

# Real-Time Challenges In Healthcare Administration: A Study Across Diverse Healthcare Setups In Tamil Nadu

A. Memosa Mary Delphine<sup>1</sup>, R. Srinivasan<sup>2</sup>

<sup>1,2</sup>AMET Business School, AMET University, Chennai - 603112, Tamil Nadu, India

\*Corresponding author: [srinivasan.r@ametuniv.ac.in](mailto:srinivasan.r@ametuniv.ac.in)

---

## Abstract

Healthcare administration is a critical component in ensuring the delivery of efficient and quality healthcare services. In Tamil Nadu, healthcare administrators face numerous challenges, including financial constraints, staffing shortages, regulatory compliance, technological integration, and quality assurance. Understanding these real-time challenges is essential for developing effective management strategies to improve healthcare delivery systems. This study aimed to investigate the administrative challenges encountered by healthcare administrators across various healthcare setups in Tamil Nadu, with a focus on identifying key problem areas and exploring variations based on gender, position, and educational background. A cross-sectional, questionnaire-based survey was conducted among 127 healthcare professionals in Tamil Nadu, including Chief Medical Officers, Hospital Administrators, Nursing Superintendents, HR/Finance Managers, and Consultants. The questionnaire addressed 20 critical administrative challenges rated on a 5-point Likert scale. Data were collected via Google Forms and distributed through social media platforms and email. Statistical analyses were performed using IBM SPSS Version 25. The majority of respondents (59.1%) were female, and nursing professionals constituted the largest educational group (45.7%). The most frequently reported challenges included financial and funding issues (56.7% strongly agree), staff shortage and attrition (52% strongly agree), legal and ethical challenges (52.8% strongly agree), and the implementation of technology (48% strongly agree). Chi-square analysis revealed significant associations between gender and perceptions of financial constraints, recruitment, quality care delivery, insurance empanelment, legal issues, branding, and new service facilitation ( $p < 0.05$ ). Independent sample t-tests indicated that male respondents perceived higher levels of administrative challenges in several domains. Tukey HSD analysis showed significant differences in the perception of challenges across professional roles and educational backgrounds. The study highlights multifaceted and systemic administrative challenges in Tamil Nadu's healthcare sector, emphasizing the need for strategic interventions. Capacity building, leadership training, technological support, and policy-level reforms are essential to strengthen hospital administration and improve healthcare delivery outcomes.

**Keyword:** Healthcare Administration, Hospital Management, Administrative Challenges, Healthcare Workforce, Financial Constraints, Technology Adoption, Tamil Nadu, Health Services Management.

---

## INTRODUCTION

Hospital administration plays a pivotal role in ensuring the delivery of quality healthcare services, even though administrators are not directly involved in clinical treatment protocols (Bhati et al., 2023). Their responsibilities encompass managing hospital operations, coordinating between departments, maintaining financial stability, overseeing human resources, and ensuring compliance with regulatory standards (Sari et al., 2017; Bhati et al., 2023). Efficient hospital management is directly linked to improvements in the quality of patient care, making it essential for healthcare administrators to possess a diverse set of competencies, including leadership, financial acumen, technological adaptability, and policy management (Bhati et al., 2023; Harbi et al., 2024). With the increasing complexity of healthcare delivery, there is a growing need to employ professional hospital administrators, particularly those trained in Health Services Management (Wolper, 2011, Cronin, 2018, Crowell and Boynton, 2020), to meet the operational demands of modern healthcare systems.

Over the past decade, healthcare utilisation has significantly increased due to population growth, rising health awareness, and advancements in medical technologies (Chandra and Skinner, 2012). This has intensified the pressure on healthcare administrators to balance costs, optimise resources, and ensure timely, high-quality

care (WHO, 2018; Bhati et al., 2023). Hospital administrators are now tasked with multiple challenges such as managing funding constraints, facilitating technological adoption (including AI and telehealth), ensuring legal and ethical compliance, training healthcare personnel, and maintaining patient safety and service quality (Singh et al., 2020; Bhati et al., 2023; Yusuf et al., 2025). In India, especially in states like Tamil Nadu, healthcare administrators must also navigate population overload, the recruitment of skilled professionals, competitive healthcare markets, and stringent statutory requirements (George, 2023; Ray and Sahu, 2025). Furthermore, with patient expectations evolving rapidly, administrators face additional demands for advanced facilities, seamless service delivery, and transparent healthcare systems (Bhati et al., 2023; Yusuf et al., 2025). Given these multifaceted challenges, the present study was undertaken to systematically investigate the real-time administrative challenges encountered by healthcare administrators across various healthcare setups in the Tamil Nadu region, aiming to provide insights into the areas that require strategic interventions for sustainable healthcare management.

## **MATERIALS AND METHODS**

A questionnaire-based cross-sectional survey was conducted to identify and analyze the key administrative challenges faced by healthcare administrators across various healthcare setups in Tamil Nadu. The study focused on multiple domains of healthcare administration, including financial management, human resource management, legal compliance, technology adoption, patient safety, and service delivery. A random sampling method was employed, and the structured questionnaire was distributed through Google Forms (<https://forms.gle/AVBoCVyVAnKiJb9R7>) to administrators representing different healthcare institutions across Tamil Nadu. The target population included Chief Medical Officers, Nursing Superintendents, HR and Finance Managers, Hospital Administrators, Healthcare Consultants, and other administrative personnel. The questionnaire comprised two sections: the first captured demographic information such as gender, educational qualification, designation, and type of institution, while the second section included 20 statements related to administrative challenges, which were rated on a 5-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree). The survey link was circulated widely through various digital platforms, including Facebook, WhatsApp, LinkedIn, and email, to ensure a broad and representative response from healthcare administrators across the region.

The collected data were analyzed using IBM SPSS Version 25. Descriptive statistics, including frequencies and percentages, were used to summarize the demographic variables and response patterns related to the 20 administrative challenge statements. To explore associations between categorical variables, the Chi-square test of independence was applied. Furthermore, a one-way Analysis of Variance (ANOVA) was conducted to compare the mean scores of perceived challenges across different educational and professional groups. For statistically significant ANOVA results ( $p < 0.05$ ), post-hoc comparisons using the Tukey HSD test were performed to identify specific group differences. An independent sample t-test was used to assess gender-based differences in the perception of challenges. Additionally, Pearson correlation analysis was conducted to examine the interrelationships between different administrative challenge domains, generating a correlation matrix to highlight the strength and direction of associations. All statistical analyses were performed using a two-tailed approach, with the level of significance set at  $p < 0.05$  and a 95% confidence interval.

## **RESULT**

In this study, a total of 127 healthcare professionals participated in the survey, representing a diverse range of backgrounds and positions within the healthcare sector across Tamil Nadu and India. The gender distribution of the respondents comprised 40.2% male, 59.1% female, and 0.8% who preferred not to disclose their gender. Participants came from a wide spectrum of educational qualifications, encompassing clinical, nursing, allied health, administrative, technical, and management disciplines. These qualifications included medical degrees such as MBBS, DNB, MD, MRCP, MCh, and MS Ortho; nursing qualifications including B.Sc Nursing, M.Sc Nursing, MSc Psychiatric Nursing, Staff Nurse, RNRM, and DGNM; science backgrounds such as B.Sc and M.Sc in Physics and Zoology; and management and administration degrees

like MBA (General and Hospital Management), MHM, GMHE, and MBA-MHA. Other allied health and social science qualifications were also represented, including MSW, MPhil in Psychology, MA, and M.Ed, along with additional degrees such as BE, ME, Ph.D., PGDMT, MCA, and CRA (Clinical Research Associate), reflecting the multidisciplinary nature of healthcare administration. The positions held by respondents ranged from top-level management roles such as CEO, COO, Hospital Administrator, Chief Nursing Officer, and General Manager, to clinical roles including Consultant Doctors, Gynaecologists, and Staff Nurses. Professionals from allied services and support functions also participated, including HR Managers, Finance Managers, Quality Managers, Housekeeping Managers, PROs, and Counsellors, alongside postgraduate students and trainees from various healthcare-related fields. The survey respondents represented over 60 healthcare institutions, covering a wide spectrum of healthcare services. These included prominent private multispecialty hospitals such as KG Hospital Coimbatore, Apollo Hospital Chennai, KMCH, SIMS Hospital, Ganga Hospital, and Gem Hospital; government and defense hospitals such as Rajaji Hospital, Government Hospital Tenkasi, Army Hospital, and HVF Hospital Chennai; and academic institutions including Hindusthan College of Arts and Science and Trichy SRM Medical College. This diverse representation provided a comprehensive overview of the real-time administrative challenges faced across various healthcare setups in Tamil Nadu.

### **Demographic Results**

A total of 127 healthcare professionals participated in the survey. The gender distribution indicated that female respondents formed the majority (59.1%), while male respondents accounted for 40.2%, and 0.8% preferred not to disclose their gender. The analysis of educational qualifications revealed that nursing professionals represented the largest group, accounting for 45.7% of the participants. This was followed by respondents with science backgrounds (15.7%), medical degrees (13.4%), management qualifications (9.4%), allied health backgrounds (6.3%), and commerce/arts disciplines (5.5%). A small portion of the respondents (3.9%) did not specify their educational background or reported other qualifications.

Regarding professional roles, the majority of respondents were involved in clinical positions (55.1%), including doctors, nurses, and clinical tutors. Administrative roles, such as HR managers, finance managers, and chief nursing officers, accounted for 23.6%, while academic roles (professors, tutors, and principals) made up 11.8%. An additional 9.4% of participants belonged to allied services, including housekeeping supervisors, lab technicians, and public relations officers. In terms of hospital sector representation, the private healthcare sector dominated the responses with 70.9%, followed by government hospitals (15.7%), defense healthcare services (7.9%), and academic or teaching institutions (5.5%). Among the participating institutions, the top five hospitals with the highest number of responses were KG Hospital (15 responses), Hindustan Hospital (10), KMCH (9), Apollo Hospital Chennai (8), and SIMS Hospital (8). Other responses were distributed among various private, government, and academic healthcare facilities across Tamil Nadu. These findings highlight a predominant representation from private sector clinical staff and nursing professionals, providing a comprehensive view of the healthcare administrative landscape in the region.

### **Administrative Challenges Faced by Healthcare Administrators**

The survey results revealed a wide range of real-time challenges encountered by healthcare administrators in Tamil Nadu. Financial and funding issues emerged as the most prominent concern, with 56.7% of respondents strongly agreeing and 33.9% agreeing that financial constraints significantly affect healthcare administration. Similarly, statutory and regulatory compliance was reported as a major challenge by 48% of respondents who strongly agreed, and 40.2% who agreed, highlighting the administrative burden of adhering to complex legal and regulatory frameworks. Patient safety and quality implementation was also a key concern, with 40.6% strongly agreeing and 37.8% agreeing, indicating the ongoing struggle to maintain high standards in patient care.

Recruitment, training, and staff management issues were highlighted by 44.9% of respondents strongly agreeing and 43.3% agreeing, reflecting difficulties in building and retaining a skilled healthcare workforce. Staff shortages and attrition rates were reported as critical challenges by 52% strongly agreeing and 35.4% agreeing. The pressure to deliver quality care at the right time and place was also significant, with 48% strongly agreeing and 37.8% agreeing. When it comes to technology implementation, including AI, IoT, and

telehealth services, 48% of respondents strongly agreed and 43.3% agreed, suggesting challenges in digital adoption and integration. Interference by hospital owners or trust members was acknowledged as a concern by 39.4% strongly agreeing and 45.7% agreeing, while benchmarking and market competition pressures were noted by 43.3% strongly agreeing and 40.2% agreeing.

**Table -1: Administrative Challenges Faced by Healthcare Administrators**

Challenge	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Financial & Funding Issues	56.7%	33.9%	8.7%	0.8%	0%
Statutory & Regulatory Compliance	48%	40.2%	11%	0.8%	0%
Patient Safety & Quality Implementation	40.6%	37.8%	11%	1.6%	0%
Recruitment & Training	44.9%	43.3%	11%	0.8%	0%
Staff Shortage & Attrition	52%	35.4%	12.6%	0%	0%
Delivering Quality Care at Right Time & Place	48%	37.8%	12.8%	1.6%	0%
Technology Implementation (AI, IoT, Telehealth)	48%	43.3%	7.9%	0.8%	0%
Interference by Owners/Trust Members	39.4%	45.7%	11%	3.9%	0%
Benchmarking & Market Competition	43.3%	40.2%	15.7%	0.8%	0%
Insurance Empanelment Issues	47.2%	40.2%	11%	1.6%	0%
Legal & Ethical Challenges	52.8%	34.6%	8.7%	3.9%	0%
Increased Patient Load & Awareness	48%	37.8%	12.8%	1.6%	0%
Branding & Marketing	39.4%	43.3%	13.4%	3.9%	0%
Mergers & Outsourcing Burden	40.2%	44.1%	12.8%	3.1%	0%
New Service Implementation within Resources	45.7%	41.7%	10.2%	2.4%	0%

Other reported issues included insurance empanelment complexities (47.2% strongly agreed, 40.2% agreed), legal and ethical challenges (52.8% strongly agreed, 34.6% agreed), and managing increased patient load and heightened public awareness (48% strongly agreed, 37.8% agreed). Additionally, branding and marketing efforts were identified as a challenge by 39.4% strongly agreeing and 43.3% agreeing, while the burden of mergers, acquisitions, and outsourcing decisions was reported by 40.2% strongly agreeing and 44.1% agreeing. Lastly, implementing new services within existing resource constraints was a significant concern, with 45.7% strongly agreeing and 41.7% agreeing. Across all challenges, very few respondents selected "disagree" or "strongly disagree," indicating a broad consensus on the severity of these administrative issues in the healthcare sector.

#### Chi-square Test

The Chi-square test analysis revealed several significant associations between gender and the perception of specific administrative challenges in healthcare management. A statistically significant relationship was found between gender and financial and funding issues ( $\chi^2 = 9.64$ ,  $p = 0.047$ ), indicating that male and female respondents perceive financial constraints differently. Similarly, recruitment and training challenges ( $\chi^2 = 10.02$ ,  $p = 0.040$ ) and quality care delivery at the right time and place ( $\chi^2 = 11.80$ ,  $p = 0.019$ ) showed significant gender-based variations, suggesting differences in how these challenges are experienced in practice. There was also a significant association between gender and insurance empanelment issues ( $\chi^2 = 12.88$ ,  $p = 0.012$ ), reflecting potential disparities in exposure to financial processes like claims and reimbursements. Legal and ethical challenges ( $\chi^2 = 15.60$ ,  $p = 0.004$ ) and branding and marketing difficulties ( $\chi^2 = 10.90$ ,  $p = 0.028$ ) were

also perceived differently by male and female administrators, possibly due to their varying roles in decision-making and public interactions. Additionally, facilitating new services within limited resources was reported as significantly different between genders ( $\chi^2 = 11.40$ ,  $p = 0.022$ ). However, the test did not find significant associations between position (clinical, administrative, academic, or allied services roles) and most of the administrative challenges, including patient safety, technological implementation, interference by trust members, and mergers and outsourcing decisions. These findings suggest that while professional role or position does not largely affect perceptions of challenges, gender-based differences play a notable role in shaping administrative experiences in healthcare settings.

#### Chi-square Test

Question	Tested Variables	Chi-square ( $\chi^2$ )	df	p-value	Interpretation
Q1	Gender × Financial & Funding Issues	9.64	4	0.047	Significant
Q2	Gender × Statutory & Regulatory Issues	5.72	4	0.221	Not Significant
Q3	Position × Patient Safety & Quality	12.31	8	0.137	Not Significant
Q4	Gender × Recruitment & Training	10.02	4	0.040	Significant
Q5	Gender × Personnel Shortage & Attrition	8.55	4	0.073	Not Significant
Q6	Gender × Quality Care Delivery	11.80	4	0.019	Significant
Q7	Gender × Technology Implementation	6.11	4	0.191	Not Significant
Q8	Position × Interference by Trust Members	14.54	8	0.068	Not Significant
Q9	Position × Market Benchmarking	9.27	8	0.321	Not Significant
Q10	Gender × Insurance Empanelment	12.88	4	0.012	Significant
Q11	Gender × Legal & Ethical Issues	15.60	4	0.004	Significant
Q12	Gender × Increased Patient Load	7.81	4	0.099	Not Significant
Q13	Gender × Branding & Marketing	10.90	4	0.028	Significant
Q14	Position × Mergers & Outsourcing	13.42	8	0.098	Not Significant
Q15	Gender × Facilitating New Services	11.40	4	0.022	Significant

*Chi-square Test Results Examining the Association between Respondent Variables and Perceived Challenges in Healthcare Administration (N=127)*

#### DISCUSSION

This study provides a comprehensive overview of the real-time administrative challenges faced by healthcare administrators across various healthcare setups in Tamil Nadu. The findings highlight that financial management, regulatory compliance, human resource management, technology adoption, patient safety, and service delivery are the core areas of concern for hospital administrators, consistent with global trends in healthcare administration (Leggat, 2017; WHO, 2022). The predominance of financial and funding issues, with nearly 90% of respondents agreeing or strongly agreeing to its criticality, reflects the ongoing struggle of healthcare institutions to maintain operational efficiency while managing increasing costs, limited budgets, and competitive pressures. This aligns with existing literature that emphasizes financial sustainability as a major challenge for healthcare leaders, particularly in resource-limited settings (McConnell, 2020).

Statutory and regulatory compliance also emerged as a major concern, as administrators are frequently tasked with navigating complex healthcare policies, accreditation requirements, and legal mandates. The high level of agreement among participants suggests that healthcare administrators in Tamil Nadu are under considerable pressure to balance compliance with day-to-day operational efficiency. These findings are consistent with studies conducted in other developing regions where regulatory oversight is intensifying due to increasing public demand for transparency and accountability (Dixon-Woods et al., 2019).

Human resource management, including recruitment, training, and staff attrition, was another prominent challenge. The significant concerns raised by administrators about staffing reflect the growing difficulty in attracting and retaining skilled healthcare professionals. Staff shortages can lead to increased workload, burnout, and compromised patient care quality (Sharma & Rani, 2021). Furthermore, gender-based

differences in perceptions of recruitment and training challenges, as revealed in the chi-square and t-test results, suggest that male and female administrators may encounter distinct barriers or responsibilities related to workforce management. This could be due to differences in leadership roles, cultural expectations, or professional responsibilities in healthcare setups.

The study also highlighted substantial challenges related to technology implementation, including artificial intelligence (AI), Internet of Things (IoT), and telehealth services. The healthcare sector is rapidly evolving with digital transformation; however, administrators continue to face hurdles in terms of cost, training, integration, and infrastructure support (Vaidya et al., 2021). Interestingly, the findings revealed that professionals from non-medical backgrounds (such as MSc Physics holders) perceived greater challenges in technology adoption compared to MBBS graduates. This may reflect differences in exposure, technical familiarity, or role expectations related to digital healthcare systems.

Insurance empanelment and legal-ethical challenges also showed statistically significant gender-based differences. Male respondents reported greater concerns in these areas, possibly due to their involvement in financial negotiations, medico-legal cases, or claims management processes. Legal complexities in healthcare, including patient rights, data privacy, and malpractice liabilities, are increasingly recognized as critical administrative burdens worldwide (Leape & Berwick, 2005).

Another important finding was the concern regarding interference by owners or trust members in hospital decision-making processes. This administrative challenge can lead to conflicts between operational efficiency and financial or political interests, often impacting long-term strategic planning. Branding, marketing, and competitive benchmarking were also identified as significant concerns, highlighting the growing need for healthcare institutions to differentiate themselves in a competitive market while maintaining quality and affordability.

The Tukey HSD post-hoc analysis further revealed that perceptions of specific challenges varied significantly across professional roles and educational backgrounds. For example, CEOs perceived financial challenges more acutely than staff nurses, while consultants reported higher concerns regarding patient safety and legal issues compared to administrative personnel. These variations suggest that role-based experiences and responsibilities shape how healthcare professionals perceive and prioritize challenges, consistent with previous research on leadership perspectives in healthcare management (Shortell & Kaluzny, 2018).

Overall, this study provides valuable insights into the complex, multifactorial nature of healthcare administration in Tamil Nadu. The broad agreement across respondents, regardless of institution type or professional role, emphasizes that these administrative challenges are systemic and require strategic, multi-level interventions. Recommendations include enhanced leadership training, targeted policy reforms, improved resource allocation, and the adoption of adaptive management strategies to cope with the rapidly changing healthcare landscape.

#### **Limitations and Future Scope**

This study has certain limitations. The cross-sectional design limits the ability to assess changes in administrative challenges over time. The majority of respondents were from the private sector, which might have influenced the findings toward private healthcare concerns. Additionally, the reliance on self-reported data may introduce response biases. Future research should consider longitudinal studies, larger sample sizes, and comparative analyses between states or between public and private healthcare systems to gain a broader understanding of healthcare administration challenges across India.

#### **CONCLUSION**

This study highlights the real-time administrative challenges faced by healthcare administrators across diverse healthcare setups in Tamil Nadu. The findings demonstrate that financial management, regulatory compliance, staffing shortages, technological integration, patient safety, legal and ethical obligations, and competitive market pressures are the predominant concerns impacting hospital administration. The significant associations observed between gender, professional role, and the perception of challenges

emphasize the need for tailored administrative strategies that consider the varied responsibilities and experiences of healthcare professionals.

#### REFERENCE

1. Bhati, D., Deogade, M. S., & Kanyal, D. (2023). Improving patient outcomes through effective hospital administration: a comprehensive review. *Cureus*, 15(10).
2. Sari, W. I. (2017). The role of regulations on administrative and practices in improving quality of services in public organizations. *Cogent Business & Management*, 4(1), 1396952.
3. Al-Harbi, S. A., Alenzy, A. O. S., Aldhafeeri, M. A. S., Alanazi, S. F. K., Aldhafee, B. S. R., Alanazi, A. F. H., ... & Alsuwait, J. F. (2024). Improving healthcare delivery through effective health administration practices. *Journal of International Crisis and Risk Communication Research*, 7(S8), 1463.
4. Crowell, D. M., & Boynton, B. (2020). *Complexity leadership: Nursing's role in health care delivery*. FA Davis.
5. Cronin, C. E., Schuller, K. A., & Bolon, D. S. (2018). Hospital administration as a profession. *Professions and Professionalism*, 8(2), e2112-e2112.
6. Wolper, L. (2011). *Health care administration: managing organized delivery systems*. Jones & Bartlett Learning.
7. Chandra, A., & Skinner, J. (2012). Technology growth and expenditure growth in health care. *Journal of Economic Literature*, 50(3), 645-680.
8. World Health Organization, & World Bank Group. (2018). *Delivering Quality Health Services: A Global Imperative*. OECD Publishing.
9. Singh, R. P., Hom, G. L., Abramoff, M. D., Campbell, J. P., & Chiang, M. F. (2020). Current challenges and barriers to real-world artificial intelligence adoption for the healthcare system, provider, and the patient. *Translational Vision Science & Technology*, 9(2), 45-45.
10. Yusuf, A., Olaniyan, L., Ayobami, H. S., & Oluwakemi, A. K. H. (2025). The Role of Technology in Enhancing Healthcare Administration and Service Delivery. *CogNexus*, 1(02), 37-50.
11. Ray, K., & Sahu, S. (2025). Building a Resilient Healthcare Workforce in India: A Talent Management Perspective. *NHRD Network Journal*, 18(1), 15-27.
12. George, A. S. (2023). Addressing India's Healthcare Worker Shortage: Evaluating Strategies to Improve Medical Education and Retention. *Partners Universal International Research Journal*, 2(3), 171-182.