Strategies for Improving Patient Experience and Satisfaction in Healthcare Facilities in USA

Mohammad Rafiqul Islam Chowdhury[1], Tahmidur Rahman Chowdhury[2], Samiha Binte Abdullah[3]

[1]Ambassador Crawford College of Business and Entrepreneurship, Kent State University, Kent, Ohio, USA.
[2]Ambassador Crawford College of Business and Entrepreneurship, Kent State University, Kent, Ohio, USA.
[3]Ambassador Crawford College of Business and Entrepreneurship, Kent State University, Kent, Ohio, USA.

Corresponding Author: Mohammad Rafiqul Islam Chowdhury

ABSTRACT

Patient experience and satisfaction are critical indicators of healthcare quality and play a pivotal role in shaping care outcomes, trust, and patient retention. This study examines key strategies to enhance patient satisfaction in healthcare facilities in the USA, focusing on communication, technology integration, staff training, environmental improvements, and operational efficiency. Findings reveal that effective communication, combined with empathy and cultural competence, significantly improves patient trust and compliance. Technological advancements like telehealth and patient portals enhance convenience but require addressing digital literacy challenges. Environmental and operational improvements, including noise reduction and workflow optimization, also contribute to positive experiences. The study highlights the need for a patient-centered approach that integrates these elements holistically. However, challenges such as resource constraints and cultural sensitivity require further exploration to ensure equitable implementation. These insights provide actionable recommendations for healthcare facilities to prioritize patient satisfaction as a cornerstone of quality care.

1. INTRODUCTION

Patient experience and satisfaction are pivotal in determining the quality and effectiveness of healthcare systems (Ajegbile, Olaboye, Maha, Igwama, et al., 2024). In the United States, where healthcare delivery is complex and patient expectations are high, ensuring a positive patient experience has become a priority for providers. Beyond its impact on individual care outcomes, patient satisfaction influences organizational reputation, financial performance, and compliance with regulatory requirements (Lin et al., 2020). The shift toward value-based care has further emphasized the need to deliver not only efficient medical treatment but also compassionate and patient-centered services (Leonardsen et al., 2020). However, improving patient experience is not without challenges. Factors such as communication gaps, lengthy wait times, inadequate cultural competence, and the growing demands of diverse patient populations often hinder efforts to meet patient expectations. Additionally, the rapid integration of technology and evolving healthcare models

require providers to adapt while maintaining a personal touch in care delivery (Silvera et al., 2021). This article explores practical strategies that healthcare facilities in the USA can implement to enhance patient satisfaction. By addressing key challenges and leveraging innovations in communication, technology, and personalized care, these strategies aim to create a healthcare environment that prioritizes patients' needs and fosters trust and loyalty.

2. LITERATURE REVIEW

Patient experience and satisfaction have emerged as key indicators of healthcare quality, directly influencing health outcomes and organizational success. According to Ozavci et al. (2021), healthcare organizations that prioritize patient experience see improvements in clinical outcomes, patient retention, and operational efficiency. The Centers for Medicare & Medicaid Services (CMS) also tie patient satisfaction scores to reimbursement through programs like the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), emphasizing its financial and regulatory importance. Studies by Nwosu et al. (2024) have highlighted the multifaceted nature of patient satisfaction, encompassing factors such as access to care, communication quality, facility environment, and emotional support. While technical proficiency remains a baseline expectation, it is the interpersonal and environmental aspects of care that differentiate high-performing healthcare facilities (Isautier et al., 2020). Effective communication between healthcare providers and patients is repeatedly cited as a cornerstone of positive patient experiences. Research by Wolf et al. (2021) shows that clear, empathetic communication fosters trust, reduces anxiety, and enhances patient compliance with treatment plans. However, studies also reveal significant gaps in communication, particularly in culturally diverse populations, where language barriers and differing health literacy levels create challenges (Ferreira et al., 2023). Interventions such as standardized communication protocols and the use of interpreters have demonstrated success in bridging these gaps (Ferreira et al., 2021). The integration of technology into healthcare systems has transformed patient interactions. Telehealth services, patient portals, and automated feedback systems have increased convenience and accessibility. A study by Wong et al. (2020) found that telehealth significantly improves patient satisfaction by reducing travel burden and providing timely consultations. Similarly, patient portals empower individuals to actively participate in their care by offering access to medical records and secure messaging with providers. Despite these benefits, challenges such as the digital divide and technology fatigue must be addressed to ensure equitable adoption (Aiken, Sloane, et al., 2021). Empathy and patient-centered care are critical components of satisfaction, as highlighted by Oben (2020). Training healthcare professionals to demonstrate empathy and actively listen to patients' concerns improves the quality of interactions and reduces the likelihood of dissatisfaction. Initiatives like the Cleveland Clinic's communication training programs have shown measurable improvements in patient satisfaction scores (Aiken, Simonetti, et al., 2021). However, maintaining staff engagement and balancing workload pressures are ongoing challenges in fostering empathy. The physical and operational environment of healthcare facilities plays a significant role in shaping patient perceptions. A study by Burgener (2020) found that aspects such as cleanliness, noise levels, and aesthetic appeal contribute to patient comfort and satisfaction. Operational factors, such as wait times and the efficiency of administrative processes, are also critical. Research by Dicuonzo et al. (2023) highlights that long wait times negatively impact satisfaction, underscoring the need

for efficient scheduling and resource allocation. Personalization of care is increasingly recognized as a determinant of satisfaction. Studies by Gavurova et al. (2021) indicate that tailoring treatment plans to align with patient preferences and cultural backgrounds enhances trust and loyalty. Cultural competence training for staff, as proposed by Godillot et al. (2021), is essential in addressing the needs of diverse patient populations and minimizing disparities in care.

While existing studies provide a comprehensive understanding of factors influencing patient satisfaction, gaps remain in the scalability of successful interventions across different healthcare settings. Moreover, the impact of emerging technologies such as artificial intelligence (AI) in enhancing patient experience is underexplored. Future research must also address the long-term sustainability of strategies in resource-constrained environments.

3. PROBLEM OF THE STUDY

Despite the significant emphasis on improving patient experience and satisfaction in healthcare facilities in the USA, several challenges persist that hinder the achievement of optimal outcomes (Al Shamsi et al., 2020). Miscommunication between healthcare providers and patients is a common issue, especially in linguistically and culturally diverse settings. Patients with limited health literacy or language proficiency often struggle to understand their care plans, leading to dissatisfaction and suboptimal outcomes (Nguyen et al., 2020). Extended wait times in healthcare facilities continue to be a major source of frustration for patients. Inefficient scheduling and resource allocation often exacerbate delays, negatively impacting patient perceptions of care quality (Amporfro et al., 2021). While technological advancements like telehealth and patient portals enhance convenience, many patients face barriers in accessing or utilizing these tools due to digital literacy

challenges, lack of access to devices, or resistance to change among providers (Karimbux et al., 2023). Healthcare professionals often face high workloads and stressful environments, limiting their ability to engage empathetically with patients. Inadequate training in patient-centered care and cultural competence further affects the quality of interactions (Eze et al., 2020). The lack of individualized care plans that align with patient preferences and cultural backgrounds often leads to dissatisfaction (Jeste et al., 2020). Many healthcare facilities struggle to balance personalization with operational efficiency. Factors such as overcrowding, poor facility design, noise levels, and inadequate cleanliness detract from the overall patient experience, particularly in urban and under-resourced healthcare settings (Kalaja, 2023). While feedback mechanisms are in place in many facilities, the integration of this feedback into actionable changes is often inconsistent. This results in repeated issues going unresolved, diminishing patient trust. Healthcare facilities operate under stringent budget constraints and regulatory requirements, which can limit their ability to invest in patient experience initiatives, particularly in smaller or rural hospitals (Ajegbile, Olaboye, Maha, & Tamunobarafiri, 2024). Addressing these problems requires a multifaceted approach that combines innovative strategies, effective resource allocation, and a commitment to continuous improvement in healthcare delivery systems.

4. OBJECTIVES OF THE STUDY

The primary objective of this study is to explore and identify effective strategies for improving patient experience and satisfaction in healthcare facilities in the USA. To achieve this, the study focuses on the following specific objectives:

- To examine the key factors influencing patient satisfaction in healthcare facilities.

- To evaluate the role of communication and empathy in enhancing patient-provider relationships.
- To analyze the impact of technology, such as telehealth and patient portals, on patient experience.
- To investigate the challenges faced by healthcare facilities in delivering patient-centered care.
- To assess the importance of environmental factors, including facility design and cleanliness, in shaping patient perceptions.
- To propose actionable strategies for healthcare facilities to improve patient satisfaction sustainably.

These objectives aim to provide a comprehensive understanding of patient satisfaction dynamics and offer practical insights for healthcare providers to enhance the quality of care.

5. METHODS AND MATERIALS

This study employed a qualitative research design to explore strategies for improving patient experience and satisfaction in healthcare facilities in the USA. Data were collected through a comprehensive review of existing literature, including peer-reviewed journal articles, healthcare industry reports, and case studies from reputable institutions. Secondary data were analyzed to identify recurring themes and effective practices in patient-centered care. A thematic analysis approach was used to categorize findings into key areas such as communication, technology, staff training, environmental factors, and operational efficiency. The methodology ensured a systematic examination of evidence-based strategies while addressing the challenges and opportunities faced by healthcare facilities in the U.S. context.

6. RESULTS

The study identified five key areas critical to improving patient experience and satisfaction in healthcare facilities in the USA:

Key Factors Influencing Patient Satisfaction: Numerous critical elements affect patient satisfaction within healthcare environments. These elements generally embody the caliber of care delivered, the patient's experiential journey, and the comprehensive context in which the care is administered.
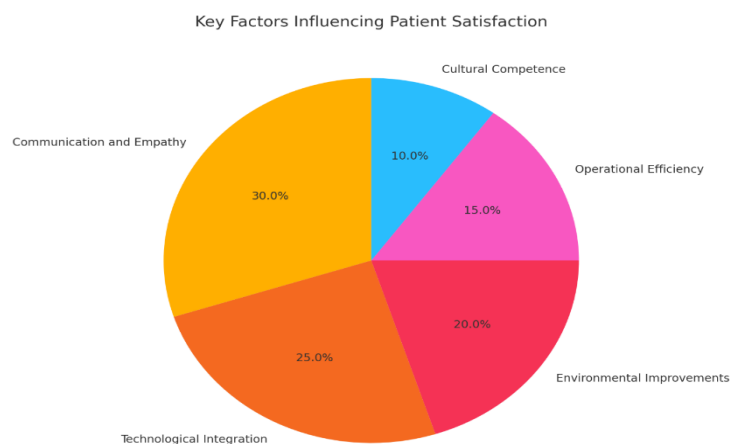

Figure 1: Key Factors Influencing Patient Satisfaction

Figure 1 illustrates that the enhancement of patient satisfaction necessitates a comprehensive strategy that emphasizes the significance of effective communication and empathy (30%), the incorporation of accessible technologies (25%), the improvement of the healthcare environment (20%), the optimization of operational processes (15%), and the promotion of cultural competence (10%). Collectively,

these approaches address both interpersonal and systemic dimensions, thereby fostering trust, inclusivity, and an overall positive patient experience.

Communication as a Cornerstone: Effective communication was consistently highlighted as a critical factor in patient satisfaction. Facilities that implemented structured communication training for staff reported higher satisfaction scores, demonstrating the importance of clear and empathetic dialogue between patients and providers (Imlach et al., 2020).
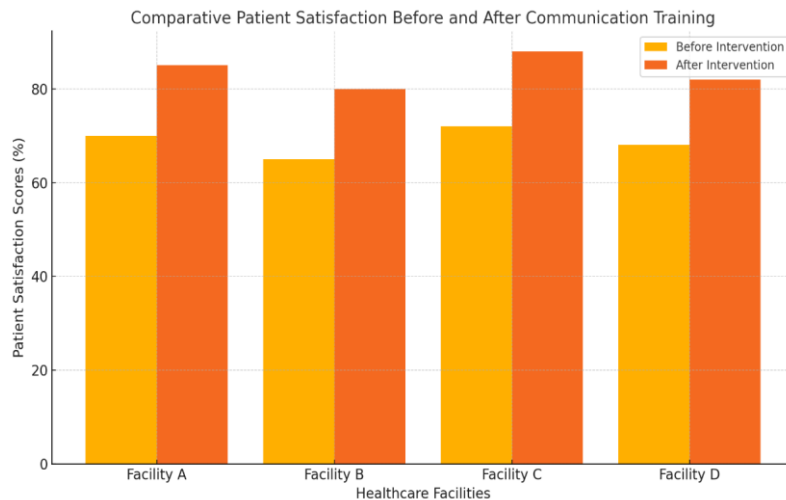

Figure 2: Comparative patient satisfaction before and after communication training

Figure 2 illustrates the influence of systematically organized communication training initiatives on patient satisfaction within four distinct healthcare institutions. Prior to the implementation of the intervention, satisfaction scores varied between 65% and 72%, thereby suggesting potential areas for enhancement. Following the intervention, there was a notable increase in satisfaction levels, rising to between 80% and 88%, with all institutions exhibiting an improvement of no less than 10%. Facility C recorded the most substantial increase, thereby underscoring the efficacy of customized strategies.

Impact of Technology Integration: The use of patient portals, telehealth, and automated feedback systems significantly enhanced patient engagement and convenience (Khanbhai et al., 2021). However, disparities in digital literacy and access remained barriers to equitable adoption of these technologies.
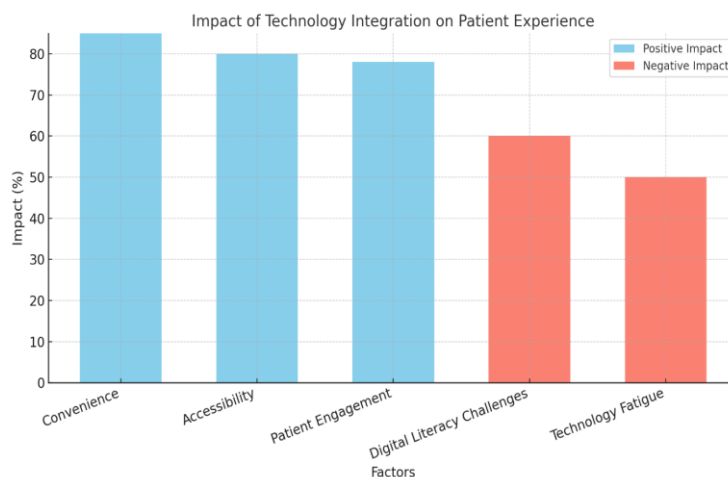

Figure 3: Impact of Technology Integration on Patient Experience

Figure 3 elucidates the bifurcated influence of technological integration within the healthcare sector, revealing significant advantages including enhanced convenience (85%), increased accessibility (80%), and heightened patient engagement (78%). Nonetheless, obstacles such as insufficient digital literacy (60%) and technology fatigue (50%) emphasize the necessity of addressing these impediments to fully actualize its potential in augmenting patient satisfaction.

Importance of Staff Empathy and Training: Facilities that prioritized empathy training and patient-centered care models observed a notable improvement in patient-provider relationships. Staff burnout, however, posed a challenge in maintaining consistent quality in interactions (Afrashtehfar et al., 2020).
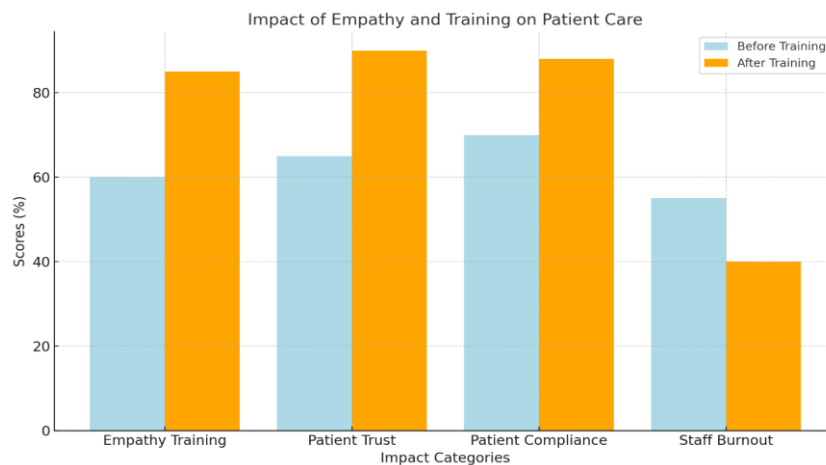

Figure 4: Impact of Empathy and Training on Patient Care

Figure 4 elucidates that the implementation of empathy training markedly enhances both the quality of patient care and the overall well-being of staff members. Empathy metrics escalated from 60% to 85%, thereby augmenting patient trust levels (from 65% to 90%) and adherence to treatment protocols (from 70% to 88%), concurrently diminishing staff burnout rates from 55% to 40%. This underscores the dual advantages of empathy training in not only improving patient outcomes but also in cultivating more conducive work environments.

Environmental Factors and Facility Design: Cleanliness, noise reduction, and comfortable waiting areas contributed to a positive patient experience. Well-designed facilities with clear signage and amenities reduced patient stress and improved overall perceptions of care (Halawa et al., 2020).
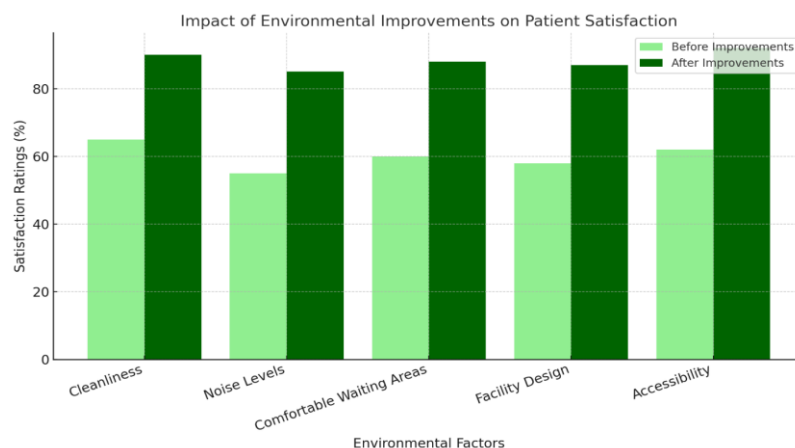

Figure 5: Impact of Environmental Improvements on Patient Satisfaction

Figure 5 delineates the manner in which enhancements in environmental determinants - such as sanitation, auditory levels, comfort of waiting areas, architectural design, and accessibility - result in substantial elevations in patient satisfaction within healthcare environments. Satisfaction metrics increased from 55% to 92% across these determinants, underscoring the critical necessity of establishing hygienic, tranquil, comfortable, and accessible settings that mitigate stress and enrich patient experiences.

Operational Efficiency: Streamlined scheduling systems and reduced wait times were strongly correlated with patient satisfaction. Facilities utilizing predictive analytics and workflow optimization tools were better equipped to manage patient flow.
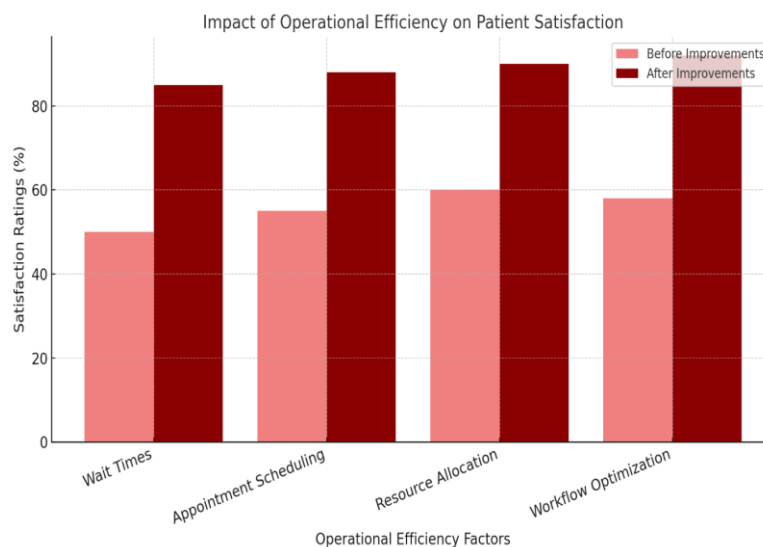

Figure 6: Impact of Operational Efficiency on Patient Satisfaction

Figure 6 elucidates the correlation between enhancements in operational efficiency within the healthcare sector and the resultant elevation in patient satisfaction levels. The reduction of wait times resulted in an increase in satisfaction from 50% to 85%, whereas the optimization of appointment scheduling contributed to a rise from 55% to 88%. Improved resource allocation facilitated an increase in satisfaction from 60% to 90%, and the streamlining of workflows led to a notable enhancement in satisfaction from 58% to 92%. These modifications exemplify the beneficial repercussions of rectifying operational inefficiencies on patient experiences and overall satisfaction.

7. DISCUSSION
The findings underscore the multifaceted nature of patient satisfaction, emphasizing the need for a holistic approach in healthcare delivery (Halimuzzaman & Sharma, 2022b). Communication emerged as a fundamental aspect, aligning with previous studies that associate effective dialogue with better health outcomes and higher trust levels. While technology has revolutionized patient interactions, the digital divide highlights the need for parallel investments in digital literacy programs to ensure inclusivity (Islam et al., 2024). Empathy and cultural competence in healthcare were shown to enhance patient trust, especially in diverse populations. However, addressing staff burnout remains critical to sustaining these improvements. Training programs should integrate stress management and workload optimization strategies to support healthcare workers (Halimuzzaman, Sharma, Karim, et al., 2024). Environmental and operational

factors, often overlooked, were revealed as significant contributors to patient satisfaction. Investments in facility design, cleanliness, and operational efficiency not only enhance the patient experience but also improve the overall perception of care quality (Halimuzzaman, Sharma, Hossain, et al., 2024). The study highlights the importance of integrating these strategies into a cohesive patient satisfaction framework. Future efforts should focus on scaling successful interventions, leveraging patient feedback for continuous improvement, and addressing systemic barriers such as resource constraints and regulatory pressures. By adopting a patient-centered approach, healthcare facilities in the USA can achieve sustainable improvements in patient experience and satisfaction.

8. FINDINGS

The study revealed several key insights into strategies for improving patient experience and satisfaction in healthcare facilities in the USA:

1. Key Factors Influencing Patient Satisfaction: Effective communication emerged as the most critical determinant, with facilities implementing structured training for staff in empathy and active listening witnessing increased patient trust and engagement. Environmental improvements such as cleanliness, noise reduction, and facility design significantly influenced patient comfort and satisfaction.

2. Role of Communication and Empathy: Communication training enhanced patient-provider relationships by improving trust, compliance, and satisfaction. Empathy training for healthcare providers reduced staff burnout and strengthened patient interactions. Effective communication emerged as the most critical determinant of patient satisfaction. Facilities implementing structured training programs for staff in empathy, active listening, and clear communication witnessed a significant rise

in trust and patient engagement (Gualandi et al., 2021).

3. Impact of Technology: Telehealth services and patient portals significantly improved accessibility, convenience, and patient engagement. Challenges like digital literacy barriers and technology fatigue limited the widespread adoption of technological solutions. The integration of telehealth services, patient portals, and automated feedback systems significantly enhanced convenience, accessibility, and patient participation in care. However, digital literacy challenges and technology fatigue remained barriers to equitable and sustainable adoption (Narne, 2024).

4. Challenges in Delivering Patient-Centered Care: Barriers included cultural competence gaps, resource constraints in smaller facilities, and difficulties in scaling successful interventions across different settings.

5. Importance of Environmental Factors: Investments in cleanliness, noise management, comfortable waiting areas, and accessible facility design led to higher satisfaction ratings. Enhancements in cleanliness, noise management, and facility design positively influenced patient comfort and reduced stress. Investments in creating comfortable waiting areas and ensuring accessibility for all patients led to notable increases in satisfaction ratings (Prang et al., 2021).

6. Actionable Strategies for Sustainable Improvement: Emphasis on regular staff training in communication and empathy. Integration of advanced scheduling systems and predictive analytics for operational efficiency (Uddin et al., 2024). Implementation of patient feedback systems to continuously improve services. Streamlining workflows, optimizing resource allocation, and implementing efficient scheduling systems reduced wait times and improved the overall patient experience. Facilities adopting predictive analytics to manage patient flow demonstrated measurable improvements in operational efficiency (Aashima et al.,

2021). Empathy training for healthcare providers was found to strengthen patient-provider relationships, enhance compliance with treatment plans, and reduce complaints. It also mitigated staff burnout, contributing to improved workplace morale and interaction quality (Lee & Lee, 2021).

9. CHALLENGES AND BARRIERS

Cultural Sensitivity: Some facilities struggled with addressing the needs of diverse patient populations due to gaps in cultural competence training (Hyder & Razzak, 2020). Resource Constraints: Smaller healthcare facilities faced limitations in implementing advanced technologies and infrastructure improvements due to budgetary pressures (Widberg et al., 2020). The study confirmed that a patient-centered approach integrating communication, technology, environment, and operational efficiency is essential for achieving high satisfaction levels. Facilities that adopted these strategies holistically outperformed those with isolated interventions (Phiri et al., 2024). These findings underscore the multifaceted nature of patient satisfaction and the importance of a comprehensive approach in improving the patient experience in healthcare facilities.

10. RECOMMENDATIONS

Based on the findings, the following recommendations are proposed to enhance patient experience and satisfaction in healthcare facilities in the USA:

- Invest in regular training programs to improve staff skills in empathy, active listening, and clear communication.
- Use patient feedback to refine communication strategies continuously.
- Expand the use of patient portals and telehealth to improve accessibility and engagement.
- Provide training for patients and staff to overcome digital literacy challenges.
- Address technology fatigue by maintaining a balance between digital and personal interactions.

- Prioritize cleanliness and noise reduction measures to improve patient comfort.
- Invest in comfortable waiting areas, accessible designs, and clear facility signage to reduce patient stress.
- Use predictive analytics and workflow management tools to reduce wait times and improve scheduling accuracy.
- Ensure equitable allocation of resources to maintain smooth operations during peak hours.
- Incorporate diversity and inclusion training to better address the needs of diverse patient populations.
- Engage community representatives to understand cultural expectations and tailor care accordingly.
- Provide financial and policy support to smaller healthcare providers to adopt patient satisfaction strategies and advanced technologies.

11. LIMITATIONS

Despite the valuable insights, this study faced several limitations:

1. Secondary Data Dependency: The study primarily relied on secondary data from existing literature and case studies, which may not fully capture recent or unpublished developments in healthcare practices.
2. Lack of Primary Data: The absence of direct surveys or interviews with patients and healthcare providers limited the depth of analysis on specific challenges and preferences.
3. Generalization of Findings: While the strategies are applicable across the USA, variations in healthcare settings, such as urban vs. rural facilities, may affect the scalability of recommendations.
4. Focus on Developed Technologies: The study emphasized current technologies but did not explore emerging tools, such as artificial intelligence, that could further revolutionize patient satisfaction.
5. Resource Constraints in Smaller Facilities: The recommendations may be challenging for smaller or underfunded

healthcare facilities to implement due to financial and staffing limitations.

6. Cultural and Regional Variations: The findings do not account for regional differences in patient expectations, cultural values, or socioeconomic conditions, which may influence the effectiveness of proposed strategies.

Future research should address these limitations by incorporating primary data collection, focusing on diverse healthcare settings, and exploring the role of innovative technologies in enhancing patient satisfaction.

12. CONCLUSION

Improving patient experience and satisfaction in healthcare facilities is a multidimensional challenge that requires a holistic approach. This study highlights the critical role of effective communication, advanced technology, empathetic staff training, environmental improvements, and operational efficiency in shaping positive patient perceptions. By addressing these factors, healthcare providers can foster trust, enhance patient engagement, and improve care outcomes (Halimuzzaman et al., 2023). The findings emphasize that patient-centered care must integrate both personal and technological solutions, striking a balance between innovation and empathy. While the strategies outlined have demonstrated success in enhancing satisfaction, challenges such as resource constraints, digital literacy barriers, and cultural sensitivity require tailored interventions to ensure equitable healthcare delivery (Halimuzzaman & Sharma, 2024). Ultimately, the study underscores the importance of continuous evaluation and adaptation to meet evolving patient needs and expectations. By prioritizing patient experience, healthcare facilities can not only achieve higher satisfaction levels but also build a sustainable model of quality care in the USA. Future research should further explore emerging technologies, cultural diversity, and the scalability of these strategies across varied healthcare settings.

REFERENCES

1. Aashima, Nanda, M., & Sharma, R. (2021). A review of patient satisfaction and experience with telemedicine: a virtual solution during and beyond COVID-19 pandemic. *Telemedicine and E-Health*, *27*(12), 1325–1331.
2. Afrashtehfar, K. I., Assery, M. K. A., & Bryant, S. R. (2020). Patient satisfaction in medicine and dentistry. *International Journal of Dentistry*, *2020*(1), 6621848.
3. Aiken, L. H., Simonetti, M., Sloane, D. M., Cerón, C., Soto, P., Bravo, D., Galiano, A., Behrman, J. R., Smith, H. L., & McHugh, M. D. (2021). Hospital nurse staffing and patient outcomes in Chile: a multilevel cross-sectional study. *The Lancet Global Health*, *9*(8), e1145–e1153.
4. Aiken, L. H., Sloane, D. M., Ball, J., Bruyneel, L., Rafferty, A. M., & Griffiths, P. (2021). Patient satisfaction with hospital care and nurses in England: an observational study. *BMJ Open*, *8*(1), e019189.
5. Ajegbile, M. D., Olaboye, J. A., Maha, C. C., Igwama, G. T., & Abdul, S. (2024). The role of data-driven initiatives in enhancing healthcare delivery and patient retention. *World Journal of Biology Pharmacy and Health Sciences*, *19*(1), 234–242.
6. Ajegbile, M. D., Olaboye, J. A., Maha, C. C., & Tamunobarafiri, G. (2024). Integrating business analytics in healthcare: Enhancing patient outcomes through data-driven decision making. *World J Biol Pharm Health Sci*, *19*, 243–250.
7. Al Shamsi, H., Almutairi, A. G., Al Mashrafi, S., & Al Kalbani, T. (2020). Implications of language barriers for healthcare: a systematic review. *Oman Medical Journal*, *35*(2), e122.
8. Amporfro, D. A., Boah, M., Yingqi, S., Cheteu Wabo, T. M., Zhao, M., Ngo Nkondjock, V. R., & Wu, Q. (2021). Patients' satisfaction with healthcare delivery in Ghana. *BMC Health Services Research*, *21*, 1–13.

9. Burgener, A. M. (2020). Enhancing communication to improve patient safety and to increase patient satisfaction. *The Health Care Manager*, *39*(3), 128–132.

10. Dicuonzo, G., Donofrio, F., Fusco, A., & Shini, M. (2023). Healthcare system: Moving forward with artificial intelligence. *Technovation*, *120*, 102510.

11. Eze, N. D., Mateus, C., & Cravo Oliveira Hashiguchi, T. (2020). Telemedicine in the OECD: an umbrella review of clinical and cost-effectiveness, patient experience and implementation. *PloS One*, *15*(8), e0237585.

12. Ferreira, D. C., Marques, R. C., Nunes, A. M., & Figueira, J. R. (2021). Customers satisfaction in pediatric inpatient services: A multiple criteria satisfaction analysis. *Socio-Economic Planning Sciences*, *78*, 101036.

13. Ferreira, D. C., Vieira, I., Pedro, M. I., Caldas, P., & Varela, M. (2023). Patient satisfaction with healthcare services and the techniques used for its assessment: a systematic literature review and a bibliometric analysis. *Healthcare*, *11*(5), 639.

14. Gavurova, B., Dvorsky, J., & Popesko, B. (2021). Patient satisfaction determinants of inpatient healthcare. *International Journal of Environmental Research and Public Health*, *18*(21), 11337.

15. Godillot, C., Jendoubi, F., Konstantinou, M. P., Poncet, M., Bergeron, A., Gallini, A., & Paul, C. (2021). How to assess patient satisfaction regarding physician interaction: A systematic review. *Dermatologic Therapy*, *34*(2), e14702.

16. Gualandi, R., Masella, C., Piredda, M., Ercoli, M., & Tartaglini, D. (2021). What does the patient have to say? Valuing the patient experience to improve the patient journey. *BMC Health Services Research*, *21*, 1–12.

17. Halawa, F., Madathil, S. C., Gittler, A., & Khasawneh, M. T. (2020). Advancing evidence-based healthcare facility design: a systematic literature review. *Health Care Management Science*, *23*, 453–480.

18. Halimuzzaman, M., Sharma, D. J., Bhattacharjee, T., Mallik, B., Rahman, R., Rezaul Karim, M., Masrur Ikram, M., & Fokhrul Islam, M. (2024). Blockchain Technology for Integrating Electronic Records of Digital Healthcare System. *Journal of Angiotherapy*, *8*(7).

19. Halimuzzaman, M., & Sharma, J. (2022a). Applications of accounting information system (AIS) under Enterprise resource planning (ERP): A comprehensive review. *International Journal of Early Childhood Special Education (INT-JECSE)*, *14*(2), 6801–6806.

20. Halimuzzaman, M., & Sharma, J. (2022b). Applications of accounting information system (AIS) under Enterprise resource planning (ERP): A comprehensive review. *International Journal of Early Childhood Special Education (INT-JECSE)*, *14*(2), 6801–6806.

21. Halimuzzaman, M., & Sharma, J. (2024). The Role of Enterprise Resource Planning (ERP) in Improving the Accounting Information System for Organizations. In *Revolutionizing the AI-Digital Landscape* (pp. 263–274). Productivity Press.

22. Halimuzzaman, M., Sharma, J., Hossain, M. I., Akand, F., Islam, M. N., Ikram, M. M., & Khan, N. N. (2024). Healthcare Service Quality Digitization with Enterprise Resource Planning. *ANGIOTHERAPY RESEARCH*.

23. Halimuzzaman, M., Sharma, J., Islam, D., Habib, F., & Ahmed, S. S. (2023). FINANCIAL IMPACT OF ENTERPRISE RESOURCE PLANNING (ERP) ON ACCOUNTING INFORMATION SYSTEMS (AIS): A STUDY ON PETROLEUM COMPANIES IN BANGLADESH. *China Petroleum Processing and Petrochemical Technology*, *23*(2), 219–244.

24. Halimuzzaman, M., Sharma, J., Karim, M. R., Hossain, M. R., Azad, M. A. K., & Alam, M. M. (2024). Enhancement of Organizational Accounting Information Systems and Financial Control through Enterprise Resource Planning. In *Synergy of AI and Fintech in the Digital Gig Economy* (pp. 315–331). CRC Press.

25. Halimuzzaman, M., Sharma, J., & Khang, A. (2024). Enterprise Resource Planning and Accounting Information Systems: Modeling the Relationship in Manufacturing. In *Machine Vision and Industrial Robotics in Manufacturing* (pp. 418–434). CRC Press.

26. Hyder, M. A., & Razzak, J. (2020). Telemedicine in the United States: an introduction for students and residents.

Journal of Medical Internet Research, *22*(11), e20839.

27. Imlach, F., McKinlay, E., Middleton, L., Kennedy, J., Pledger, M., Russell, L., Churchward, M., Cumming, J., & McBride-Henry, K. (2020). Telehealth consultations in general practice during a pandemic lockdown: survey and interviews on patient experiences and preferences. *BMC Family Practice*, *21*, 1–14.

28. Isautier, J. M. J., Copp, T., Ayre, J., Cvejic, E., Meyerowitz-Katz, G., Batcup, C., Bonner, C., Dodd, R., Nickel, B., & Pickles, K. (2020). People's experiences and satisfaction with telehealth during the COVID-19 pandemic in Australia: cross-sectional survey study. *Journal of Medical Internet Research*, *22*(12), e24531.

29. Islam, M. F., Debnath, S., Das, H., Hasan, F., Sultana, S., Datta, R., Mallik, B., & Halimuzzaman, M. (2024). Impact of Rapid Economic Development with Rising Carbon Emissions on Public Health and Healthcare Costs in Bangladesh. *Journal of Angiotherapy*, *8*(7), 1–9.

30. Jeste, S., Hyde, C., Distefano, C., Halladay, A., Ray, S., Porath, M., Wilson, R. B., & Thurm, A. (2020). Changes in access to educational and healthcare services for individuals with intellectual and developmental disabilities during COVID-19 restrictions. *Journal of Intellectual Disability Research*, *64*(11), 825–833.

31. Kalaja, R. (2023). Determinants of patient satisfaction with health care: a literature review. *European Journal of Natural Sciences and Medicine*, *6*(1), 43–54.

32. Karimbux, N., T JOHN, M., Stern, A., T MAZANEC, M., D'AMOUR, A., Courtemanche, J., & Rabson, B. (2023). Measuring patient experience of oral health care: A call to action. *Journal of Evidence-Based Dental Practice*, *23*(1), 101788.

33. Khanbhai, M., Anyadi, P., Symons, J., Flott, K., Darzi, A., & Mayer, E. (2021). Applying natural language processing and machine learning techniques to patient experience feedback: a systematic review. *BMJ Health & Care Informatics*, *28*(1).

34. Lee, S. M., & Lee, D. (2021). Opportunities and challenges for contactless healthcare services in the post-COVID-19 Era. *Technological Forecasting and Social Change*, *167*, 120712.

35. Leonardsen, A.-C. L., Hardeland, C., Helgesen, A. K., & Grøndahl, V. A. (2020). Patient experiences with technology enabled care across healthcare settings-a systematic review. *BMC Health Services Research*, *20*, 1–17.

36. Lin, Y., Hong, Y. A., Henson, B. S., Stevenson, R. D., Hong, S., Lyu, T., & Liang, C. (2020). Assessing patient experience and healthcare quality of dental care using patient online reviews in the United States: mixed methods study. *Journal of Medical Internet Research*, *22*(7), e18652.

37. Narne, S. (2024). The impact of telemedicine adoption on patient satisfaction in major hospital chains. *Bulletin of Pure and Applied Sciences-Zoology*, 1485–1493.

38. Nguyen, T., Nguyen, H., & Dang, A. (2020). Determinants of patient satisfaction: Lessons from large-scale inpatient interviews in Vietnam. *PloS One*, *15*(9), e0239306.

39. Nwosu, N. T., Babatunde, S. O., & Ijomah, T. (2024). Enhancing customer experience and market penetration through advanced data analytics in the health industry. *World Journal of Advanced Research and Reviews*, *22*(3), 1157–1170.

40. Oben, P. (2020). Understanding the patient experience: a conceptual framework. *Journal of Patient Experience*, *7*(6), 906–910.

41. Ozavci, G., Bucknall, T., Woodward-Kron, R., Hughes, C., Jorm, C., Joseph, K., & Manias, E. (2021). A systematic review of older patients' experiences and perceptions of communication about managing medication across transitions of care. *Research in Social and Administrative Pharmacy*, *17*(2), 273–291.

42. Phiri, A. K., Juba, O. O., Baladaniya, M., Regal, H. Y. A., & Nteziryayo, T. (2024). *Strategies for Quality Health Standards*. Cari Journals USA LLC.

43. Prang, K.-H., Maritz, R., Sabanovic, H., Dunt, D., & Kelaher, M. (2021). Mechanisms and impact of public reporting on physicians and hospitals' performance: a systematic review (2000–2020). *PloS One*, *16*(2), e0247297.

44. Silvera, G. A., Wolf PhD, J. A., Stanowski, A., & Studer, Q. (2021). The influence of COVID-19 visitation restrictions on patient experience and safety outcomes: a critical

role for subjective advocates. *Patient Experience Journal*, *8*(1), 30–39.

45. Uddin, M. M., Islam, N., & Halimuzzaman, M. Genetic Engineering in Crop Improvement for Diseases on Resistance. *International Journal of Science and Healthcare Research*. 2024; 9(3): 262-276. DOI: 10.52403/ijshr.20240332

46. Widberg, C., Wiklund, B., & Klarare, A. (2020). Patients' experiences of eHealth in palliative care: an integrative review. *BMC Palliative Care*, *19*, 1–14.

47. Wolf, J. A., Niederhauser, V., Marshburn, D., & LaVela, S. L. (2021). Reexamining "Defining Patient Experience": the human experience in healthcare. *Patient Experience Journal*, *8*(1), 16–29.

48. Wong, E., Mavondo, F., & Fisher, J. (2020). Patient feedback to improve quality of patient-centred care in public hospitals: a systematic review of the evidence. *BMC Health Services Research*, *20*, 1–17.

******