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# Service Quality and Patients' Satisfaction on Ayurvedic Health Services

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#### **Abstract**

Ayurveda is one of the oldest and famous natural health care systems mostly practicing in south Asian region. It is originated in India and has developed in different countries through religious and cultural background of the local society. The main purpose of this study is to examine the impact of the service quality on patient satisfaction in the government Ayurvedic medical institutions in Jaffna district. The study is carried out as a questionnaire survey and used purposive non random sampling method to collect data from 591 respondents. The five dimensional SERVQUAL model proposed by Parasuraman et al. (1985) was employed to measure the service quality dimensions related to the Ayurvedic hospitals. Descriptive statistics and regression analysis were mainly employed to analyze the data. The results show that the service quality of the Ayurvedic medical institutions contribute significantly to the patients satisfaction. However, the patients' satisfaction is not significantly influenced by tangible dimension and other dimensions i.e. reliability, responsiveness, assurance and empathy statistically and significantly enhance the patients' satisfactions. It is necessary to improve the overall service quality of the Ayurvedic medical institutions in order to enhance the patients satisfaction who trust and take medicine from the government Ayurvedic institutions.

#### **Keywords**

Patient Satisfaction, Service Quality, Ayurvedic Medical Institutions, Patients' Satisfaction

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# 1. Introduction

Ayurvedic health system is one of the oldest, natural health care systems, originated in India. It has been developed within religious and cultural context of the society. In the early era, this system was widely practiced in the South Asian region including Sri Lanka (Wanninayaka, 1982). However, during the colonization period, the foreign rulers supported and gave priorities to the Allopathic system of medicine, and at the same time discouraged the development of Ayurvedic health care system. As a result, Ayurvedic system lost their popularity and gradually the Allopathic system was developed very rapidly (Silva, 1999).

According to Sivasanmugarajah (2000) the Ayurvedicmedical treatments have been practiced in Jaffna even from the kings

up to the present. The concepts and the treatment techniques of Ayurveda has been developed and modified as per the changes in the cultural, social and economic stages of Jaffna. At present, in comparison with the last two decades, Ayurveda has lost its place in the service to the western health care demand (Kushmararatna, 2005). Several reasons can be attributed for the loss of its place in the society. The main reason for the loss of its place is the failure in gaining the patients' satisfaction. Patients' satisfaction generally depends on several reasons.

Modern literature states that the patients' satisfaction has a positive relationship with quality of service (Zineldin, 2006). The competitive challenges of businesses have been given an important place for the service quality and the service quality greatly affect for the customers' satisfaction. Also, it leads to

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the success of the business organizations. Health care organizations also considered the patients' satisfaction as an important issue like other services (Shabbir et al., 2010). Ayurvedic health service is a growing business and it has a great potential to achieve success and popularity though delivering high quality services to meet the patients satisfaction. Quality of health service is a key determinant for patients' satisfaction (Omar & Schiffman, 1995). Hence the research study focuses on the service quality and its impact on patient's satisfaction.

The quality of the medical service is considered as one of the modern topics since 1980. It took an ample of space in the literature in services marketing (Parasuraman et al., 1985, 1988). According to Zineldin (2006), the interest in the quality of medical service becomes an important tool in distinguishing institutions and attracts patients and increasing rates of patients retain while maintaining their loyalty. Also Mc Alexander et al. (2003) pointed that consumer satisfaction is an antecedent factor for the consumer loyalty. Campton (2004) highlighted that the consumer loyalty drives expectation values of receiving service that eventually drives value of consumer satisfaction in future. Therefore, many companies focus on quality issues to drive top level of consumer satisfaction (Kumar et al., 2008).

The Ayurveda is an accepted health systems in Sri Lanka practicing through two different networks such as government and private sector hospitals and dispensaries. However, the government sector is welfare oriented while the private sector is profit oriented. The demand for the health care services is growing very rapidly due to the spreading of both communicable and non-communicable diseases in the present society. However, the demand for Ayurveda health care services is increasing very slowly specially the elderly people usually move towards the government Ayurvedic hospitals rather than the young generation. Utilization of the Ayurvedic health care service depend on many factors and among them the patients' satisfaction is one of the key bases for it. The patients' satisfaction may arise with several factors such as organizational profile, benchmarking of institutions, lack of resources, non-effective health care service, inadequate resources, lack of medicines, poor facilities and poor service quality (Zeithmal & Britner, 2008). Several past studies pointed out that service quality has positively impacted with the customer satisfaction as well as patients' satisfaction. On this bases, the purpose of this study is to recognize the level of patient's satisfaction in relation to the quality of service of Ayurvedic institutions. Service quality can positively affect the patients' satisfaction and at the same time patients' satisfaction can help to measure the quality of health care services provided by the Ayurvedic medical institutions. In the measurement of the service quality, the patients satisfaction judge to measure the quality of service (Oliver, 1980). Therefore, the patients should have enough experience to produce accurate and meaningful information about their satisfaction (Murante, 2010). Hence, the main objective of this study is to recognize the relationship between the service quality and patients' satisfaction. In addition, the study will discover the factors which influence on the service quality and the patients' satisfaction of Ayurvedic medical institutions.

## 2. Literature Review

#### 2.1. Introduction

Hospital is a residential establishment which offers short term medical care consists of diagnostic, observational, therapeutic, and rehabilitative services for persons who are suffering or supposed to be suffering from a disease or injury (Singh, 2010). Its fundamental job is the treating of and caring for patients. The hospital may vary in size, funding, types of patients and conditions of treatment (Kurtz & Chalfant, 1984). Therefore, the patient's satisfaction is an important factor for keeping continuous relationship between patients, physician and hospital (Chaka, 2005).

Ayurveda is one of the oldest traditional health care systems in the world. India is considered the first practitioners of the Ayurveda medicine. There are some evidences to prove that it has practiced this system since 3000 B.C. in the South Asian countries. Ayurveda is considered as a Sub Veda and it has its own unique theory and pattern of treatment. There are four Vedas which were the foremost property of Hindu religion. The Charaka Samhithas and Sushtuta Samhithas are the original texts of this medicine.

The hospital marketing is not popular thing in Sri Lanka like in other developing countries. It is a specialized field and deals with the connection of doctors, patients, hospitals, and to some extends the insurance corporations & companies. Hospital marketing is considered important to ensure the long term viability of hospitals and make available of higher quality service to every individual in health care services. In health care services, the patients are the customers of the service (Woodside et al., 1989). The patients are valuable assets for the health care organizations since they are the consumers who determine the success or failure of the health care organizations. Patients are now considered as the health care customers for the reason that, they can make the decision to select the choice of service and provider which best meets their health care needs (Wadhwa, 2002). The patients' satisfaction is important for hospitals because it is a significant determinant of repeated usage, positive word-of-mouth, and patients' loyalty. Patients' perceptions about health services seem to have been largely ignored by health care providers in

developing countries (Singh, 2010). The patient's satisfaction and service quality has a positive relationship. The satisfied customers will become loyal customers and give more profitable business to the organization (Parasuraman et al., 1985; Zenithal & Britner, 2008; Riechheld & Sasser, 1990; Boulding et al., 1993).

Health care service is one of the fastest growing sectors in both developed and developing countries. Sri Lanka as a developing country provides free medical facilities through the government medical institutions. According to Woodside et al. (1989) present health care customers are the patents and the patient's satisfaction is an important competitive factor for the health care industries and also it will be the best indicator for the firm's profitability, because highly satisfied customers are not price sensitive. The health care organization has to achieve their continuous development and gather the sustainable competitive advantages through increase their patient's satisfaction by providing the highest level quality of service (Zineldin, 2006).

#### 2.2. Service Quality

Ayurveda is considered as a highly service oriented industry, therefore, the patients' satisfaction mainly depends on the way they received the medicine and other treatments rather than the quality of the Ayurvedic drugs. In the service sector organizations, the people can play a major role for the satisfaction of the customers since there are a lot of human interactions. Research studies identified that the quality of the consumed products and services greatly affect the customer satisfaction and vice versa. Patients like to get highly personalized service with care and attention by the medical officers for their requirements. Measurement of the service quality of Ayurveda depends on the personal judgments about the actual service performance and the expectations.

Service quality means the difference between the customer expectation of service performance prior to the service encountered and actual performance of received service (Asubontung et al., 1996). It has a positive effect on the bottom line performance of a firm so it is widely useful to fight to achieve the benefit from industrial competition in service market (Caruana, 2002; Cronin & Taylor, 1992). Furthermore, the service quality has become a popular area of academic investigation and it has been accepted as a key factor in keeping the competitive advantages and sustains relationship with their consumers (Zeithaml & Bitner, 2008). The services consist of four unique characteristics such as intangibility, perishability, variability and inseparability. Therefore, the quality and value of services depend on who provide the service, when they provide the service, where they provide the service and how they provide the service. The quality of the service received by the customers may vary from person to person and place to place (Gnanapala, 2015). The service buyers are aware of this variability and therefore often talk to others before selecting a service provider and their service standards (Brown et al., 1993). To ensure the service quality, the service providers take every possible action to measure and identify the service quality of their services. Measurement of service quality is not an easy task because the service is not a tangible product as service quality is an intangible in character, due to this character the service quality is difficult to measure (Sodani et al., 2010). Furthermore, it is difficult to judge the quality of the core service unless already got one experience it, like in hospital service; it is difficult to assess the service quality of the hospital with new patients who have no past experience of the same service. For example, a new patient cannot measure the behavior of the staff of the hospital, ambience and maintenance of hospitals, attractiveness and perceived competence of the hospital before receiving the actual services (Chaka, 2005).

Service quality is determined by the differences between customer's expectations of the services provider's performance and their evaluation of the services they have received (Parasuraman et al., 1985, 1988; Zeithaml & Bitner, 2008). Oliver (1980) argues that service quality theory will predict that the customer will judge that the quality is low; the performance of service does not exceed the consumer's expectation as the quality is high, the performance of service exceeds the consumer's expectation. In the services marketing, the consumers have the power of judgment of service standard. In the relationship marketing, the consumer communication is the most important factor to create a dialogue between the organization and its consumers. It leads to consumer knowing what they want and at the same time they become loyal customers as well and they recommend the others to the same service by words of mouth. Therefore, any service providing organization should maintain a good relationship between their customers, because those are one of the essential parts for producing service joining with the service provider. Relationship marketing of hospital is closely aligned with both patients care principles' and the basics tenant of consumerism. The patients are judges, of deciding the quality of the service in comparison with the service they actually receive and they would like to receive. Some theorists mentioned the same concept that the quality plays a major role on consumer satisfaction (Omar & Schiffman, 1995; Gremler et al., 2001; Kumar et al., 2008). Satisfied patients get intend to continuously use the service further they will introduce new patients with their words of mouth.

However, the service quality is difficult to define and measure like the tangible products so different scholars have tried to measure service quality through using different tools. Marketing research studies proposed a set of criteria used to measure the quality of service with the past experiences of consumers. There are two popular methods used in measuring the service quality such as SERVQUAL model (Parasuraman et al., 1985) SERVFERF (Cronin & Taylor, 1994).

Parasuraman et al. (1985) formulated a service quality model that highlights the main requirements for delivering a high service quality. According to him, the first step of the service quality model is the identification of the consumer expectations, management perception. The quality that a consumer perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived service. Parasuraman et al. (1998) believe that measuring of service quality as disconfirmation theory is valid and allows service provider to measure several gaps in the provided service. Parasuraman has used five dimensions SERVQUAL model, such as tangible, reliability, responsiveness, assurance and empathy, for measuring the service quality. Tangible means the physical assets need to provide service, reliability means perform the service in the promised way, responsiveness means willingness to provide prompt service which satisfies the customers' willing, assurance means the knowledge and courtesy of the employees and their ability to inspire trust and confidence of service and the empathy dimension means the carrying of individualized attention of firm to his consumer.

According to Chakraborty & Majumdar (2011), the SERVQUAL model is the most suitable instrument to measure the health care service quality due to four major reasons. First, it is good at eliciting the view of the customer regarding the service encounter, second, it can alert the management to consider the perception of both the management and consumers. Third, it address the service gap that will helps as a basic for formulating strategies and tactics in order to ensure fulfilment of expectations and finally, it is able to identify the special area of the weakest service and also provides benchmarking analysis for hospitals in the same industry.

#### Quality of Health Care Services

Health care service is an important service system for human being and it helps the people to be away from illnesses and also to get cure from deceases. Therefore, the quality is determined by the best possible balance between risks and benefits (Niaze, 2007). Health care service has to meet the clinical needs of the population while ensuring the patients respect as persons, prompt attention of care, quality of amenities, access to social support networks and choice of providers.

Babakus & Mangold (1992) identify the health service quality components as two folds such as the technical quality and the functional quality. The technical quality of heal care services

is the accuracy of diagnostic and treatment procedures. However, it is very difficult to successfully judge the recipient of the service. The functional quality of health service is the way in which the hospitals provide health service for patients. This aspect of service could be understood and judged by the receivers on the quality of health service. However, Saleh et al. (2012) identified three quality dimensions related to the health care services i.e. client quality, management quality and professional quality.

The quality is a buzz word for many parties and may views by different parties in different ways. For example, in medical and technical point of view, providing of medical services using the superior values though different methods; which includes the ethics of medical practice, medical working personnel, the quality of the provided medical services are considered as important. Quality from the patient's point of view, is satisfying patient's needs, and providing the necessary medical services to the patient. Quality from the administrative point of view, includes the ways of using available resources and allocate them to ensure the delivery of the medical service in the right time, and with an acceptable cost. Quality from the senior medical administration, includes the extent of satisfaction with the performance of the senior management, and its role in the support and development of medical services and the health system.

The past studies have pointed out that the behaviour of unsatisfied and less talented employees, negatively affect the quality of care which adversely affects the patients' satisfaction and patients' loyalty to the hospitals (Atkins et al., 1996). Similarly, Prakash (2010) pointed out that the quality of the health care system would be determined by the patients through safe, equitable, evident based, timely, efficient and a patient centered service process.

#### 2.3. Patients' Satisfaction

In the health care service, the consumers are the patients thus the customer satisfaction is called as patients' satisfaction. According to Strasser (1991) the patients' satisfaction is the patients' value judgment and subsequent reaction to the stimuli they perceive in the health environment just before, during, and after the course of their impatient stage or clinical visit. Similarly, Blumenthal (1996) defines patients' satisfaction as how the patients value and regard their health care. Also, Jagdip (1989) says the patients satisfaction is the result of a process of assessment of the service which has obtained from an object (physician) on patient health care system.

Presently, the health care consumers are more aware of medical service and they have a good knowledge about the quality of service than earlier. Therefore, it has become an important factor to provide better quality services to meet the patients' expectations. The health care industry is becoming more competitive therefore the concept of patients satisfaction has become more importance (Singh, 2010). According to Donabedian (1980, 1988) higher patients' satisfaction of health care service leads to more reuse of service, positive words of mouth publicity and brings more positive benefits to the hospital through loyal consumers of the health care services. Patients' satisfaction is an important and commonly used indicator for measuring the quality in health care services. Also, the patients satisfaction is a good indicator to measure the success of doctors and hospitals since the patients' satisfaction depends on timely attention, providing an efficient service and patient-centered delivery of quality health care system.

According to Prabakaren & Satya (2003) the patients' dissatisfaction shall arise in three ways; first, the service providers are not aware of the service dimensions which important for the consumers, second, the service providers do not have a clear idea of the consumer prioritization of the service dimensions bases of their importance and last, the service providers are unaware of the service attributes that create service dimensions.

# 3. Methodology

The study was carried out as a survey using the patients who received medical treatments from the Ayurvedic hospitals in Jaffna district. The patient satisfaction is a feeling, which is a result achieved by the treatment from a hospital and it is also a function of tangibility, reliability, responsiveness, assurance, and empathy of the service provider. These dimensions were measured through the five dimension SERVQUAL model developed by Parasuraman et al. (1985). The model of the study defines the patients' satisfaction as the dependent variable and the service quality of the government Ayrvedic hospitals as the independent variable and it consists of five dimensions. The model appears in the figure 3.1.

The study was done in the government Ayurvedic hospitals in Jaffna district. The respondents were selected using purposive and non-random sampling methods. The population of the study is the number of patients who come for treatments in each hospital for a day. The sample of the study is also limited to the patients who visit for treatment more than two times from the hospital and they must be above the age of sixteen and the sample size was 591 patients.

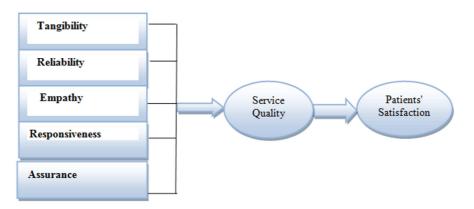


Figure 3.1. Model of the Study.

Source: Developed by the Researcher, 2013

The primary data collection tool was the questionnaire survey. The construct quality was measured by using five dimensional SERVQUAL model and the questionnaire was prepared to evaluate the level of service quality and patients' satisfactions. Accordingly, the prepared questionnaire which consists of 54 questions and it measured through dimensions such as tangibility (12 questions), reliability (13 questions), responsiveness (10 questions), assurance (6 questions), empathy (6 questions) and the remaining seven questions were to measure the level of patient satisfaction. The questionnaire was translated in to Tamil Language since the Jaffna district of Sri Lanka consists of many Tamil speakers. The utilized scales

of the questionnaire were strongly agree, agree, no comments, disagree and strongly disagree.

The collected data were analyzed through SPSS package using different statistical methods to find out the influence of the service quality on patients' satisfaction. These methods include first, the descriptive statistics which involves in collecting, summarizing and presenting data through frequency distribution, central tendency, and the dispersion. Second, multiple regression analysis was used to find out the significant impact of the service quality on the patients' satisfaction.

# 4. Results and Discussions

This section presents the results of the data analysis related to the service quality and patients satisfaction related to the Ayurvedic medical institutions in Jaffna district of Sri Lanka.

# **4.1. Demographic Characteristics of the Respondents**

The patients who participated for the survey interview comprised with more female respondents (63 percent) compared to the male respondents (37 percent). When considering the age category of the existing customer groups of the Ayurveda, the major portion of the respondents (60 percent) were 60 years and above in age, and the rest 20 percent was between 51 - 60 years, 25 percent of them were between 41-50 years, 13 percent was between 31-40 years, 9 percent was between 21 - 30 years and 2 percent was below 20 years respectively. The figures indicate that more elderly people are taking treatments from Ayurveda and less percentage of the young generation take Ayurveda treatments. Also, the results indicates that the patients who take treatments from Ayurveda have a basic education. The table 4.1 shows the demographic information of the respondents very clearly.

Table 4.1. Demographic Characteristics.

Variables	Frequency	Percentage (%)
Gender		
Male	219	37
Female	372	63
Age (Years)		
Below 20	11	02
21 -30	53	09
31-40	79	13
41-50	147	25
51-60	119	20
Above 60	182	31
Education		
Up to GCE (O/L)	461	78
Up to GCE (A/L)	63	10.7
Degrees& Above	67	11.3

Source: Survey Data, 2013

# **4.2. Service Quality and the Patients Satisfaction-Descriptive Statistics**

The study investigated the service quality and the patients' satisfaction related to the government Ayurvedic medical institutions in Jaffna district. Therefore, first we analyzed the data using the descriptive statistics to identify the influence of the service quality dimensions (independent variable) i.e. tangibility, reliability, responsiveness, assurance to the dependent variable (patients satisfaction). The detailed information is presented in the table 4.2.

Table 4.2. Descriptive Statistics.

Dimensions	Mean	Standard deviation	Skewness	Kurtosis
Patient Satisfaction	4.2715	0.28987	-0.729	1.995
Tangible	2.6559	0.40397	0.593	0.195
Reliability	4.2530	0.17477	0.234	0.335
Responsiveness	3.8904	0.27921	0.299	0.022
Assurance	4.2321	0.31525	-0.289	-0.212
Empathy	4.2355	0.30247	-0.289	-0.305

Source: Survey Data Analysis, 2013

According to the table 4.2, the mean & standard deviation of reliability, responsiveness, assurance, and empathy dimensions of service quality exit at an equivalent level, however, the values of the tangible dimensions exit at a lower level compared to the other four dimensions. The values of the table 4.2 says that except tangible dimension the four other demotions are positively influenced on the satisfaction of the patients who come to the Ayurvdedic medical institutions in Jaffna district.

### 4.3. Service Quality and the Patients Satisfaction-Regression Analysis

The main rationale of the multiple regression analysis is to learn more about the relationship between the independent variable/s and the dependent variable. Further, the purpose of regression analysis is to find out the significant impact of independent variable on dependent variable. In this study, service quality is considered as the independent variable and the patient satisfaction is considered as the dependent variable. The tables 4.3 & 4.4 display the results of the regression analysis and it will be followed by the discussion of the results.

Table 4.3. Model Summary.

R	R Square	Adjusted R Square	Std. Error of the Estimate	<b>Durbin-Watson</b>
.370ª	.137	.130	.19137	1.989

- a. Predictors: (Constant), Service Quality Dimensions
- b. Dependent Variable: Patient Satisfaction

Table 4.4. ANOVA Table in Regression Analysis.

Model Squares df	Square	F	Sig.
Regression 3.389 5	.678	18.510	$.000^{a}$
1 Residual 21.350 583	.037		
Total 24.739 588			

- a. Predictors: (Constant), Empathy, Tangible, Assurance, Responsiveness, Reliability.
- b. Dependent Variable: Patients Satisfaction.

Source: Survey Data Analysis, 2013

According to the table 4.3, the model summary shows that the adjusted R square is 0.13 and it indicates that the service quality (independent) impact is 13% on patients' satisfaction

(dependence variable). Consequently service quality has an impact on patients' satisfaction.

According to the table 4.4 the p value is 0.000, therefore, there exists a significant linear relationship between Y (patients

satisfaction) and the independent variable (quality) at 1% level. For that reason, it gives us the conclusion that the service quality provides positive impacts on patients' satisfaction related to the Ayurvedic health services in Jaffna.

Table 4.5. Coefficients Table in Regression Analysis.

М-	3.1	Un-standardized Coefficients		Standardized Coefficients	4	C:_	Co linearity Statistics	
Mo	dei	В	Std. Error	Beta	ι	Sig.	Tolerance	VIF
	a (Constant)	2.212	.306		7.234	.000		
	Tangible	.022	.020	.042	1.073	.284	.970	1.031
1	Reliability	.057	.049	.046	1.344	.031	.925	1.081
1	Responsiveness	.088	.041	.085	2.135	.033	.937	1.067
	Assurance	.287	.036	.316	8.074	.000	.965	1.037
	Empathy	.142	.034	.162	4.192	.000	.994	1.006

a. Dependent Variable

Source: Survey Data Analysis, 2013

According to the table 4.5, except tangibility dimensions, all other independent variables i.e. reliability, responsiveness, assurance and empathy have significantly and positively influenced on the patients' satisfaction. Finally, in terms of the multiple regression analysis, we can come to the conclusion

that the predictor power of the service quality is at a weak level. The result of the regression analysis, summarized in table 4.4, shows that the service quality contributes significantly to patient satisfaction (F=18.51; P<0.05).

Table 4.6. Hypothesis Testing.

No.	Hypotheses	Results
$H_1$	There is a significant impact of service quality on the patient satisfaction.	Accepted
$H_{2a}$	There is a significant impact of Tangible in service quality on the patient satisfaction.	Rejected
$H_{2b}$	There is a significant impact of Reliability in the service quality on the patient satisfaction.	Accepted
$H_{3c}$	There is a significant impact of Responsiveness in the service quality on the patient satisfaction.	Accepted
$H_{4d}$	There is a significant impact of Assurance in the service quality on the patient satisfaction.	Accepted
H <sub>5e</sub>	There is a significant impact of empathy in the service quality on the patient satisfaction	Accepted

Source: Survey Data, 2013

#### 4.4. Hypotheses Testing

The table 4.6 presents the summary of results of the hypothesis testing. The model of the study consists of service quality dimensions (independent variables) such as tangibility, reliability, responsiveness, assurance and empathy and the patient satisfaction. Except the tangible dimension, other five dimensions are positively affected for the patients satisfaction, therefore, those hypotheses are accepted and there is a significant impact of service quality on the patient satisfaction. The table 4.6 depicts the information very clearly.

## 5. Conclusion

This study mainly focused on the impact of the service quality to the patients satisfaction and the study was carried out in the Ayurvedic medical institutions in Jaffna district. The well known service quality (SERVQUAL) dimensions developed by Parasuraman et al. (1985) used to measure the independent variables and the patients satisfaction was the dependent variable. It revealed that through descriptive statistics and regression analysis results, except the tangibility dimension,

the other four dimensions such as reliability, responsiveness, assurance and empathy significantly contribute to the patients' satisfaction in the government Ayurvedic hospitals of Jaffna district.

The tangibility dimension of the Ayurvedic hospitals measured through the indicators such as the location, easy access, general external appearance, surrounding environment including herbal gardens, building and furniture, waiting rooms, drinking water & toilets, canteen facilities, wearing of uniforms by the medical officers and the other staff (appearance). However, those factors do not support for the patients satisfaction. Even though, there are 42 Ayurvedic medical institutions in Jaffna district, 30 institutions are functioning in temporary buildings, therefore, infrastructure and the other facilities exist at a very poor level. The rest of the hospitals have the basic infrastructure facilities and the surrounding environment is also maintained nicely with properly grown herbal gardens.

The findings communicate the important knowledge and guidelines for the hospital administrations. Customer satisfaction depends on the perceived performance and the

quality of the products and services consumed and their perceived values related to the patients expectations (Kotler & Armstrong, 2014). When the hospitals fail to provide the services to meet the patient's expectation the patient will be dissatisfied. On the other hand, the patients are satisfied when their expectations are met during the stay at the hospitals. Even though, the government Ayurvedic institutions provide free of charge services, the hospital administrators must take much efforts to deliver more superior values to satisfy and retain the patients with the Ayurvedic industry.

The patients come to the Ayurvedic institutions to fulfil different expectations based on their experience, beliefs, opinions and advise of friends and relatives. Therefore, the hospital administrators need to provide better quality drugs, services and other offerings to meet the diverse expectations of the customers. According to Kotler & Armstrong (2014) customer satisfaction and customer loyalty are two interrelated and important fields. Patients' satisfaction is very important and the satisfactions drive towards loyalty. Customer loyalty measures how likely customers return and their willingness to perform business partner activities with a particular organization. As highlighted by Kotler & Armstrong (2014) the customers develop loyalty when their expectations are met. Therefore, the loyal customers are more valuable than satisfied customers to the Ayuredic industry. Because the loyal customers/patients make repeat visits, recommend the treatments to others and spread positive word of mouth publicity and bring more value to the Ayurveda industry. Therefore, the government Ayurvedic institutions should think about the competitive advantages and the ways and means of achieving them. The industry need to understand: what the special benefits that the patients can receive from Ayurvedic medicine. Why should the patients come for Ayurvedic treatments?

The hospital managers should think whether the patients are satisfied with the service they have received. If the patient are satisfied with their needs they have positive attitudes about the Ayurveda sector and it is also known as the loyalty. The patients will display their loyalty in numerous ways, such as revisiting, recommendation, positive word of mouth publicity, etc.

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