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Management

"A STUDY ON CONSUMERS' EXPECTATIONS AND PERCEPTIONS AND ITS IMPACT ON THE SERVICE QUALITY DIMENSIONS OF PRIMARY HEALTHCARE CENTERS (PHC) IN THRISSUR DISTRICT, KERALA."

KEY WORDS: Primary Healthcare Centre's, Consumers' Expectations, Perceptions, Service Quality Dimensions, Servqual, Service Quality Gap, Consumer Satisfaction, Health Care Services.

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ABSTRACT

Health care is the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments in human beings.[1] Access to efficient and economic healthcare services has tremendous importance at present, due to the alarming growth rate of lifestyle diseases irrespective of any demographic factors. Kerala is the only State in India which remains in the 'very high human development index (HDI)' with respect to all the three dimensions, education, health and income. The major healthcare service providers in Kerala are government hospitals and private hospitals which are differentiated mainly by the quality of services offered, ownership status, profit motive and the affordability to consumers. It has been reported by media and researches that the utilization of public healthcare services by people are comparatively less, even though it is either free of cost or highly subsidized by government. In this backdrop, a study has been conducted at grass root level government healthcare providers, the Primary Healthcare Centre's (PHC's), to find out the underlying reasons for dissatisfaction of consumers. This article examines the root causes by comparing consumers' expectations and perceptions on the service quality dimensions of PHC's in Thrissur District, Kerala, using SERVQUAL and GAP models.

Introduction

Health care system consists of people, organizations and resources to deliver health care services to meet the health needs of target population. The Public health care system in India is a three tier system consisting of Primary care, Secondary care and Tertiary care. Primary care refers to the work of health professionals who act as a first point of consultation for patients and Secondary care (acute care) is the services provided by medical specialists, who generally do not have first contact with patients. Tertiary care is specialized consultative health care, usually for inpatients and on referral from a primary or secondary health professional.[2]

Primary Healthcare Centers are the basic units of this system with the most basic facilities, and especially serving rural India, generally at the level of a Panchayat.They are single-physician clinics, usually with facilities for consultation and in some cases for minor surgeries. At present, there are 25,308 primary healthcare centers in India.Primary Health Care is a multitude of services offered to individuals, families and communities.[3]

There is a common feeling in the general public that the quality of services and facilities offered in government sector organizations are substandard, as well as the attitude of the service providing professionals are indifferent. In addition, there is an opinion that the process and procedures are highly time consuming. The present study is undertaken to examine the satisfaction levels of consumers on the quality of services offered by PHC's as well as to understand how they perceive the services offered by these service providers.

Healthcare Services – Indian Scenario

Health was, is and will be a fervent topic of priority to mankind. Since ancient years, health was treated as a matter of top priority and the traces of which can be found in Scriptures and Veda's. It is from the knowledge of Veda; we developed Yoga, Meditation and Ayurveda.Ayurveda, which literally means the science of life, is developed and evolved into what it is today from several ancient treatises, most notably Adharva Veda, which dates back to five thousand years. The ancient Vedic literature by sages has clearly laid out instructions to maintain health as well as fighting illness through therapies, massages, herbal medicines, diet control and exercise.[4]

The system of health care industry in India is complicated due to the presence of multi-level and multi-discipline service providers. The multi-level health care providers consists of both government and private institutions, which include Primary Health Centers (PHC), Taluk Hospitals, District Hospitals, Medical College Hospitals, Clinics, Private Consultations, General and Specialty Hospitals. These providers practice different systems of medicine namely, Allopathic, Homeopathic, Ayurveda, Siddha, Unani and therapies such as Yoga and Naturopathy.

Health care Profile of Kerala

Growth of service sector in the Indian economy is often critiqued for the disproportionate relationship between income and employment. Kerala is famous for its "Kerala Model" of development, mainly due to the growth of service sector, which was shaped by remarkable achievements in human development and the huge inflow of foreign remittances. One of the service industries that gained momentum in Kerala during the recent years is health care and allied services.

Kerala has made significant gains in health indices like infant mortality rate, birth rate, death rate, life expectancy at birth etc. At present, the healthcare industry of the State is encountering major threats from life style diseases like diabetes, coronary heart disease, renal disease, cancer and geriatric problems, as well as communicable diseases like chikungunya, dengue, leptospirosis, swine flu etc. In addition, there are new challenges and issues in the areas of mental health, suicide rate, narcotic abuse, alcoholism, coupled with the alarmingly increasing rate of traffic accidents.

The private sector has emerged as a major player in India's healthcare industry, by accounting for approximately 74% of the country's total healthcare expenditure. The presence of a universally available and accessible government healthcare delivery system in Kerala made the healthcare services economical and affordable, even to the poorer sections of the society. In addition, the competition from Government facilities often serves as an important factor in determining treatment cost in private hospitals. Due to the need for providing quality services to all sections of the society, the Government has taken several measures to upgrade the service quality levels of public health care system. As a result, Kerala has currently two quality control and accreditation programmes for government hospitals, the NABH accreditation by the Quality Council of India and the State-level Kerala Accreditation Standards for Hospitals (KASH). Four hospitals have already secured NABH accreditation while 17 have been accredited under KASH.The new certification has been built on the premise that quality can be a sustained activity only if there is an in-built system within institutions for quality control, with clearly defined standards and measurable processes.

In spite of all these efforts, there still exists a misconception in the minds of people that quality of services offered by public hospitals is unsatisfactory. As a result, PHC's come only at the last position in their priority list. A recent report in Deccan Chronicle Daily, (2017), stated that "Today only 100 of 1000 people seeking primary health care depend on government sector. Among patients, 350 of 1000 depend on private doctors[5]. This situation needs to be reversed by making PHCs people friendly". This report points fingers on to the undeniable fact that most of our public health care centers are underutilized due to lack of beneficiaries.

Primary Healthcare Centers in Thrissur District, Kerala,

Primary Health Care (PHC) was initially conceptualized by the World Health Organization (WHO) in 1970's, with a view to monitor and control the social causes of poor health, such as poverty and lack of access to medical care. In 1978, WHO issued the Alma Ata Declaration, which was adopted at the International Conference on Primary Health Care (PHC), Almaty (formerly Alma-Ata), Kazakhstan in September 1978. It expressed the need for urgent action by all governments, all health and development workers, and the world community to protect and promote the health of all people. It was the first international declaration underlining the importance of primary health care. The primary health care approach has since then accepted by member countries of WHO as the key to achieving the goal of "Health For All" but only in developing countries at first. This applied to all other countries five years later.[6]

As per the Report of Office of the State Mission Director, Arogyakeralam, there are 853 PHC's in Kerala and out of these 79 are in Thrissur district.The primary health care approach is based on principles of social equity,nationwide coverage, self- reliance, inter sectoral co-ordination, and people's involvement in the planning and implementation of health programs in pursuit of common health goals. This approach has been described as "Health by thepeople" and "placing people's health in people's hand." The main objectives of PHC's are the following.

1. Promotion of proper nutrition and an adequate supply of safe water
2. Basic sanitation
3. Maternal and child health care including family planning
4. Immunization against the major infectious diseases
5. Prevention and control of locally endemic diseases
6. Education concerning prevailing health problems
7. Appropriate treatment of common diseases and injuries.
8. Provision of essential drugs

Review of Literature

Various studies on primary health care have observed that, though the infrastructure is in place in most areas, they are grossly under-utilized because of lack of facilities, inadequate supplies, and absence of a mechanism for periodical monitoring and evaluation. However, relatively little research has been done in the field of public healthcare services, especially in the area of service quality and consumers expectations and perceptions on service quality. Cited below are reviews of some of the prominent studies undertaken in Kerala in the related field.

Gronroos (1984) in his article differentiates between technical quality and functional quality. Technical quality is defined on the basis of the technical accuracy of the diagnoses and procedures and functional quality refers to the manner in which it is delivered to the patient. Since patients are often unable to accurately assess the technical quality of a health care service, functionalquality is usually the primary determinant of patients' quality perceptions.[7]

Zeithaml (1987) opined that perceived quality is the consumer's judgement about an entity's overall excellence or superiority.[8]

In his article, Nabae (1997) has examined the current status, past accomplishment and challenges encountered by the health care system in Kerala and opined that Kerala must invest in the public sector to revitalize the system.[9]

George, A. V., (1999) in his study on PHC's in Kerala stated that most often health centers fail to provide primary health care to its people due to the undue emphasis given to vertical programmes like centrally – sponsored family welfare, communicable disease control and nutrition. There are seriousmanagerial problems which health centers face like lack of team work, inadequate technical and managerial support and serious weaknesses in the development and implementation of action plans. Other major obstacles include inadequate resources, poor morale of the staff and lack of adequate skills. Though Kerala has a higher per capita expenditure on health than other States, the quest for equity in health still remains unattainable. Kerala has done well in building the basic health infrastructure. However, the PHC's are inadequately equipped for fulfilling the key areas of primary health care like nutrition, immunization, first aid, maternal and child health, sanitation and water supply, supply of essential drugs and control of endemic diseases. The popular perception of the quality of services rendered by the PHC system is low. [10]

Padmaja, K. (2005) in her study on PHC's in Kerala, cited many shortcomings and suggested that implementing user fees and health insurance may increase the quality and efficiency of primary health care system, since majority are availing of private services. She suggested that preventive and promotive measures such as health education to change health habits, diet pattern, life style etc. are to be developed and active community participation must be ensured to attain the goals.[11]

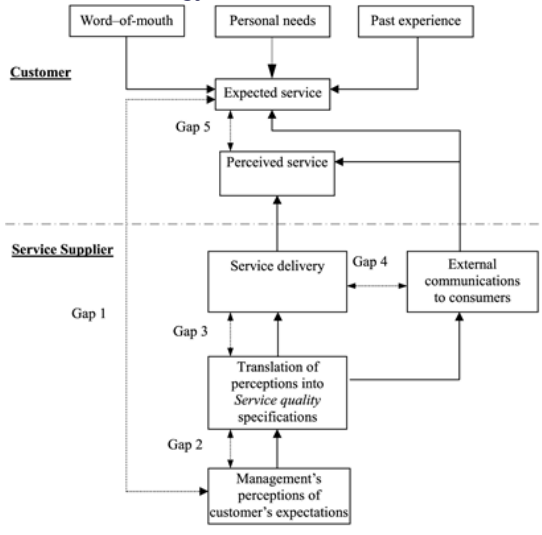
Shyni, M. C., (2015), in her study on health care facilities in Kerala concluded that the development of healthcare facilities is varying but their role in the health care sector is very significant. The study revealed that the facilities available in government hospitals in three districts in Kerala were comparatively lower than the private hospitals.[12]

Objectives of the Study

The present study was undertaken with the following objectives:

1. To study consumer's expectations and perceptions on the service quality of PHC's in Thrissur district, Kerala.
2. To examine the degree of service quality gaps present, if any, between consumers expected levels of service and actual service delivery.
3. To analyze the dimensions that influence service quality and consumer satisfaction.
4. To identify the reasons leading to underutilization of PHC services by public.

Research Methodology



Source: Parasuraman *et al.* (1985)

The intangible, multifunctional nature of services makes it difficult to evaluate the quality of a service compared to the goods. As customers are often involved in service production, a distinction needs to be drawn between the process of service delivery and the actual output of the service. Therefore, Christopher Lovelock defines service quality from the user's perspective as 'consistently meeting or exceeding customer expectations.'[13]

The present study is conducted with the help of SERVQUAL scale and GAP model, developed by Parasuraman, Zeithaml and Berry. They have formulated five dimensions of service quality that are applicable to service organizations. These dimensions are:

(1) Tangibles (physical facilities, equipment and appearance of personnel);
(2) Reliability (ability to perform the promised service dependably and accurately);
(3) Responsiveness (willingness to help customers and provide prompt service);
(4) Assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence); and
(5) Empathy (caring, the individual attention provides to its customers).[14]

Instead of the original seven-point scale format, a five-point Likert response format (ranging from "strongly agree = 5" to "strongly disagree = 1") was adopted to reduce the disparity in responses and to increase the response rate and the quality of the responses.

Population of the study

The population of the study includes common public who are directly or indirectly utilize, experience or exposed to the services offered by the PHC's in Thrissur district, Kerala. Being the Central region, Thrissur district is considered to be exhibiting the representative characters.

Sample size

For the purpose of study, a sample size of 100 consumers was selected using judgment sampling method. There are 79 PHC's in Thrissur district and the researcher has selected 20 PHC's using lot method and 5 consumers each were selected from these PHC's for the purpose of primary data collection.

Data Collection Method

This descriptive research is based on primary data collected from the consumers who resides within the target area of PHC's. The data were collected by administering a survey schedule, which focused on the five service quality dimensions identified by Valarie Zeithaml, Leonard Berry and A. Parasuraman, popularly known as the "SERVQUAL" scale.

Data Analysis and Interpretation

Main tools used for data analysis were weighted average, mean and percentage analysis.The following Table depicts the demographic profile of the sample population.

It is clear from the below Table that most of the respondents who utilize the PHC services are belonging to rural population (68%) and out of these, majority are female patients. However, in municipal areas, male population is more inclined to avail the services of PHC's. The possible reason could be the exposure of rural male population to other service providers such as clinics and private consultations. A significant number of respondents are even going forself-diagnosis and medication or take OTC medicines from the medical stores.

Demographic Profile of Respondents			
Profile Variables	**Male**	**Female**	**Total**
A. Location			
Rural	30	38	68
Municipality	18	14	32
Total	48	52	100
B. Level of Education			
Plus 2 & Below	26	20	46
Graduation	22	28	50
Post-Graduation	0	4	4
Total	48	52	100
C. Income Group			
Above Poverty Line	18	20	38
Below Poverty Line	30	32	62
Total	48	52	100
D. Age			
Below 20	2	2	4
20 - 30	4	6	10
30 - 40	10	8	18
40 - 50	8	16	24
Above 50	24	20	44
Total	48	52	100
E. Frequency of Visit			
Less than 5	14	20	34
5 to 10	16	16	32
Above 10	18	16	34
Total	48	52	100

From the education profile of respondents, it is evident that most of the respondents are graduates. We can see a correlation between education and usage of primary healthcare services. Consumers prefer private clinics and hospitals over PHC's as most of them are employed and they are under the belief that a visit to PHC may result in loss of working day due to long waiting hours and absence of skilled medical and paramedical staff.

The income data reveals that most of the rural consumers are hailing from low income group (BPL). Therefore, it is evident that consumers who prefer PHC's are low income group rural female population with education below degree level.

Age wise analysis of respondents discloses the fact that most of the consumers of PHC's are from the age group of above 50. The lowest number was in the age group 'below 20' which could be associated with the reason that there are no specialist physicians in PHC's.

Most of the frequent visitors are in the age group of 40 years and above. Youth population does not prefer to avail the services. Therefore, we can infer that educated youth with a source of income from both rural and urban population has lack of confidence in the quality of services offered by public hospitals.

SERVQUAL ANALYSIS

The service quality model (gaps model) was developed by A. Parasuraman, Valarie A. Zeithaml and Len Berry, in a systematic research program carried out between 1983 and 1988. The model identifies the principal dimensions (or components) of service quality; proposes a scale for measuring service quality (SERVQUAL) and suggests possible causes of service quality problems.SERVQUAL is a multi-dimensional research instrument, designed to capture consumer expectations and perceptions of a service along the five dimensions that are believed to represent service quality. SERVQUAL is built on the expectancy-disconfirmation paradigm, which in simple terms means that service quality is understood as the extent to which consumers' pre-consumption expectations of quality are confirmed or disconfirmed by their actual perceptions of the service experience.

GAP Model Analysis

Service quality(SQ), in its contemporary conceptualization, is a comparison of perceived expectations (E) of a service with perceived performance (P), giving rise to the equation SQ=P-E. When customer expectations are greater than their perceptions of received delivery, service quality is deemed low. When perceptions exceed expectations then service quality is high.[15]

Items	Service Quality Dimensions	Mean (E)	Mean (P)	Quality Gap (P-E)	Score
	Tangibility (Average)	**4.8**	**3.9**	**-0.9**	**4**
1	Appearance of Physical facilities	4.5	4.5	0.0	
2	Appearance of Service Provider	4.9	4.1	-0.8	
3	Availability of Modern Equipment's	4.8	2.8	-2.0	
4	Availability of Communication Materials	5.0	4.0	-1.0	
	Reliability (Average)	**4.1**	**3.1**	**-1.0**	**3**
5	Upkeep of promised Appointment schedules	4.0	3.1	-0.9	
6	Shows genuine interest to diagnose the issues	4.0	3.2	-0.8	
7	Provision of excellent service at first visit	4.1	2.9	-1.2	
8	Error free treatment with proper records	4.2	3.2	-1.0	
9	Provision of promised service without compromise	4.1	3.1	-1.0	

	Responsiveness (Average)	**4.4**	**3.0**	**-1.4**	**1**
10	Provision of service without unnecessary delay	5.0	3.0	-2.0	
11	Ready to offer right information on time	4.2	2.9	-1.3	
12	Ready to offer assistance at any point of time	4.3	3.0	-1.3	
13	Prompt addressal of complaints / enquiries	4.0	3.2	-0.8	
	Assurance (Average)	**4.4**	**3.1**	**-1.3**	**2**
14	Credibility	3.5	2.5	-1.0	
15	Provision of safe and secure service	4.5	3.0	-1.5	
16	Competency of service provider	5.0	3.8	-1.2	
17	Courtesy of Staff	4.6	3.0	-1.6	
	Empathy (Average)	**3.9**	**3.3**	**-0.6**	**5**
18	Approachability and ease of contact	4.2	4.2	0.0	
19	Listening to customers and their issues	4.0	2.5	-1.5	
20	Understanding the customer	3.5	2.9	-0.6	
21	Provision of individual attention and care	3.0	2.5	-0.5	
22	Convenient operating hours	4.7	4.5	-0.2	

The above Table depicts that out of the five service quality dimensions the maximum gap is scored by Responsiveness and Assurance.

The negative scores gained by Responsiveness dimension point to the fact that most of the consumers are dissatisfied with these elements. The unwarranted delays in availing of services due to lack of adequate skilled medical and paramedical staff, absenteeism of staff, negligence and irresponsible attitude of service provider, all leads to this dissatisfaction. It is also mentioned by respondents that there is no system in most of the PHC's to provide adequate information to consumers responsibly. As most of the PHC's lack emergency / casualty ward or ambulance service, nobody is ready to take a chance of visiting PHC's in emergency situations. It has also been indicated that in certain cases, there are no female staff to assist female patients. Though the staff is qualified and skilled, at times, their attitude towards rural consumers is arrogant.

The second lowest scored dimension is Assurance. Most of the consumers expect a firm assurance from the service provider that they will get safe and secure treatment from the PHC. However, in many a case, they have had to face difficulties such as lack of accurate diagnostic facilities, inadequate skilled paramedical staff to operate machines, unhygienic handling of equipment's and tools, lack of medicines etc. These deficiencies reduce the level of assurance in the mind of consumers and become a factor of non-utilization of services.

When it comes to Reliability dimension, consumer's expectations were rather lower than the perceived service delivery. Though there was dissatisfaction on delays in consulting doctors and for diagnostic test; most of the consumers were ready to accept it as a regular event. The reliability factor showed a very high satisfaction level with regards to the vaccination services offered by PHC's.

Consumers are satisfied with the tangible elements of PHC's and in certain cases; they were not bothered about the building or modern looking equipment's. However, they were of the opinion that more than the physical elements, they need better and safe care and prompt service from these institutions.

It was surprising to see that most of the consumers' expectations on the Empathy dimension were lower than the perceived services. This can be connected to the fact that most of the frequent visitors are in the age group of above 50 and are rural female population. They were of the opinion that only few of the PHC's are working 24x7 and therefore, the timings are not convenient in certain emergency cases and hence, they have to approach the private clinics.

Findings and Conclusions

The study on the consumers' expectations and perceptions on the quality of services offered by Primary Health Centers revealed that there exists wide service quality gap in almost all dimensions. The major gap was identified in the Responsiveness and Assurance dimensions of service quality. The result reveals the root cause of underutilization of primary healthcare services, a revolutionary programme put forwarded by WHO. Every consumer expects to receive prompt, safe and secure service from a provider and in the absence of proper responsiveness; they are looking for alternative options. PHC's failed to gain confidence of consumers in this dimension and as a result, they are embracing the private providers, even though they have to pay unaffordable charges. The highlighting factors of affordability and accessibility of PHC's are insignificant for the target population, when the service quality is substandard.

The assurance factor plays a vital role in customer satisfaction as health is considered to be of prime importance to every human being. They are ready to spend anything and everything to restore health. Moreover, in a state like Kerala, where people are health conscious and educated, they never compromise on issues related to health. Therefore, assurance of quality healthcare is essential for the very existence of any healthcare provider.

The study also highlights the shortcomings in the public healthcare system such as inadequate female staff to assist female patients, insufficient skilled medical and paramedical staff, lack of proper maintenance of available equipment's and machinery, inaccuracy in diagnostic and lab services, shortage of medicines, etc.

In addition to patient care, PHC's are responsible for community development, implementation of Anti-epidemic programs, Birth control programs, Sterilization surgeries such as vasectomy and tubectomy, Pregnancy and related care and Emergencies. However, the role and contribution of PHC's are comparatively minimal in most of these functional areas. This may be due to the fact that Kerala is well ahead on these healthcare indices and hence, there is little scope for such activities.

The positive and encouraging factors about PHC's include the proper administration of immunization / vaccination programmes and well-built infrastructure facilities.

Government hospitals can play a vital role in controlling the dominance of private health care providers by interfering into the competition and as a result, can reduce the enormous fees charged by the private hospitals. However, in order to gain public confidence, there should be a proper check on the levels of service quality of government hospitals. Proper training and awareness should be given to frontline staff on proper customer handling and care. Personal attention and care should be ensured to enhance responsiveness and create assurance in the minds of people. A mechanism should be in place to control and standardize the service quality on a periodic manner, which will enhance customer satisfaction by value addition and value creation. The communication between service providers and patients should be improved to create trust and confidence. Cost is perceived to be a least important factor influencing patients' satisfaction and they are ready to pay fair price for quality service. Therefore, bearing these factors in mind, public hospitals must take steps to be more competitive and customer friendly so that they can achieve the set objectives envisaged at the Alma Ata Declaration.

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