

# Caregiver-Centric Hospitality as a Driver of Destination Loyalty: A Quantitative Study in Chennai's Medical Tourism Sector

\*Divya T<sup>1</sup> and K. Karthik Sridar<sup>2</sup>

<sup>1</sup>Research Scholar and <sup>2</sup>Assistant Professor, Faculty of Management, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu, Tamil Nadu

\*dt1674@srmist.edu.in, karthikk@srmist.edu.in

## Abstract

**Background:** Medical tourism has experienced significant growth in recent years, positioning hospitality and tourism services as critical components of destination competitiveness. While existing studies largely focus on patients' experiences, the role of caregivers accompanying international patients has received limited research, especially in medical tourism destinations. **Objective:** To inspect the impact of caregiver-centric hospitality dimensions, such as residential comfort, culinary autonomy, navigational and transport ease and linguistic and cultural support, that have a significant effect on destination loyalty among international medical attendants in Chennai. **Methodology:** A quantitative research design with a cross-sectional survey approach was used in this study. A structured questionnaire was administered through Google Forms to obtain the primary data. The questionnaire was distributed to 331 international medical attendants, from which 254 valid responses were used for analysis. The size was adequate as per Cochran's formula. PLS-SEM was used for data analysis and to test the proposed hypotheses. **Results:** A strong explanatory power, with logistic hospitality dimensions, 86.6 % of variance was identified in destination loyalty ( $R^2 = 0.856$ ). A significant statistical value was noted between all proposed relationships. Navigational and transportation ease emerged as the strongest predictor of destination loyalty ( $\beta = 0.321$ ,  $p < 0.001$ ), followed by culinary autonomy ( $\beta = 0.227$ ,  $p = 0.021$ ), residential comfort ( $\beta = 0.220$ ,  $p = 0.044$ ), and linguistic and cultural support ( $\beta = 0.215$ ,  $p = 0.042$ ). **Conclusion:** Caregiver-centric hospitality plays an important role in improving destination loyalty in medical tourism. Strengthening non-clinical support services for caregivers can improve destination competitiveness and long-term sustainability.

**Keywords:** Caregiver-centric hospitality, medical tourism, destination loyalty, hospitality services, Chennai, international caregivers

## Introduction

Medical tourism is one of the growing parts of the global tourism and hospitality sector. This is as more people are able to travel internationally, health care is cheaper, and travel and medical care are becoming more closely linked. Chennai is recognized as a top medical tourist destination and attracts a large number of international patients because of its unique healthcare services, lower costs, and other hospitality services. As destinations increasingly compete on non-clinical factors, there is a growing recognition that the hospitality experience

beyond clinical care contributes substantially to overall destination evaluation and behavioral intentions such as destination loyalty. Caregivers who accompany patients not only influence patient comfort but also shape perceptions of the destination's hospitality ecosystem.

Earlier studies have primarily focused on medical tourists' satisfaction plus loyalty; the role of accompanying caregivers remains underexplored, despite their status as

vital stakeholders in medical tourism journeys (Mahmud et al., 2020). Caregivers frequently assume responsibilities that encompass not only emotional support but also logistical duties such as transportation, lodging, and cultural navigation, all of which collectively influence the comprehensive satisfaction of medical tourism. Caregiver needs reflect distinct service expectations that diverge from those of leisure travelers, emphasizing the necessity for focused examination of caregiver-oriented hospitality aspects. In the literature on tourism, service quality, happiness, and loyalty to the destination are closely interconnected through experience-based assessments. Research in wellness and other tourism domains indicates that experiential quality impacts satisfaction, which significantly affects behavioral intentions, including intentions to revisit and recommend (Karagianni et al., 2025). Extending this logic to medical tourism, the quality of non-clinical hospitality services such as accommodation proximity, meal options, transport ease, and linguistic support can be conceptualized as antecedents of destination loyalty. Existing research indicates that accommodating guest dietary requirements and offering customized food options enhance overall satisfaction and encourage intentions to return, highlighting culinary autonomy as an important component of hospitality.

Hospitality research indicates that accommodation remains a foundational determinant of service satisfaction and destination loyalty in tourism contexts. In medical tourism, caregiver satisfaction with lodging, particularly when integrated with supportive hospitality environments, can likewise contribute to favorable destination evaluations. Similarly, unobstructed and culturally sensitive navigation and transportation can reduce travel stress for caregivers and enhance perceived destination quality.

Cultural and linguistic support further constitutes an essential dimension of caregiver hospitality. Experiences of effective communication, cultural responsiveness, and social addition have been recognized as facets of destination image formation, which influences behavioral intentions in broader tourism literature. High-quality interpersonal interactions and culturally congruent services positively shape tourists' perceptions and, consequently, their loyalty to destinations in hospitality settings. Both clinical and non-clinical service attributes contribute to behavioral loyalty. Studies also mention service quality and revisit intention are mediated by destination image (Demir et al., 2025). There is still a gap

in finding the way caregiver-centric tourism differs from patient-centered clinical quality of service, which affects how loyal medical tourists are to a destination.

This study examines four caregiver-centric hospitality dimensions residential comfort, culinary autonomy, navigational and transport ease, and linguistic and cultural support assessing their cumulative effect on destination loyalty among international medical attendants in Chennai. This research delineates caregivers as a unique service category within the medical value chain, thereby enriching both hospitality and healthcare tourism scholarship. It provides insights to aid destination management, hospital managers, and tourism policymakers in the development of comprehensive experience frameworks that foster loyalty outcomes.

Recent studies further emphasize that medical tourism has evolved into a highly integrated service ecosystem where healthcare delivery and hospitality experiences are inseparable. The convergence of medical and tourism services has strengthened destination competitiveness, making non-clinical factors increasingly critical in shaping overall visitor perceptions and loyalty outcomes (McCartney & Wang, 2024). It is no longer viewed purely as a healthcare transaction but as a comprehensive experiential journey influenced by accessibility, service quality, and destination infrastructure (Ford, 2023). Emerging literature highlights that destination competitiveness in medical tourism is strongly linked to integrated service systems that combine healthcare excellence with efficient hospitality and support services (Yilmaz & Güneren, 2023). Scholars have increasingly argued for a systems-based perspective, where both clinical and non-clinical service elements jointly influence tourist satisfaction and behavioral intentions (Wong et al., 2024). This shift underscores the need to explore underrepresented stakeholders, such as caregivers, who interact extensively with hospitality infrastructures throughout the medical travel journey.

Recent empirical research also reinforces the central role of service quality in shaping destination loyalty. Post-pandemic tourism studies demonstrate that perceived service quality significantly influences destination loyalty, often mediated by destination image and trust (Zeina et al., 2023). Similarly, structural equation modeling studies confirm that service quality and satisfaction remain primary predictors

of destination loyalty across tourism contexts (Hussain et al., 2023). These findings indicate that both functional and experiential service attributes play a vital role in influencing revisit intention and recommendation behavior. Recent tourism research identifies destination loyalty as a multidimensional construct shaped by emotional, functional, and experiential value perceptions, including accessibility, safety, and cultural familiarity (Cruz-Milán, 2023). The integration of these non-clinical service elements enhances perceived value and strengthens destination image, thereby influencing long-term loyalty.

Despite these advancements, contemporary research continues to highlight a gap in understanding the role of non-patient stakeholders, particularly caregivers, in shaping destination experiences and loyalty outcomes. Caregivers' interactions with accommodation services, transport systems, food services, and cultural environments position them as critical evaluators of the destination's hospitality ecosystem. Therefore, incorporating caregiver-centric perspectives into medical tourism research is essential to developing a more comprehensive understanding of destination loyalty in this evolving domain.

Literature in hospitality and tourism consistently identifies quality of service and experiential elements as pivotal determinants of loyalty to a destination, a fundamental behavioral outcome indicative of tourists' interest in revisiting and endorsing a terminus (Arevin, 2024). Destination loyalty is particularly significant in competitive tourism markets, as it contributes to long-term sustainability and positive word-of-mouth. While traditional tourism research has focused on leisure travelers, recent studies emphasize the need to examine non-traditional visitor segments whose experiences also shape destination perceptions. In medical tourism, caregivers accompanying patients play a vital role but are an under-researched stakeholder group whose hospitality experiences can substantially influence destination evaluations. While service quality is commonly defined as the ability of service providers to meet or exceed customer expectations, it has been shown to directly influence satisfaction, memorable experiences, and loyalty intentions in tourism contexts (Eviana, 2024). High-quality service interactions enhance tourists' emotional responses, which in turn strengthen behavioral intentions such as return visits and recommendations. (Eviana, 2024) demonstrated that service quality contributes to memorable tourism experiences,

which mediate the relationship between service encounters and tourist satisfaction. These findings suggest that service quality dimensions beyond core offerings play an important role in shaping loyalty outcomes.

Destination loyalty has been widely conceptualized as a combination of revisit intention and willingness to suggest the place to others (Arevin, 2024). Empirical research indicates that tourism facilities, infrastructure, and service quality significantly influence destination loyalty through visitor satisfaction. Arevin (2024) confirmed that return intention is positively affected by available facilities and quality of service, reinforcing the importance of non-clinical services in destination competitiveness. Similarly, studies in rural and alternative tourism contexts show that physical and functional service elements enhance tourists' perceptions of service quality and increase their intention to stay and revisit destinations (Yang et al., 2025).

In medical tourism, service quality assumes a dual role, encompassing both healthcare services and hospitality-related experiences (Dogra et al., 2024) found that medical tourists' insights of quality in the service significantly influence customer satisfaction, which subsequently affects loyalty-related behaviors. Although this research primarily focuses on patients, it highlights the relevance of service quality in medical tourism settings. Caregivers, who manage accommodation, transport, food arrangements, and cultural navigation during medical stays, are exposed extensively to destination hospitality services. Their experiences are therefore likely to influence destination loyalty like that observed among tourists in conventional hospitality contexts. Residential comfort is a fundamental component of hospitality service quality and has been extensively linked to satisfaction and loyalty in tourism literature. Accommodation attributes such as comfort, cleanliness, safety, proximity, and environmental quality enhance tourists' overall experience and contribute to favorable behavioral intentions (Arevin, 2024). In medical tourism, caregivers often require accommodation for extended periods, making residential comfort particularly salient. Studies on service scape indicate that physical environments influence service perceptions and behavioral intentions by shaping comfort and emotional responses (Yang et al., 2025). When caregivers think that residential facilities are comfortable and helpful, they rate the place better overall, which makes them more likely to stay loyal. Based on above, the following hypothesis is proposed:

H1: Residential comfort positively influences destination loyalty among international medical attendants.

Food and dietary services are another important part of hospitality experiences, particularly for people from other countries. Culinary autonomy, defined as the capacity to access chosen food options and fulfill dietary requirements, is recognized as a significant determinant of satisfaction and intentions to revisit in tourism contexts. Research shows that meeting dietary needs makes people feel better mentally and boosts their perceived value, which in turn renders them more loyal to a brand (Qiu et al., 2024). During long stays in health tourism, the caregivers often have to deal with cultural and dietary changes. This is why having access to familiar food choices is so important. When destinations offer culinary flexibility and autonomy, caregivers encounter diminished stress and heightened satisfaction, potentially enhancing their loyalty to the destination. Thus, the following hypothesis is proposed:

H2: Culinary autonomy positively influences destination loyalty among international medical attendants.

Ease of navigation and transportation is widely seen as a functional service quality attribute that affects how tourists view the convenience and accessibility of a destination. Clear navigation support and efficient transportation systems help people feel less stressed and uncertain about their travels, especially for international visitors who do not belong to the area. Tourism studies indicate that infrastructure and transportation facilities substantially elevate satisfaction and intentions to revisit by enhancing overall service assessments (Arevin, 2024). Caregivers frequently travel between hospitals, accommodations, and essential service locations, making navigational ease very important in medical tourism. Consistent with servicescape and service quality literature, ease of navigation and transport is expected to enhance caregivers' destination loyalty. Thus, the proposed hypothesis is:

H3: Navigational and transportation ease positively influences destination loyalty among international medical attendants.

Linguistic and cultural support is a part of hospitality that affects how international visitors understand and feel about the service. It has been shown that good communication and

being aware of other cultures can make tourists happier and improve the image of a destination, which can then lead to loyalty behaviors (Eviana, 2024). Cultural congruence and linguistic assistance help international visitors navigate unfamiliar environments, developing trust and emotional attachment to the destination. Hussain (2023) demonstrated that service quality and satisfaction significantly influence destination loyalty, highlighting the importance of interpersonal and cultural aspects of service delivery. Caregivers rely heavily on communication support when interacting with service providers, making linguistic and cultural support a crucial determinant of destination loyalty. Therefore, the following hypothesis is proposed:

H4: Linguistic and cultural support positively influences destination loyalty among international medical attendants.

Qui (2024) found that perceived value significantly influences satisfaction and loyalty in tourism settings, suggesting that both emotional and functional service attributes shape behavioral intentions. Hussain (2023) confirmed that service quality and destination loyalty are mediated by satisfaction. These findings support the argument that Logistic hospitality dimensions, though non-clinical in nature, can substantially influence destination loyalty through enhanced service perceptions and satisfaction.

Although there have been a lot of studies on service quality and loyalty to a destination, there have not been many studies that directly look at the experiences of caregivers in medical tourism. Current literature predominantly focuses on patients' clinical satisfaction, neglecting the hospitality encounters with caregivers who significantly influence overall destination perceptions. This gap highlights the need to empirically examine Logistic hospitality dimensions as predictors of destination loyalty. By integrating residential comfort, culinary autonomy, navigational and transportation ease, and linguistic and cultural support into a unified framework, the present study extends hospitality and tourism literature by offering a caregiver-focused perspective on destination loyalty in medical tourism.

Even though medical tourism is growing quickly around the world, not much research has been done on caregiver-centric hospitality as a factor that affects destination loyalty. Current research primarily emphasizes patients' clinical fulfillment and treatment outcomes, neglecting caregivers

who significantly influence destination views, logistical coordination, and follow-up behavioral intentions. Caregivers interact a lot with accommodation providers, public transit, dining establishments, and intermediaries in culture while their loved ones are in the hospital for a long time. This means that their experiences have a big impact on how people rate the whole destination. In new medical tourism hubs like Chennai, it is especially important to understand caregiver-centric hospitality in order to make the destination more competitive, integrate services better, and make sure they last for a long time. Filling this research gap will help both hospitality and healthcare professionals by giving them new ideas and new ways to think about things.

Recent literature further strengthens the conceptual link between service quality dimensions and destination loyalty in tourism and hospitality contexts. Contemporary empirical studies confirm that service quality continues to be a primary antecedent of destination loyalty, often mediated by satisfaction, trust, and electronic word-of-mouth behaviors (Hussain, et al., 2023). These findings reinforce the multidimensional nature of loyalty, suggesting that both functional and experiential service attributes significantly influence revisit intention and recommendation behavior. Post-pandemic tourism research has also emphasized the increasing importance of trust and destination image in strengthening loyalty outcomes. Service quality not only directly influences loyalty but also indirectly impacts it through mediating constructs such as destination image and tourist trust (Abdulaziz et al., 2023). This highlights the growing complexity of loyalty formation, where intangible service elements such as communication, responsiveness, and perceived safety play a crucial role.

Recent studies indicate that perceived value and service interactions significantly influence revisit intention through destination image. Empirical evidence suggests that destination image acts as a partial mediator between perceived service value and loyalty behaviors, emphasizing the importance of integrated healthcare and hospitality experiences (Demir et al., 2025). These findings align with the argument that non-clinical service dimensions are critical determinants of behavioral intentions in medical tourism settings. Systematic reviews recently advocate for a more integrated and multidisciplinary approach that incorporates both clinical and non-clinical service dimensions (Wong et al., 2024). The review highlights a significant gap in

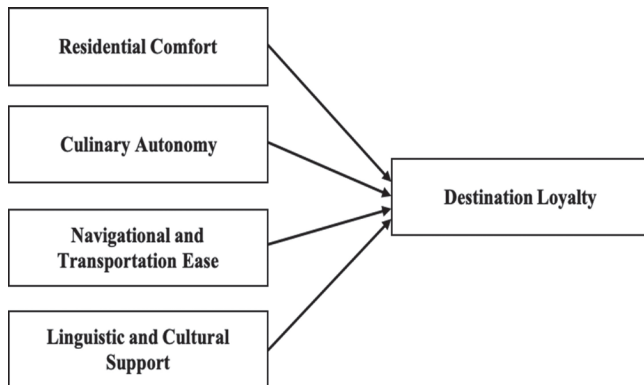
stakeholder-specific research, particularly concerning caregivers and accompanying attendants, thereby reinforcing the relevance of caregiver-centric hospitality frameworks. Emerging research in tourism and hospitality emphasizes value co-creation and experiential quality as key drivers of customer satisfaction and loyalty. Digital-era tourism studies suggest that personalized and context-specific service experiences enhance perceived value and long-term loyalty outcomes (Dang & Nguyen, 2023). This perspective supports the inclusion of caregiver-specific needs, such as cultural adaptation and service flexibility, within broader hospitality frameworks. Studies also highlight the role of destination image in strengthening loyalty relationships. Empirical evidence suggests that positive destination image significantly enhances customer loyalty by influencing emotional attachment and perceived value (Zakiah & Alhadihaq, 2023). This is particularly relevant in medical tourism, where emotional reassurance and trust are critical components of the travel experience. Research focusing on tourism loyalty frameworks indicates that destination loyalty is a complex construct influenced by satisfaction, service quality, and behavioral intentions such as word-of-mouth and revisit intention (Singh et al., 2022). Studies emphasize the need for more nuanced models that incorporate diverse tourist segments, including non-leisure travelers such as medical caregivers. Studies also demonstrate that trip attributes and service-related experiences significantly influence patient satisfaction and loyalty outcomes (Toni et al., 2022). Although primarily patient-focused, these findings indirectly support the argument that similar experiential factors influence caregivers, who engage extensively with hospitality services.

The literature indicates that destination loyalty in tourism is shaped by a combination of service quality, perceived value, destination image, and experiential factors. However, there remains a significant gap in examining how these constructs operate within caregiver-centric contexts in medical tourism. Addressing this gap is essential for developing more comprehensive service quality frameworks that reflect the experiences of all stakeholders involved in the medical tourism journey.

**Conceptual Model:** The model proposes that logistic hospitality dimensions, such as residential comfort, culinary autonomy, navigational and transportation ease, and linguistic and cultural support, have a direct effect on

destination loyalty in medical tourism. Caregivers are key evaluators of non-clinical hospitality experiences, suggesting that positive caregiver experiences strengthen destination trust and recommendation intentions.

**Figure 1**  
*Conceptual Framework*



*Source: Author's Work*

### Objectives:

- To examine the influence of Logistic hospitality dimensions (residential comfort, culinary autonomy, navigational & transport ease, and linguistic & cultural support) on destination loyalty among international medical attendants in Chennai.
- To assess which Logistic hospitality dimensions most strongly predict destination loyalty in medical tourism contexts.
- To contribute to hospitality and medical tourism literature by expanding service quality frameworks to include caregiver-centered perspective.

## Methodology

**Research Design:** This study adopted a quantitative research design to examine the relationship between logistic hospitality dimensions and destination loyalty in the medical tourism context. A cross-sectional survey approach was employed to collect primary data from international medical attendants accompanying patients in Chennai. The quantitative approach was considered appropriate for testing hypothesized relationships and assessing predictive associations among multiple constructs.

**Locale:** The respondents were from Chennai, the medical hub of India. Chennai attracts a substantial number of international patients due to its specialized healthcare

facilities, cost advantages, and integrated hospitality services.

**Sampling Design:** The target population comprised international medical attendants (caregivers) accompanying patients receiving treatment in Chennai. Purposive sampling was used. A total of 331 questionnaires were distributed online, of which 254 medical attendants were retained. The sample represents a single respondent group consisting exclusively of international caregivers. Inclusion Criteria: Caregivers who are 18 years of age or older and stayed 3 days or more in Chennai were considered. Only international medical attendants who were accompanying patients to Chennai and have direct experience with non-clinical hospitality services, including accommodation, food, transportation, and communication support, were enrolled.

**Tools and Technique:** A structured questionnaire consisting of measurement items adapted from established tourism and medical tourism literature was used for data collection. All constructs were measured using a five-point Likert scale. The questionnaire was distributed via Google Forms to international respondents. Measurement of Scale: Measurement items for this study were adapted from established scales in tourism and medical tourism literature to ensure validity and reliability. Items related to residential comfort, navigational and transportation ease, and linguistic and cultural support were derived from service quality and servicescape frameworks (Arevin, 2024; Eviana, 2024; Yang et al., 2025). Culinary autonomy was measured using items adapted from food service quality and dietary satisfaction studies in tourism research (Qiu et al., 2024). Destination loyalty was assessed using standard items capturing revisit intention and recommendation behavior (Arevin, 2024; Hussain et al., 2023).

**Data Analysis and Statistical Analysis:** Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The measurement model was assessed to evaluate internal consistency, reliability, and validity. Reliability was examined using Cronbach's alpha and composite reliability. Convergent validity was assessed through factor loadings and average variance extracted (AVE). Discriminant validity was evaluated using the (Fornell & Larcker, 1981) criterion. The structural model was analyzed to test the proposed hypotheses. Path coefficients and significance levels were examined using a bootstrapping procedure. The coefficient of

determination ( $R^2$ ) was used to assess the model's explanatory power. Model fit was evaluated using SRMR, NFI, and Chi-square indices. Effect sizes ( $f^2$ ) were also computed to determine the contribution of each predictor variable.

## Results and Discussion

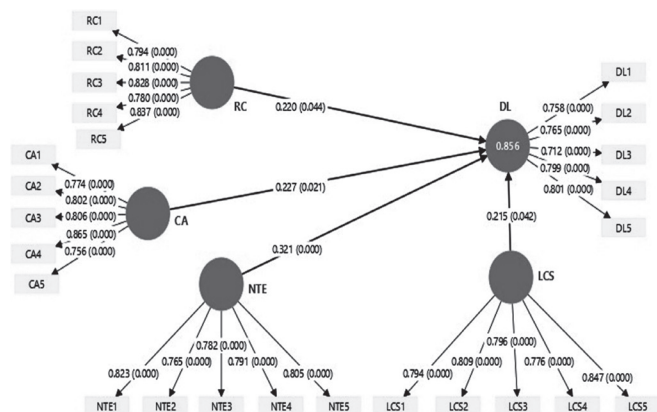
**Table 1**  
*Demographic Characteristics of Respondents (N = 254)*

Demographics	Category	Frequency (n)	Percentage (%)
Gender	Male	117	46.1
	Female	137	53.9
Age group	Below 25 years		
	26 - 34 years	18	7.1
	35 - 44 years	199	78.3
	45 - 54 years	16	6.3
	55 and above years	17	6.7
Educational qualification	Undergraduate	247	97.2
	Postgraduate	3	1.18
	Doctorate / Professional	4	1.57
	Country Origin		
Country Origin	Asia	148	58.3
	Africa	46	18.1
	Middle East	39	15.4
	Europe	21	8.3
Relationship with the patient	Spouse	102	40.2
	Parent	68	26.8
	Child	27	10.6
	Sibling	31	12.2
	Others	26	10.2
Duration of stay in Chennai	Less than 1 week	29	11.4
	2 weeks	87	34.3
	4 weeks	94	37
	More than 1 month	44	17.3

Source: Author's Work

**PLS SEM Results:** The bootstrapping (Figure 1) was conducted to test the significance of hypothesized relationships in the structural equation model. PLS-SEM the algorithm was applied (Figure 2) to evaluate the measurement and structural models, following the two-step approach recommended by (Hair et.al., 2021), and to examine indicator reliability and validity and path coefficients.

**Figure 2**  
*PLS SEM Results*



Source: Author's Work

**Reliability and Validity Results:** The results indicate satisfactory reliability and validity. Cronbach's alpha values for all constructs (Table 2) were more than the recommended threshold of 0.70, suggesting good internal consistency. Composite reliability values were also above the acceptable level (Fornell & Larcker, 1981) further supporting the reliability of the measurement scales.

Validity of convergence was established as the AVE values for all constructs (Table 2) were greater than 0.50, indicating that a considerable proportion of variance was captured by the constructs. The mean values recommend a moderate to high level of agreement between respondents, while the standard deviation values indicate reasonable variation in responses.

**Table 2**  
*Reliability and Validity Results*

Items	Factor Loadings	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)	Mean	Standard Deviation
RC1	0.794				3.808	1.107
RC2	0.811				3.778	1.291
RC3	0.828	0.869	0.905	0.657	3.545	1.166
RC4	0.780				3.808	1.098
RC5	0.837				3.778	1.124

CA1	0.774				3.606	1.144
CA2	0.802				3.535	1.076
CA3	0.806	0.860	0.900	0.642	3.657	1.165
CA4	0.865				3.737	1.194
CA5	0.756				3.626	1.151
NTE1	0.823				3.586	1.206
NTE2	0.765				3.687	1.152
NTE3	0.782	0.853	0.895	0.630	3.657	1.173
NTE4	0.791				3.677	1.109
NTE5	0.805				3.697	1.210
LCS1	0.794				3.798	1.239
LCS2	0.809				3.657	1.173
LCS3	0.796	0.864	0.902	0.648	3.475	1.048
LCS4	0.776				3.556	1.174
LCS5	0.847				3.717	1.172
DL1	0.758				3.576	1.120
DL2	0.765				3.626	1.124
DL3	0.712	0.825	0.877	0.589	3.586	1.164
DL4	0.799				3.667	1.092
DL5	0.801				3.667	1.155

Source: Author's Work

**Model Fit Indices:** The Standardized Root Mean Square Residual (SRMR) indicates the average difference between the model-predicted and observed correlations. Values 0.08 or below are acceptable (Hair et.al., 2021). SRMR is 0.059 (Table 3), which suggests that the proposed model fits the data well. The Normed Fit Index (NFI) compares the proposed model with a null (baseline) model. Values closer to 1 indicate a better fit, with 0.90 being accepted. In PLS-SEM, however, NFI values are often lower, especially in exploratory or prediction-oriented models. An NFI of 0.786 (Table 3) suggests a moderate but acceptable model fit. The Chi-square statistic reflects the discrepancy between the observed and estimated covariance matrices. In large samples and complex models, Chi-square values are typically high and often become significant even when the model fit is reasonable. Therefore, in PLS-SEM, Chi-square

is interpreted descriptively rather than as a strict decision criterion. The reported value indicates some discrepancy, which is expected, and should be considered alongside SRMR and NFI. **Top of Form**

**Table 3**  
Model Fit Indices Results

	Saturated model	Estimated model
SRMR	0.059	0.059
NFI	0.786	0.786
Chi- Square	404.844	404.844

Source: Author's Work

**R<sup>2</sup> and Adjusted R<sup>2</sup> Values:** The R-square value for Destination Loyalty (DL) is 0.856 (Table 4), indicating that 85.6% of the variance in destination loyalty is explained by residential comfort, culinary autonomy, navigational and transportation ease, and linguistic and cultural support, demonstrating substantial explanatory power of the proposed model. In PLS-SEM, R<sup>2</sup> values of 0.75, 0.50, and 0.25 are substantial, moderate, and weak, respectively (Hair et.al., 2021). The adjusted R-square value of 0.850 is very close to the R-square value, showing a strong explanatory capability. The small difference in R<sup>2</sup> and adjusted R<sup>2</sup> further indicates that the model is stable and not affected by overfitting (Hair et.al., 2021).

**Table 4**  
R<sup>2</sup> and Adjusted R<sup>2</sup> Values

	R-square	R-square adjusted
DL	0.856	0.850

Source: Author's Work

**Hypothesis Testing Results:** The results of the model show that all of the proposed hypotheses were true. This means that there are strong connections between the logistic accommodation dimension and destination loyalty. Residential comfort has a positive and statistically significant impact on destination loyalty ( $\beta = 0.220$ ,  $p = 0.044$ ), indicating that their thoughts about accommodation comfort significantly bolster their commitment goals towards the destination. The effect size ( $f^2 = 0.067$ ) shows that the model gets a small but important boost from it. Culinary autonomy significantly enhances destination loyalty ( $\beta = 0.227$ ,  $p = 0.021$ ), emphasizing the importance of the availability of preferred food choices and dietary flexibility in influencing

caregivers' destination-related behavioral intentions. The effect size ( $f^2 = 0.076$ ) indicates a small but significant influence, underscoring the importance of dietary offerings in medical tourism hospitality encounters. Navigational and transportation ease stands out as the most significant predictor of destination loyalty ( $\beta = 0.321$ ,  $p < 0.001$ ), showing a moderate impact ( $f^2 = 0.142$ ). This finding highlights the most important importance of physical mobility, access, and guidance in alleviating travel-associated stress and improving caregivers' overall assessments of destinations. There is a strong positive link between linguistic and cultural support and destination loyalty ( $\beta = 0.215$ ,  $p = 0.042$ ). The magnitude of the effect is small ( $f^2 = 0.060$ ), but the result shows that good interpersonal skills and being aware of other cultures genuinely do help caregivers think better and want to stay loyal.

**Table 5**  
*Hypothesis Testing Results*

Hypothesis	Beta ( $\beta$ )	p-value	f-square	Decision
H1 (RC $\rightarrow$ DL)	0.220	0.044	0.067	Supported
H2 (CA $\rightarrow$ DL)	0.227	0.021	0.076	Supported
H3 (NTE $\rightarrow$ NTE)	0.321	0.000	0.142	Supported
H4 (LCS $\rightarrow$ DL)	0.215	0.042	0.060	Supported

*Source: Author's Work*

The present study investigated the influence of caregiver-centric logistic hospitality dimensions like residential comfort, culinary autonomy, navigational and transportation ease, and linguistic and cultural support on destination loyalty among international medical attendants in Chennai. The structural model demonstrates strong explanatory power, with the four predictors jointly accounting for 85.6% of the variance in destination loyalty. According to PLS-SEM guidelines, this reflects substantial predictive accuracy (Hair et al., 2021), which highlights the importance of non-clinical hospitality experiences in shaping caregivers' behavioral intentions. These findings reinforce the growing recognition that destination loyalty in medical tourism extends beyond clinical outcomes to encompass broader experiential and service-related factors (Dogra et al., 2024).

All four hypotheses were supported, confirming that caregiver-centric hospitality dimensions significantly

influence destination loyalty. This result extends existing tourism literature, which primarily focuses on leisure travelers, by empirically validating caregivers as a critical stakeholder group whose experiences substantially shape destination perceptions (Arevin, 2024). Consistent with service quality frameworks, the findings suggest that caregivers form holistic evaluations of destinations based on multiple functional and emotional service encounters, which collectively drive loyalty outcomes (Eviana, 2024; Hussain et al., 2023).

Objective 1: To examine the influence of Logistic hospitality dimensions on destination loyalty among international medical attendants in Chennai. The measurement model demonstrated satisfactory reliability and validity. All constructs exceeded the recommended threshold of 0.70 for Cronbach's alpha and composite reliability. AVE values were above 0.50, confirming convergent validity. Discriminant validity was established using the Fornell-Larcker criterion (Fornell & Larcker, 1981). The structural model revealed strong explanatory power, with logistic hospitality dimensions explaining 85.6% of the variance in destination loyalty ( $R^2 = 0.856$ ), indicating substantial predictive accuracy. Hypothesis testing results indicated that all four logistic hospitality dimensions significantly influence destination loyalty. Residential comfort ( $\beta = 0.220$ ,  $p = 0.044$ ), culinary autonomy ( $\beta = 0.227$ ,  $p = 0.021$ ), navigational and transportation ease ( $\beta = 0.321$ ,  $p < 0.001$ ), and linguistic and cultural support ( $\beta = 0.215$ ,  $p = 0.042$ ) were found to positively predict destination loyalty. These findings align with prior research emphasizing service quality and experiential factors as critical determinants of loyalty (Arevin, 2024; Hussain et al., 2023). The results extend existing literature by confirming that non-clinical hospitality attributes significantly influence caregiver-based destination evaluations in medical tourism contexts.

Residential comfort was found to exert a significant positive effect on destination loyalty, supporting H1. This finding aligns with hospitality research emphasizing accommodation quality as a foundational determinant of satisfaction and behavioral intentions (Arevin, 2024). Caregivers in medical tourism contexts often require extended stays, making comfort, cleanliness, safety, and proximity to healthcare facilities particularly salient. The present results indicate that when caregivers perceive residential environments as supportive and comfortable, their

overall evaluation of the destination improves, leading to stronger loyalty intentions. This outcome is consistent with servicescape theory, which posits that physical environments influence emotional responses and subsequent behavioral decisions (Yang et al., 2025). Although the effect size is relatively small, residential comfort functions as a baseline condition that contributes meaningfully to caregivers' holistic destination experiences.

Culinary autonomy also demonstrated a significant positive relationship with destination loyalty, confirming H2. This result underscores the importance of access to preferred food options and dietary flexibility in shaping caregivers' satisfaction and loyalty. Previous tourism studies indicate that meeting travelers' dietary needs enhances perceived value and emotional comfort, thereby strengthening revisit intentions (Qiu et al., 2024). In medical tourism settings, caregivers frequently encounter cultural and dietary adjustments during prolonged stays, making culinary autonomy particularly relevant. The present findings suggest that destinations offering diverse and culturally inclusive food services reduce caregiver stress and enhance psychological well-being, which subsequently translates into greater destination loyalty. This supports earlier research emphasizing food-related services as an integral component of experiential quality in tourism aspects (Eviana, 2024).

Navigational and transportation ease emerged as the strongest predictor of destination loyalty, thereby supporting H3. This finding highlights the critical role of mobility, accessibility, and navigational support in medical tourism experiences. Caregivers routinely travel between hospitals, accommodation facilities, pharmacies, and other essential services, rendering efficient transportation systems and clear wayfinding mechanisms indispensable. Consistent with tourism infrastructure literature, ease of navigation and transport significantly enhances destination evaluations by reducing uncertainty and travel-related stress (Arevin, 2024). The moderate effect size observed in this study indicates that functional convenience plays a particularly prominent role in shaping caregivers' loyalty intentions. This result reinforces servicescape-based arguments that physical and functional service elements exert direct influence on behavioral outcomes (Yang et al., 2025), especially in high-stress contexts such as medical travel.

Linguistic and cultural support was also found to

significantly influence destination loyalty, confirming H4. Effective communication and cultural sensitivity contribute to caregivers' emotional comfort and trust in service providers, thereby enhancing overall destination perceptions. Previous studies have shown that interpersonal service quality and cultural congruence positively affect satisfaction and destination image, which subsequently influence loyalty behaviors (Eviana, 2024; Hussain et al., 2023). In medical tourism contexts, caregivers depend heavily on communication support when interacting with healthcare personnel and hospitality providers. The present findings indicate that linguistic assistance and culturally responsive services, although exhibiting a smaller effect size, remain essential contributors to destination loyalty by fostering feelings of safety, inclusion, and emotional attachment.

The high R-square value further demonstrates that caregiver-centric hospitality dimensions collectively provide substantial explanatory power for destination loyalty. This supports the argument that loyalty in medical tourism is multidimensional and shaped by both functional and emotional service attributes (Hair et al., 2021; Qiu et al., 2024). The minimal difference between R-square and adjusted R-square values suggests that the model is stable and not affected by overfitting, reinforcing confidence in its predictive relevance.

This study contributes to hospitality and medical tourism literature by extending service quality frameworks to explicitly incorporate caregiver experiences. While prior research has predominantly emphasized patients' clinical satisfaction (Dogra et al., 2024) the present findings empirically demonstrate that caregivers' interactions with non-clinical hospitality systems significantly influence destination loyalty. By integrating residential comfort, culinary autonomy, navigational and transportation ease, and linguistic and cultural support into a unified model, this research advances a caregiver-centric perspective that complements existing patient-focused approaches.

Objective 2: To assess which Logistic hospitality dimensions most strongly predict destination loyalty in medical tourism contexts. Among the four predictors, navigational and transportation ease emerged as the strongest determinant of destination loyalty ( $\beta = 0.321$ ;  $f^2 = 0.142$ ), indicating a moderate effect size. This suggests that functional convenience, accessibility, and mobility play a particularly

critical role in shaping caregivers' behavioral intentions. Since caregivers frequently travel between hospitals, accommodation facilities, and essential service locations, providing efficient transport systems and navigational clarity significantly reduces stress and enhances overall destination perception. This finding supports servicescape theory and tourism infrastructure research, which highlight accessibility as a central driver of satisfaction and revisit intention (Yang et al., 2025).

Objective 3: To contribute to hospitality and medical tourism literature by expanding service quality frameworks to include caregiver-centered perspectives. The findings contribute theoretically by extending service quality frameworks beyond patient-centric models to incorporate caregiver experiences as a distinct evaluative dimension in medical tourism. While prior studies focus predominantly on clinical satisfaction (Dogra et al., 2024), this study demonstrates that non-clinical hospitality services exert a substantial influence on destination loyalty. By integrating residential comfort, culinary autonomy, navigational ease, and linguistic support into a unified framework, the study advances a caregiver-centric perspective within medical tourism research.

The results have important implications for managers of destinations, hospital managers, and hospitality providers. Since convenience in navigation and transit was the most important factor, putting money into mobility amenities and mapping systems could lead to major improvements in loyalty results. The results show that making their lives better requires cooperation between healthcare organizations, transit systems, and travel authorities. Caregivers will feel better about their places if they can travel to them more easily, have more culturally appropriate food options, and have access to services that are fluent and culturally sensitive. Residential ease and linguistic support may have smaller effect sizes, but they are still important parts of the whole experience and add up to destination loyalty. Taking proper care of caregivers' mental and physical needs overall can help the destination get good press, get people to come back, and stay competitive for a long time. Tourism destinations can work to create more sustainable and friendly hospitality models by seeing that they are equally significant assessors in the healthcare tourism supply network.

## Conclusion

This study examined the role of caregiver-centric logistic hospitality dimensions in shaping destination loyalty among international medical attendants in Chennai. By focusing on caregivers as key stakeholders in medical tourism, the research extends existing literature that has largely emphasized patient-centered outcomes. The findings demonstrate that residential comfort, culinary autonomy, navigational and transportation ease, and linguistic and cultural support collectively exert a strong influence on destination loyalty, highlighting the importance of non-clinical hospitality experiences in medical tourism contexts.

## Conflict of Interest

The Author(s) possess no conflict of interest and had equal contributions in this research work

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