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**Research Article**

# KERALA: HEALTH TOURISM HUB FOR AYURVEDA

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## Abstract

Health/Medical tourism is a booming niche tourism market in the tourism industry. The main reason for the increasing trend is the high cost of treatment, long waiting time, less insurance coverage in developed countries and the attitude of people to spend holidays in a quality manner with the aim of improving health. In India, Kerala is emerging as a prime health tourism hub for its Ayurveda packages. The state attracts millions of foreign and domestic tourists to visit the state's incredible heritage and experience the traditional nature based treatment therapies. The volume of tourist arrivals in Kerala had experienced a stupendous growth of 7.7 per cent in 2014 from 4.3 per cent in 2001 (Annual report of Tourism Statistics, Department of Tourism, Government of Kerala). This study aims to profile the tourists visiting Kerala for Ayurvedic treatment and to identify the destination image factors making Kerala an attractive place for Ayurveda health tourism. For this purpose, 150 domestic tourists availing Ayurvedic treatment in Kerala were selected on the convenience of the researcher. In order to analyse the objectives, the Descriptive Statistics, Factor Analysis and One-way ANOVA were employed and the results revealed that service quality, attraction, opportunity, benefits and promotion were the destination image factors making Kerala an attractive place for Ayurvedic Health Tourism. The present study identifies the strength of Kerala for Ayurveda health tourism which helps the destination managers and the service providers with a better understanding of the market for elevating Kerala and its Ayurveda in this niche market.

**Keywords:** Health Tourism, Destination Attractiveness, Ayurveda, Kerala.

## Introduction

Health/Medical tourism is a booming niche tourism market in the tourism industry. Medical tourism (also called medical travel or health tourism) is a term initially coined by travel agencies and the mass media to describe the rapidly growing practise of travelling to another country to obtain healthcare. Goodrich and Goodrich (1987: 217) defined medical tourism as "the best attempt on the part of a tourist facility or destination to attract tourists by deliberately promoting its healthcare services and facilities in addition to its regular tourists' amenities". The high cost of treatment, long waiting time, less insurance coverage in developed countries and the attitude of people to spend holidays in a quality manner with the aim of improving health is the main reason for the increasing trend in medical tourism.

The attractiveness of the destination has a great influence on determining a person's destination of choice, expectations/ satisfaction, intentions to revisit, perceptions of benefits and motivations, the amount of money spent and the duration of stay (Henkel *et al.,* 2006). Countries all over the world have analysed a wide scope for this market and are trying hard to capture a large market share by attracting a large number of tourists with their destinations specific attributes and wide variety of tourism products. This has created an immense competition in the health tourism market for the major players like Thailand, India, Costa Rica, etc. Thus it has become a need of the hour to know the competitive advantage of their destination, attracting tourists. It is always thought that the destination with more attractiveness will have the priority to be chosen the most and revisited. There are many attributes of a destination which may or may not attract tourists who travel for a particular type of tourism. This arises the need to identify the attributes that lead tourists to choose one destination over another.

In India, Kerala is emerging as the prime destination for Ayurveda Health Tourism. It is famous for its tourist attractions like beaches, backwaters, hill stations and Ayurveda. Ayurvedic medical practice is the most ancient medical system which is more popular in Kerala where it is practised in a traditional way. The state's equitable climate, natural abundance of forests and the cool monsoon season are best suited for curative and rejuvenative Ayurvedic treatments. The presence of moisture in the air and on the surface of skin makes it an ideal place for natural medicines to work effectively at their highest levels. Compared to other states, having different soil constitution, in Kerala the soil is rich in alkaloid which enhances the intensity and potential of many Ayurvedic medicines. Ayurveda has become a huge selling point for Kerala Tourism Industry and the state promotes it as a part of medical tourism in the international market. Today popularity of Kerala Ayurvedic treatment has gained such a momentum that tourist from

across the world come to Kerala only for ayurveda. There are number of resorts and hospitals throughout the state which offers Ayurveda holiday packages. The volume of tourist arrivals in Kerala had experienced a stupendous growth of 7.7 per cent in 2014 from 4.3 per cent in 2001 (Annual Report of Tourism Statistics, Department of Tourism, Government of Kerala). Also based on a Continuous Tourism Survey Report (2012 – 2013), it was reported that 3.1 per cent of foreign tourist and 3.71 per cent of domestic tourists visited Kerala for health treatment. The main reason for this growth may be the aggressive media campaigns made by the state government and the word of mouth publicity made by the tourists who have visited earlier. In this context, the researcher has identified the factors influencing destination attractiveness of Kerala Ayurveda Health Tourism from the perspective of tourists.

## Review of Literature

Mayo and Jarvis (1989) defined the notion of the destination attractiveness as "the perceived ability of the destination to deliver individual benefits." This ability is enhanced by the attributes of a destination, i.e., that is those components that makeup a destination.

Bindu (2009) investigated the perception of tourists on Ayurvedic health tourism in Kerala and the satisfaction of health tourists towards health tourism services and facilities. Using factor analysis the researcher identified destination image, healthcare package and ayurker were the perception of tourists towards Kerala as preferred Ayurvedic Health care destination and the factors which affected their satisfaction level were booking procedures, promotion and awareness creation, environment and facilities of Ayurvedic Resorts.

Sarwar *et al.* (2012) examined the relationship between the key elements of medical tourist's perception and its impact on destination selection by developing a conceptual research model and the results revealed that cost, service quality, treatment types and availability, lack of access to particular treatment and marketing impact had a very strong relationship on the perception of medical tourist's in selecting the destination.

Neha Singh (2012) studied the factors that influenced the travel motivation of US medical tourists in selecting specific tourist destinations. Five factors were explored namely, local primary doctor's recommendation, medical facilities and services, hotels and food and beverage quality, general tourism supply government policies and laws and the findings revealed that they gave prime importance to medical facilities and services and least importance was given to general tourism supply.

Mohammad Mosadeghrad (2014) made an attempt to identify the most important influencing factors in choosing a hospital by patients. The findings of the study revealed that type of hospital, type of services, word of mouth, and cost of services, the health insurance programme, location, physical environment, facilities, providers' expertise and interpersonal behaviour and reputation of the hospital influenced patients' choice of a hospital. Doctors' recommendations and health insurance programme were the main reasons for choosing a hospital for inpatients and outpatients respectively.

## Objectives

The following were the objectives of the study-
1. To profile the domestic tourists' visiting Kerala for Ayurvedic treatment.
2. To identify various destination attributes attracting Ayurvedic Health Tourism in Kerala.

## Research Methodology

The researcher made use of both primary and secondary data for analysis. The secondary data was collected from Annual Reports of Tourism Department, Government of India and Kerala. For collecting primary data a survey of domestic tourists was undertaken to identify the factors influencing their choice of destination. Questionnaire was used to collect their personal and perception data of the destination. Since the purpose was to study the factors influencing the destination attributes, factor analysis was used. Attributes were selected from past reviews, reports and articles. The responses were collected from domestic tourists availing ayurvedic treatment in Kerala. The questionnaire was issued to 150 respondents depending their convenience at various ayurvedic health centres and resorts in Kerala. A five point Likert scale was used to collect data about the perception and the collected data were analysed using statistical tools like descriptive statistics, factor analysis and One- way ANOVA.

## Results and Discussion

### *Profile and Travel Behaviour of Health Tourists*

Table 1 it could be inferred that majority of the tourists visiting Kerala are Females (56.00 per cent) above 55 years who are married and working as private employees. Majority of them are visiting Kerala second time with the motive of availing ayurvedic treatment for a period of 1 – 7 days.

### *Determinants of Kerala as Health Tourism Destination*

Kerala is synonymous to Ayurveda because of its unique features like natural and herbal medicinal products, geographical position and tropical climate for the treatment and age old practice of curing diseases.

To identify the factors that contribute to destination attractiveness of Kerala Ayurvedic health tourism, factor analysis was employed. Before going for factor analysis, one need to test the reliability of the scale to ensure the internal consistency of the scale that if anyone else goes further with this analysis the possibility of getting the same result for them. Hence Cronbach's Alpha, the most common reliability test was applied in the present study which gave a value 0.751 greater than standard value 0.6 stated by

(Cronbach, 1951; Nunnally, 1994). The next step was to see the samples are adequate and appropriate enough to proceed with factor analysis, for this Kaiser- Meyer-Oklin test and Bartlett's test of Sphericity was undertaken. It is clear from Table: 2 the test result of Kaiser- Meyer-Oklin was 0.74. According to Kaiser (1974) the values greater than 0.5 are acceptable and Bartlett's test of Sphericity was significant at five per cent which ensured that the data is appropriate to perform factor analysis. After completing these procedures Factor Analysis was carried out to obtain the influencing factor, for this purpose Principal Component Analysis was used. From Table 3, it could be inferred that five independent factors were extracted from18 attributes, which accounted a total variance of 55.52 per cent. Each of the five factors contributes 14.52 per cent, 11.60 per cent, 10.89 per cent, 10.05 per cent and 8.44 per cent respectively to total variance.

**Table 1:** Demographic Profile and Travel Behaviour of the Health Tourists

| Gender | | |
|---|---|---|
| Male | 66 | 44.00 |
| Female | 84 | 56.00 |
| **Age (Years)** | | |
| 25-34 | 14 | 9.33 |
| 35-44 | 25 | 16.67 |
| 45-54 | 45 | 30.00 |
| Above 55 | 66 | 44.00 |
| **Marital Status** | | |
| Married | 95 | 63.33 |
| Unmarried | 55 | 36.67 |
| **Occupational Status** | | |
| Government Employee | 35 | 23.33 |
| Private Employee | 45 | 30.00 |
| Businessmen | 28 | 18.67 |
| House Wife | 25 | 16.67 |
| Student | 17 | 11.33 |
| **Frequency of Visit** | | |
| First Visit | 45 | 30.00 |
| Second Visit | 95 | 63.33 |
| Repeat Visit | 10 | 6.67 |
| **Purpose of Visit** | | |
| Ayurvedic Treatment | 85 | 56.67 |
| Rejuvenation Therapies | 65 | 43.33 |
| **Duration of Stay** | | |
| 1 -7 days | 123 | 82.00 |
| 8 – 14 days | 20 | 13.33 |
| One Month | 5 | 3.33 |
| More than one Month | 2 | 1.33 |

**Source:** Primary Data

**Table 2:** Factor Analysis-KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.74 |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 473.496 |
| | Df | 153 |
| | Sig. | .000 |

**Source:** Computed Data

Table 4 depicts the factor loading of each attributes explaining the factors. Factor 1 accounted 14.52 per cent of total variance which included five variables Quality infrastructure & other equipments, Certification of the ayurvedic centres, efficiency and results of treatment, Confidence in Services received and Personalised care provided by competent physicians with factor loading ranging from 0.75 to 0.50. Therefore this factor was named as **Quality of Service**.

Factor 2 explained 11.60 per cent of total variance with factor loading ranging from 0.73 to 0.58 for Type of ayurvedic treatment not available in your home town, experiencing ayurveda in its traditional form along with yoga and meditation, Wide range of ayurveda treatment available in Kerala. Hence this factor was termed as **Opportunity**.

Factor 3 constituted 10.89 per cent of total variance with high factor loading ranging from 0.72 to 0.68 for less expensive for treatment compared to your home town, shorter waiting time for treatment compared to your home town, treatment given in Kerala is worth for money spent. Therefore this factor was named as **Benefit**.

Factor 4 consist of Reputation of Kerala as a destination for Ayurveda, Great place for relaxing after treatment for recapturing patients, humidity in climate that best suits for ayurveda revealing high factor loading from 0.74 to 0.61 explaining 10.05 per cent of total variance. Therefore this factor was named as **Attraction.**

Factor 5 included Advertisements in the Print Medias, railways and bus stand, Participation in trade fair, conferences, exhibitions, etc., Internet Advertisements & Provision for online health newsletters with high factor loading from 0.69 to 0.50 accounting 8.44 per cent of total variance. Hence this factor was named as **Promotion**.

Table 5 summarizes the four factors contributing to choose Ayurvedic Health Tourism in Kerala based on their mean values. Factor 3 had the highest mean value of 6.81 implying that tourists are more attracted towards this destination factor in Kerala followed by Factor 4 with mean value 6.42 and factor 5 had the lowest mean value 5.72

**Table 3:** Factor Analysis-Component Matrixes for Extracted Value

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 2.614 | 14.523 | 14.523 | 2.614 | 14.523 | 14.523 | 2.320 | 12.888 | 12.888 |
| 2 | 2.088 | 11.600 | 26.123 | 2.088 | 11.600 | 26.123 | 2.059 | 11.441 | 24.329 |
| 3 | 1.961 | 10.897 | 37.020 | 1.961 | 10.897 | 37.020 | 1.972 | 10.957 | 35.287 |
| 4 | 1.810 | 10.056 | 47.076 | 1.810 | 10.056 | 47.076 | 1.902 | 10.568 | 45.855 |
| 5 | 1.520 | 8.444 | 55.520 | 1.520 | 8.444 | 55.520 | 1.740 | 9.666 | 55.520 |
| 6 | 1.279 | 7.107 | 62.627 | | | | | | |
| 7 | 1.127 | 6.260 | 68.887 | | | | | | |
| 8 | 1.066 | 5.925 | 74.811 | | | | | | |
| 9 | .931 | 5.174 | 79.985 | | | | | | |
| 10 | .768 | 4.265 | 84.250 | | | | | | |
| 11 | .648 | 3.600 | 87.849 | | | | | | |
| 12 | .546 | 3.035 | 90.885 | | | | | | |
| 13 | .460 | 2.555 | 93.440 | | | | | | |
| 14 | .398 | 2.210 | 95.650 | | | | | | |
| 15 | .324 | 1.802 | 97.452 | | | | | | |
| 16 | .184 | 1.024 | 98.476 | | | | | | |
| 17 | .149 | .829 | 99.305 | | | | | | |
| 18 | .125 | .695 | 100.000 | | | | | | |

**Source:** Computed Data

**Table 4:** Factor Analysis – Rotated Component Matrix

| Factors | Components | | | | | % of Variance | Factor Name |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | |
| Quality Infrastructure & other Equipments | .757 | | | | | 14.52 | Quality of Service |
| Certification of the Ayurvedic Health care centres. | .669 | | | | | | |
| Efficiency and results of treatments | .621 | | | | | | |
| Confidence in Services Received | .574 | | | | | | |
| Personalised care provided by competent physicians | .504 | | | | | | |
| Type of Ayurvedic treatment not available in your home town | | .735 | | | | 11.60 | Opportunity |
| Experiencing Ayurveda in its traditional form along with yoga and meditation | | .653 | | | | | |
| Wide range of Ayurvedic treatments available in Kerala. | | .582 | | | | | |
| Less expensive compared to your home town | | | .725 | | | 10.89 | Benefits |
| Shorter waiting time for treatment compared to your hometown | | | .700 | | | | |
| Treatment given in Kerala is worth for money spent | | | .685 | | | | |
| Reputation of Kerala as a popular Ayurveda destination | | | | .747 | | 10.05 | Attractions |
| Great place for relaxation after treatment for recapturing patients | | | | .625 | | | |
| Humidity in the climate that best suits for ayurvedic treatment | | | | .611 | | | |
| Advertisements in the Print Medias, railways and bus stand | | | | | .699 | 8.44 | Promotion |
| Participation in trade fair, conferences, exhibitions, etc. | | | | | .577 | | |
| Internet Advertisements & Provision for online health newsletters | | | | | .509 | | |

**Source:** Computed Data

**Table 5:** Determinants of Ayurvedic Health Tourism in Kerala

| Factors | Factor Name | Factor Mean | Ranking |
|---------|-------------|-------------|---------|
| Factor 3 | Benefits | 6.81 | 1 |
| Factor 4 | Attractions | 6.42 | 2 |
| Factor 1 | Quality of Service | 6.14 | 3 |
| Factor 2 | Opportunity | 5.91 | 4 |
| Factor 5 | Promotion | 5.72 | 5 |

**Table 6:** ANOVA Test of Socio-demographic Status* Destination Attractiveness

| Socio-demographic Status | | Sum of Squares | df | Mean Square | F | Sig. | Result |
|---|---|---|---|---|---|---|---|
| Age | Between Groups | 32.857 | 3 | 18.179 | | | |
| | Within Groups | 568.716 | 147 | 5.474 | 3.321 | .023* | Rejected |
| | Total | 601.573 | 150 | | | | |
| Gender | Between Groups | 5.355 | 4 | 14.761 | | | |
| | Within Groups | 482.119 | 146 | 5.768 | 2.559 | .013* | Rejected |
| | Total | 487.474 | 150 | | | | |
| Occupation | Between Groups | 33.241 | 1 | 45.670 | | | |
| | Within Groups | 651.219 | 149 | 4.182 | 10.920 | .000* | Rejected |
| | Total | 684.460 | 150 | | | | |
| Marital Status | Between Groups | 94.061 | 5 | 26.073 | | | |
| | Within Groups | 510.899 | 145 | 4.783 | 5.451 | .000* | Rejected |
| | Total | 604.960 | 150 | | | | |

**Source:** Computed Data

### *ANOVA Test*

In order to assess the significant difference between the profile of respondents and their choice of destination, ANOVA was applied and from Table 6 it is observed that all the demographic variables like age, occupation, gender and marital status have a significant difference at five per cent level as their p-values are less than 0.5, hence rejecting the null hypothesis that there is no significant difference between demographic variables like age, occupation, marital status, gender and their attractiveness towards their destination.

## Conclusion

Health and beauty consciousness of the people have paved way for growing importance of Health Tourism. The present study examined the destination attributes attracting Ayurvedic Health Tourism in Kerala from the health tourists' perspective. Quality of service and opportunity were the factors which had high total variance explaining the destination attributes. Thus the overall analysis indicates that Kerala can develop its image as Ayurvedic Health Tourism destination. Hence, providing entrepreneurs to go for elevating ayurveda based health tourism, where a wider scope exists. The destination managers and service providers are advised to develop a well-planned promotion campaign with necessary improvements focusing on quality of services and opportunities available in Kerala would be more helpful in attracting the domestic tourists.

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