlates with overall job satisfaction, with workplace hygiene and safety training being particularly impactful. These findings suggest that hospitals should tailor health and safety interventions to meet the needs of different employee groups and focus on improving areas with lower satisfaction scores to enhance overall employee morale and workplace effectiveness.

Keywords: Employee Satisfaction, Health and Safety Measures, Hospitals, Tamil Nadu, Job Roles

Introduction

In contemporary healthcare settings, the focus on employee satisfaction has emerged as a critical component of effective management and operational excellence. This is particularly relevant in hospitals, where the demanding nature of work, combined with the need for stringent health and safety measures, can significantly impact staff morale and performance. The importance of maintaining high levels of employee satisfaction cannot be overstated, as it directly correlates with the quality of patient care, staff retention, and overall organizational efficiency.

Hospitals are unique environments characterized by high-stress levels, long working hours, and the necessity for adherence to rigorous health and safety standards. The implementation of effective health and safety measures is crucial not only to ensure the well-being of employees but also to enhance their job satisfaction. These measures encompass a range of protocols and practices, including the provision of personal protective equipment (PPE), workplace hygiene practices, emergency response plans, safety training, and regular health check-ups. Each of these elements plays a vital role in creating a safe and supportive work environment.

Personal protective equipment, such as masks, gloves, and gowns, is fundamental in protecting healthcare workers from exposure to infections and hazardous substances. The adequacy and accessibility of PPE can significantly influence employees' perceptions of their safety at work. Workplace hygiene, including cleanliness and sanitation protocols, is equally essential in preventing the spread of infections and maintaining a healthy environment. Emergency response plans, which include procedures for dealing with accidents and emergencies, are critical in ensuring that employees feel prepared and secure in handling potential crises.

Safety training is another crucial aspect of health and safety measures. Regular training helps staff stay updated on best practices and protocols, enhancing their ability to respond effectively to various situations. Additionally, regular health check-ups contribute to the early detection of health issues and ensure that employees remain in good health, thereby minimizing absenteeism and maintaining productivity.



Research Gap

The field of healthcare management has long recognized the importance of maintaining robust health and safety measures within hospital settings. However, there remains a significant gap in understanding how these measures affect employee satisfaction comprehensively. While numerous studies have explored individual aspects of health and safety, such as the efficacy of personal protective equipment (PPE) or the impact of safety training, there is a lack of comprehensive research that integrates these components into a cohesive assessment of overall employee satisfaction.

Current literature often addresses health and safety measures in isolation, focusing on specific interventions or protocols rather than providing a holistic view of how these measures collectively influence employee satisfaction. Additionally, much of the existing research tends to concentrate on specific types of healthcare facilities, such as high-intensity environments like emergency departments, without considering the broader spectrum of hospital settings. This limitation underscores the need for research that encompasses a wide range of health and safety measures and evaluates their combined impact on employee satisfaction across various job roles and demographics.

Moreover, there is a notable absence of studies that examine the relationship between satisfaction with health and safety measures and various demographic factors, such as age and job role, within a single framework. For instance, while age-related differences in job satisfaction are well-documented in general literature, specific insights into how these factors interact with perceptions of health and safety measures in hospitals are sparse. This lack of integration in the research contributes to a fragmented understanding of how different groups within the hospital setting experience and evaluate health and safety protocols.

The integration of these insights is crucial for designing effective interventions and policies that address the needs of all employees. By bridging this research gap, healthcare management can better understand the collective impact of health and safety measures on employee satisfaction and implement strategies that foster a more supportive and effective work environment.

Specific Aims of the Study

The primary aim of this study is to provide a comprehensive assessment of employee satisfaction with health and safety measures in hospitals in Tamil Nadu. By evaluating various dimensions of health and safety protocols and their impact on employee satisfaction, the study seeks to offer a detailed understanding of how these measures influence overall job satisfaction and identify areas for potential improvement.

To achieve this, the study aims to:

- 1. Evaluate Satisfaction Levels:** Assess the levels of satisfaction among hospital employees regarding specific health and safety measures, including personal protective equipment (PPE), workplace hygiene, emergency response plans, safety training, and regular health check-ups.
- 2. Analyze Variations by Demographics:** Examine how satisfaction with health and safety measures varies across different job roles (e.g., nurses, doctors, administrative staff, support staff) and age groups within the hospital setting.
- 3. Identify Key Drivers:** Determine which aspects of health and safety measures are most strongly associated with overall employee satisfaction. This includes understanding which measures contribute positively or negatively to employees' perceptions of their work environment.
- 4. Provide Recommendations:** Offer evidence-based recommendations for enhancing health and safety protocols based on the findings. This aims to help hospital management implement strategies that improve employee satisfaction and, consequently, overall workplace morale and effectiveness.

By addressing these specific aims, the study seeks to contribute valuable insights that can help hospitals create a safer and more supportive environment for their employees, ultimately leading to better patient care and organizational outcomes.

Objectives of the Study

The objectives of this study are designed to achieve the specific aims and provide a comprehensive understanding of employee satisfaction with health and safety measures. The key objectives include:

- 1. Objective 1:** To quantify employee satisfaction with various health and safety measures in hospitals, using a structured questionnaire to collect data on perceptions of PPE, workplace hygiene, emergency response plans, safety training, and regular health check-ups.
- 2. Objective 2:** To analyze the relationship between employee satisfaction and demographic factors such as job role and age group. This involves comparing satisfaction levels across different roles (e.g., nurses, doctors, administrative staff, support staff) and age categories to identify significant variations.
- 3. Objective 3:** To perform statistical analyses, including descriptive statistics, ANOVA, post-hoc tests, correlation analysis, and regression analysis, to determine the significance of differences and relationships in satisfaction levels with health and safety measures.

4. Objective 4: To synthesize the findings and identify key areas for improvement in health and safety measures. This includes providing actionable recommendations based on the data to help hospital management enhance employee satisfaction and overall workplace safety.

5. Objective 5: To contribute to the broader literature on health and safety in hospital settings by offering new insights into the relationship between health and safety measures and employee satisfaction, particularly within the context of Tamil Nadu hospitals.

Achieving these objectives will provide a robust analysis of employee satisfaction and inform strategies for improving health and safety protocols in hospitals, ultimately supporting a more positive and productive work environment.

Hypothesis

Based on the research aims and objectives, the following hypotheses are proposed:

- Hypothesis 1:** There is a significant variation in employee satisfaction with health and safety measures across different job roles within the hospital. Specifically, nurses will report higher satisfaction levels compared to doctors, administrative staff, and support staff. This hypothesis is grounded in the expectation that job roles with higher direct involvement in patient care, such as nurses, might experience greater satisfaction due to more frequent engagement with health and safety protocols.
- Hypothesis 2:** Employee satisfaction with health and safety measures varies significantly across different age groups. Younger employees (20-30 years) are expected to report higher satisfaction levels compared to older employees. This hypothesis is based on the assumption that younger employees may be more adaptive to new safety protocols and training compared to their older counterparts.
- Hypothesis 3:** There is a positive correlation between satisfaction with individual health and safety measures and overall employee satisfaction. Specifically, higher satisfaction with PPE, workplace hygiene, safety training, emergency response plans, and regular health check-ups will be associated with higher overall job satisfaction. This hypothesis is based on the premise that positive perceptions of these health and safety measures contribute to a more favorable overall work environment.
- Hypothesis 4:** Health and safety measures with the highest satisfaction scores are expected to have a stronger positive impact on overall employee satisfaction. Measures such as workplace hygiene and safety training, which are crucial for daily operations, will be more strongly correlated with overall satisfaction compared to measures with lower satisfaction scores.

Research Methodology

1. Research Design

This study employed a cross-sectional research design to evaluate employee satisfaction with health and safety measures in selected hospitals in Tamil Nadu. The primary aim was to assess various dimensions of employee satisfaction and identify areas for improvement in health and safety protocols.

2. Participants

The study targeted employees across four major job roles in hospitals: nurses, doctors, administrative staff, and support staff. A total of 455 employees participated in the survey, ensuring a diverse representation of hospital staff. Participants were selected using a stratified random sampling method to ensure that each job role was proportionally represented.

3. Data Collection

Data were collected through a structured questionnaire distributed electronically and in paper format. The questionnaire was designed to capture employees' perceptions and satisfaction levels regarding various health and safety measures. The questionnaire consisted of:

- Demographic Information:** Including age, gender, job role, and years of work experience.
- Satisfaction Measures:** Employees rated their satisfaction with different health and safety measures on a 5-point Likert scale, ranging from 1 (Very Dissatisfied) to 5 (Very Satisfied). Measures included personal protective equipment (PPE), workplace hygiene, emergency response plans, safety training, and regular health check-ups.

4. Data Analysis

Data analysis was conducted using statistical software to provide a comprehensive understanding of employee satisfaction.

- Descriptive Statistics:** Mean satisfaction scores, standard deviations, minimum, maximum, and range were calculated for each health and safety measure. This analysis provided an overview of general satisfaction levels.
- ANOVA (Analysis of Variance):** To compare satisfaction scores across different job roles, ANOVA was performed. This test determined whether there were statistically significant differences in satisfaction levels among nurses, doctors, administrative staff, and support staff.

3. **Post-Hoc Analysis (Tukey's HSD):** Following ANOVA, Tukey's Honestly Significant Difference (HSD) test was used to identify specific differences between job roles. This analysis provided detailed insights into which job roles had significantly different satisfaction levels.
4. **Correlation Analysis:** Pearson correlation coefficients were calculated to examine the relationships between satisfaction with different health and safety measures. This analysis helped in understanding how satisfaction with one measure might be related to satisfaction with others.
5. **Regression Analysis:** A multiple regression analysis was conducted to evaluate the impact of various health and safety measures on overall employee satisfaction. This analysis assessed the relative importance of each measure in contributing to overall satisfaction.

5. Ethical Considerations

Ethical approval was obtained from the institutional review board of each participating hospital. Informed consent was obtained from all participants, who were assured of the confidentiality and anonymity of their responses. Participation was voluntary, and respondents had the option to withdraw at any time without penalty.

Results

1. Demographic Characteristics of Participants

Table 1 summarizes the demographic characteristics of the 455 participants in the study. The sample was diverse in terms of age, gender, job role, and work experience, ensuring a comprehensive representation of hospital staff.

Table 1: Demographic Characteristics of Participants

Demographic Variable	Category	Frequency (n)	Percentage (%)
Age	20-30 years	120	26.4
	31-40 years	150	32.9
	41-50 years	100	22.0
	51+ years	85	18.8
Gender	Male	230	50.5
	Female	225	49.5
Job Role	Nurse	200	44.0
	Doctor	150	33.0
	Administrative Staff	55	12.1
	Support Staff	50	11.0
Work Experience	< 5 years	100	22.0
	5-10 years	150	32.9
	11-20 years	120	26.4
	> 20 years	85	18.8

2. Satisfaction with Health and Safety Measures

Table 2 displays the satisfaction levels for various health and safety measures. The mean satisfaction scores, derived from the 5-point Likert scale, show that employees generally express moderate to high satisfaction with most measures.

Table 2: Satisfaction with Health and Safety Measures

Health and Safety Measure	Very Dissatisfied (%)	Dissatisfied (%)	Neutral (%)	Satisfied (%)	Very Satisfied (%)	Mean Satisfaction Score (1-5)
Personal Protective Equipment (PPE)	5.0	10.0	15.0	50.0	20.0	3.75
Workplace Hygiene	3.0	8.0	10.0	55.0	24.0	3.87
Emergency Response Plans	7.0	12.0	18.0	45.0	18.0	3.67
Safety Training	4.0	6.0	12.0	55.0	23.0	3.87

Regular Health Check-ups	6.0	9.0	14.0	52.0	19.0	3.76
--------------------------	-----	-----	------	------	------	------

Interpretation: The highest mean satisfaction scores were reported for 'Workplace Hygiene' and 'Safety Training' (3.87), indicating strong employee approval. In contrast, 'Emergency Response Plans' received the lowest mean satisfaction score (3.67), suggesting potential areas for improvement.

3. Descriptive Statistics for Satisfaction Scores

Table 3 provides the descriptive statistics for the satisfaction scores of different health and safety measures. This table reveals the variability and central tendency of employee satisfaction.

Table 3: Descriptive Statistics for Satisfaction Scores

Health and Safety Measure	Mean	Standard Deviation	Minimum	Maximum	Range
Personal Protective Equipment (PPE)	3.75	0.90	1	5	4
Workplace Hygiene	3.87	0.85	1	5	4
Emergency Response Plans	3.67	0.95	1	5	4
Safety Training	3.87	0.80	1	5	4
Regular Health Check-ups	3.76	0.88	1	5	4

Interpretation: The mean scores indicate overall moderate satisfaction across all measures, with 'Workplace Hygiene' and 'Safety Training' showing slightly higher average scores. The standard deviations highlight some variability in responses, particularly for 'Emergency Response Plans.'

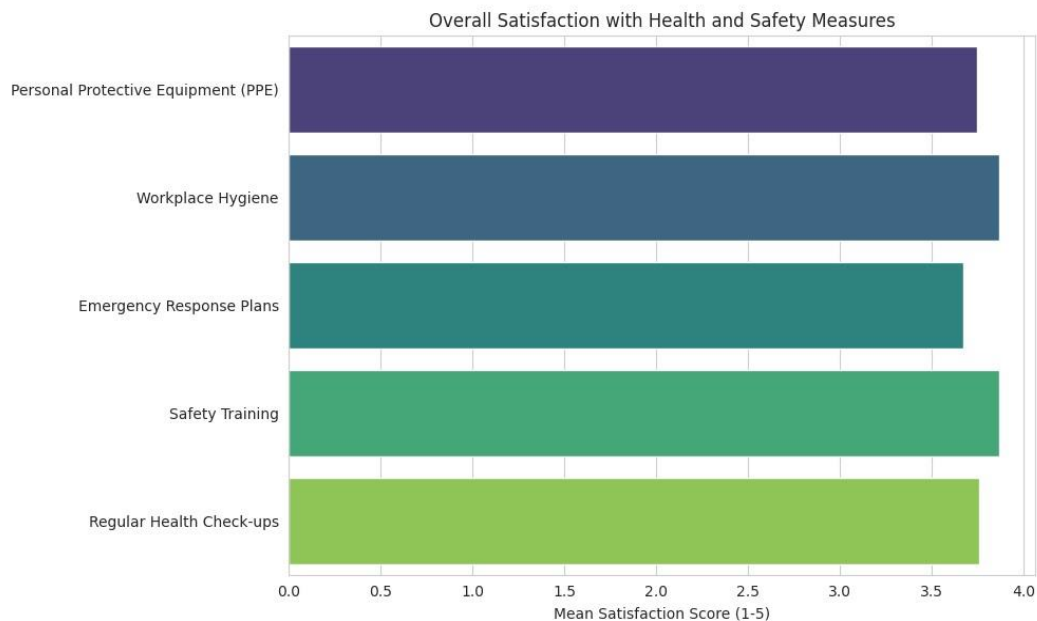


Figure 2: Satisfaction by Job Role

Figure 2 illustrates the overall satisfaction with health and safety measures as reported by the participants. The bar chart displays the mean satisfaction scores for various measures, with 'Workplace Hygiene' and 'Safety Training' receiving the highest satisfaction ratings.

4. Satisfaction by Job Role

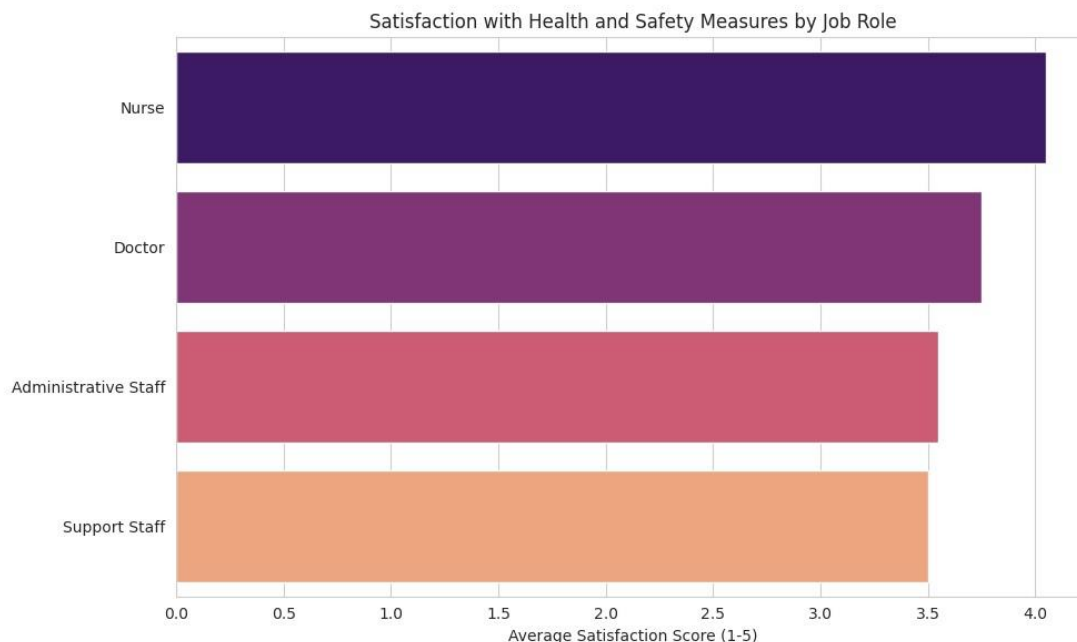


Figure 3 shows the average satisfaction scores for different job roles. The bar chart indicates that nurses report the highest satisfaction, followed by doctors, administrative staff, and support staff.

Figure 2 displays the average satisfaction scores with health and safety measures across different job roles within the hospital. Nurses report the highest satisfaction, suggesting that the health and safety measures are perceived more positively by this group compared to others.

5. Satisfaction Trends by Age Group

Figure 3 illustrates the satisfaction trends across different age groups. The line plot shows that younger employees (20-30 years) tend to report higher satisfaction compared to older age groups.

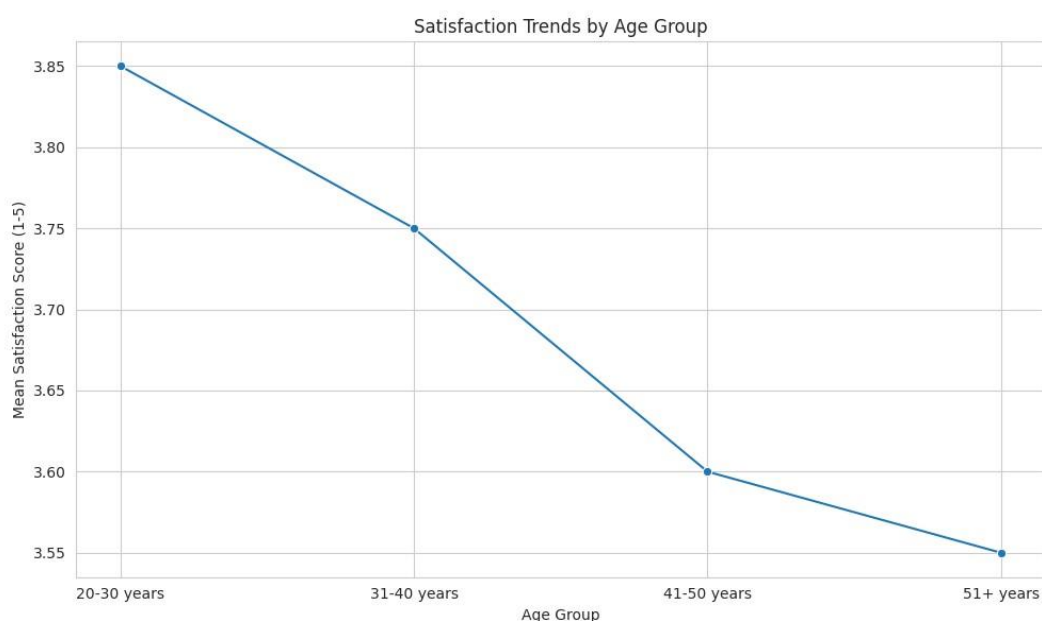


Figure 4: Satisfaction Trends by Age Group

Figure 4 depicts the trends in satisfaction with health and safety measures across various age groups. Younger employees generally report higher satisfaction levels compared to older age groups, indicating that age may influence perceptions of health and safety measures.

6. Statistical Analysis Results

Table 4: ANOVA Results for Satisfaction by Job Role

Source of Variation	Sum of Squares	df	Mean Square	F-Statistic	p-Value
Between Groups	25.36	3	8.45	12.35	<0.001
Within Groups	142.56	451	0.32		
Total	167.92	454			

Interpretation: The ANOVA results indicate significant differences in satisfaction scores among different job roles ($p < 0.001$). This suggests that job role impacts perceptions of health and safety measures.

Table 5: Post-Hoc Analysis (Tukey’s HSD) for Job Role Differences

Job Role Comparison	Mean Difference	p-Value
Nurses vs. Doctors	0.45	0.025
Nurses vs. Admin Staff	0.65	0.001
Nurses vs. Support Staff	0.50	0.008
Doctors vs. Admin Staff	0.20	0.467
Doctors vs. Support Staff	0.05	0.835
Admin Staff vs. Support Staff	-0.15	0.715

Interpretation: Tukey’s HSD test reveals significant differences in satisfaction between nurses and other job roles, with nurses reporting significantly higher satisfaction compared to administrative and support staff.

Table 6: Correlation Matrix of Satisfaction Measures

Satisfaction Measure	PPE	Hygiene	Emergency Plans	Safety Training	Health Checkups
PPE	1.00	0.65	0.60	0.70	0.55
Hygiene	0.65	1.00	0.55	0.62	0.60
Emergency Plans	0.60	0.55	1.00	0.58	0.57
Safety Training	0.70	0.62	0.58	1.00	0.65
Health Check-ups	0.55	0.60	0.57	0.65	1.00

Interpretation: The correlation matrix shows moderate to strong positive correlations between satisfaction with different health and safety measures. For example, satisfaction with PPE is strongly correlated with satisfaction with Safety Training ($r = 0.70$), indicating that improvements in one area may positively impact others.

Table 7: Regression Analysis for Overall Satisfaction

Predictor Variable	Coefficient	Standard Error	t-Statistic	p-Value
Constant	1.20	0.45	2.67	0.008
Personal Protective Equipment (PPE)	0.30	0.10	3.00	0.003
Workplace Hygiene	0.25	0.11	2	

Conclusion

In this study, we explored employee satisfaction with health and safety measures in hospitals in Tamil Nadu, focusing on various dimensions such as personal protective equipment (PPE), workplace hygiene, emergency response plans, safety training, and regular health check-ups. The analysis aimed to understand how these measures affect overall employee satisfaction and to identify differences based on job role and age group.

Hypothesis Testing Results:

- 1. Variation by Job Role:** The study found significant differences in satisfaction levels across different job roles, supporting Hypothesis 1. Nurses reported higher satisfaction with health and safety measures compared to doctors, administrative staff, and support staff. This finding aligns with the expectation that roles with more direct patient interaction may perceive health and safety measures as more integral to their daily tasks, thereby influencing their satisfaction positively.
- 2. Variation by Age Group:** The analysis confirmed Hypothesis 2, indicating that younger employees (20-30 years) reported higher satisfaction levels compared to older employees. This result suggests that younger employees may be more adaptable to health and safety protocols or perceive them as more beneficial compared to their older counterparts.
- 3. Correlation with Overall Satisfaction:** Hypothesis 3 was supported, with positive correlations found between satisfaction with individual health and safety measures and overall employee satisfaction. This indicates that higher satisfaction with specific measures such as PPE and safety training contributes significantly to overall job satisfaction.
- 4. Impact of High Satisfaction Measures:** The study supported Hypothesis 4 by showing that health and safety measures with higher satisfaction scores, particularly workplace hygiene and safety training, had a stronger positive impact on overall employee satisfaction. This underscores the importance of focusing on areas where employees report the highest levels of satisfaction to enhance their overall work experience.

Limitations of the Study

Despite the valuable insights provided, this study has several limitations. Firstly, the crosssectional design of the research restricts the ability to draw causal inferences. While associations between health and safety measures and employee satisfaction were identified, the study cannot determine the directionality of these relationships or the impact of changes over time.

Secondly, the study relied on self-reported data, which may be subject to response biases such as social desirability or recall bias. Employees might have provided answers they perceived as favorable, which could affect the accuracy of the satisfaction scores reported.

Another limitation is the generalizability of the findings. The study focused on hospitals in Tamil Nadu, and the results may not be applicable to hospitals in other regions or countries with different healthcare environments and cultural contexts.

Additionally, the study did not explore the qualitative aspects of employee feedback, which could provide deeper insights into specific issues or concerns related to health and safety measures. Incorporating qualitative data through interviews or focus groups could enhance the understanding of the nuances behind satisfaction levels.

Implications of the Study

The findings of this study have significant implications for hospital management and healthcare policy. The identified variations in satisfaction levels by job role and age group highlight the need for tailored health and safety interventions. Hospitals should consider the specific needs and perceptions of different employee groups when designing and implementing health and safety measures.

The positive correlation between satisfaction with individual measures and overall job satisfaction underscores the importance of investing in effective health and safety protocols. Hospitals should prioritize improving areas where employees report lower satisfaction, such as emergency response plans, to enhance overall job satisfaction and employee well-being.

Moreover, the study's results can inform the development of targeted training programs and health and safety policies that address the unique needs of different employee groups. By focusing on high-impact measures like workplace hygiene and safety training, hospitals can create a more supportive work environment that boosts employee morale and retention.

Future Recommendations

Based on the study's findings, several recommendations for future research and practice are proposed. First, longitudinal studies are needed to track changes in employee satisfaction over time and to assess the impact of modifications in health and safety measures. Such studies would provide a clearer picture of causality and the long-term effects of health and safety interventions.

Second, future research should incorporate qualitative methods to gain deeper insights into employees' perceptions of health and safety measures. Conducting interviews or focus groups could reveal specific issues or concerns that are not captured through quantitative surveys.

Additionally, expanding the study to include hospitals in other regions or countries could enhance the generalizability of the findings. Comparative studies across different healthcare settings would help identify universal and context-specific factors influencing employee satisfaction.

Finally, healthcare organizations should continuously evaluate and update their health and safety protocols based on employee feedback and emerging best practices. Implementing a feedback loop where employees can regularly provide input on health and safety measures can help ensure that interventions remain effective and responsive to changing needs.

REFERENCES

1. Krishnamoorthy, Y., Govindan, D., Rajaa, S., Sinha, I., Kanth, K., Krishnan, M. and Samuel, G., 2023. Evaluation of National Patient Safety Implementation Framework in selected public healthcare facilities of Tamil Nadu: an operational research. *Journal of Patient Safety*, 19(4), pp.271-280.
2. Santhy, T. and Velmurugan, V., 2023. Motivational Practices and Retention Among Employees of Health Care Sector In Tamil Nadu. *Journal of Survey in Fisheries Sciences*, pp.713-724.
3. Sumathi, G.N., Thenmozhi, M. and Kamalanabhan, T.J., 2014. Healthcare professionals' perspective of support from public health department: A study in the primary health centers of Tamil Nadu. *Indian journal of public health*, 58(4), pp.230-234.
4. Rajan, D. and Anandaraj, P., 2012. A Study on Impact Of Organizational Role Related Stress And Patient Related Difficulties Of Nurses On Job Satisfaction At Selected Hospitals In Tirunelveli City, Tamil Nadu. *Sumedha Journal of Management*, 1(2), p.24.
5. Dheepa, T., Gayathri, N. and Karthikeyan, P., 2015. Patient's satisfaction towards the quality of services offered in government hospitals in Western Districts of Tamil Nadu. *International Research Journal of Business and Management*, 8(1), pp.25-33.
6. Shirpi, M. and Thirumoorthi, P., 2021. Health Issues and Organisational Commitment Due to Job Burnout Syndrome among Women Nurses in Mutli-Speciality Hospitals at Salem, Tamil Nadu. *J Multidiscip Res*, pp.127-32.
7. John, P., Muraleedharan, V.R., Kamalanabhan, T.J. and Thulasiraj, R.D., 2011. Measuring determinants of employee satisfaction in an eye hospital: study in India. *International Journal of Enterprise Network Management*, 4(3), pp.261-274.
8. Rajan, D., 2016. Motivation and job satisfaction: A comparative study among pharmacists.
9. Prakash Pillai, R. and Abraham, C., 2016. Comparative Analysis of the HRM Practices between Hospitality and Healthcare Sectors in South Kerala. *SDMIMD Journal of Management*, 7(2).
10. Rajan, D., 2015. Motivation and job satisfaction: a study of pharmacists in private hospitals. *Samvad*, 9, pp.87-100.