Chapter-III

QUALITY OF SERVICE IN HOSPITALS IN VISAKHAPATNAM

In this chapter, an attempt is made to present a clear picture regarding the Medical and Health facilities that are being provided in Visakhapatnam city and quality of service in the hospitals Visakhapatnam.

Visakhapatnam District is one of the North Eastern Coastal districts of Andhra Pradesh and it lies between 17° - 15' and 18° - 32' Northern latitude and 83° - 54' and 83° - 30' in Eastern longitude. It is bounded on the North partly by Orissa State and partly by Vizianagaram District, on the South by East Godavari District, on the West by Orissa State and on the East by Bay of Bengal. Visakhapatnam is a major port and the second largest city with an area of 550 km in the state of Andhra Pradesh and the third largest city on the east-coast of India after Kolkata and Chennai, with a population of approximately 42,88,116. It is located at 625 kilometres (388 miles) east of state capital, Hyderabad.
The city is nestled among the hills of the Eastern Ghats and faces the Bay of Bengal to the east. It is the administrative headquarters of Visakhapatnam district and is also home to the Eastern Naval Command of the Indian Navy. Visakhapatnam is often referred to as The Jewel of The East Coast or The City of Destiny. Vizag is sometimes referred to as the "Goa of the East Coast". According to the history, the city was named after the god of Valor-Vishakha. It was a part of the Kalinga Kingdom, under Ashoka’s rule in 260 B.C. It passed on later to the Andhra Kings of Vengi. After this Pallava, Chola and Ganga dynasties ruled the city. In the 15th century, Visakhapatnam became a part of the Vijayanagar Empire. The British took the charge of this beautiful land and transformed it into a busy and flourishing port town.

Thus, Visakhapatnam, better known as Vizag, is a port city on the East Coast of India. The port of Vizag handles the maximum cargo in the country and it is promised transform it into one of Asia’s major ports by 21st century. The city is a harmonious blend of the magical past and the bustling present and is a home for peaceful community living in the midst of golden beaches, lush green fields, verdant valleys and splendid monuments from the past.

Visakhapatnam is often called the best tourism destination in Andhra Pradesh. From lakes to cool beaches, from beautiful hill ranges to caves and valleys, wide and smooth roads, stunning landscapes are found with their grandeur in Visakhapatnam. The district has many tourism spots that represent the rich culture and heritage of the true India. Health tourism is fast developing industry. The local population is basically Telugu speaking people. There is considerable concentration of Marwaris, Oriya, Bengalis, Punjabis, Tamil and Malayalees. In addition, there is a large population of migrant workers from other parts of India who have been drawn to the area by the abundance of work at locally based companies, such as Eastern Naval Command, Vizag Steel Plant and Hindustan Shipyard. Bharat Heavy Plate And Vessels, Hindustan Zinc Limited, etc.

Today, the city is on the threshold of a major technological revolution through which the civic services rendered by its Municipal Corporation are being thrown open to the citizens using information and communications technology which could be the first of its kind in the country. Visakhapatnam being the district Head Quarters has two distinct geographic divisions. The strip of the land along the coast and the interior called the
plains division and hilly area of the Eastern Ghats flanking it on the North and West called the Agency Division. The Agency Division consists of the hilly regions covered by the Eastern Ghats with an altitude of about 900 metres dotted by several peaks exceeding 1200 metres. Administratively, the District is divided into 3 Revenue Divisions and 43 Mandals.

### PROFILE OF VISAKHAPATNAM DISTRICT

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 Census Population</td>
<td>42,88,116</td>
</tr>
<tr>
<td>Estimated Population as on 01.10.2010</td>
<td>43,52,214</td>
</tr>
<tr>
<td>a) Male Population</td>
<td>21,40,872</td>
</tr>
<tr>
<td>b) Female Population</td>
<td>21,47,244</td>
</tr>
<tr>
<td><strong>Area-wise Population</strong></td>
<td></td>
</tr>
<tr>
<td>Estimated population as on 1-10-2011</td>
<td>43,10,905</td>
</tr>
<tr>
<td>a) Rural Population</td>
<td>23,16,162</td>
</tr>
<tr>
<td>b) Urban Population</td>
<td>13,57,058</td>
</tr>
<tr>
<td>c) Tribal Population</td>
<td>6,37,685</td>
</tr>
<tr>
<td>d) Decadal Growth Rate</td>
<td>11.89</td>
</tr>
<tr>
<td>Density of Population</td>
<td>384 per Sq.Km.</td>
</tr>
<tr>
<td>Sex Ratio per 1000 Males</td>
<td>1003 Females per 1000 males</td>
</tr>
<tr>
<td><strong>Literacy Rate (Census 2001):</strong></td>
<td></td>
</tr>
<tr>
<td>a) Male</td>
<td>75.85</td>
</tr>
<tr>
<td>b) Female</td>
<td>54.16</td>
</tr>
<tr>
<td>Area</td>
<td>11161 Sq.Kms</td>
</tr>
<tr>
<td>Revenue Divisions</td>
<td>3</td>
</tr>
<tr>
<td>Number of Mandals</td>
<td>43</td>
</tr>
<tr>
<td>Greater Municipal Corporations</td>
<td>1</td>
</tr>
<tr>
<td>No. of Municipalities</td>
<td>2</td>
</tr>
<tr>
<td>No. of Revenue Villages</td>
<td>3294</td>
</tr>
<tr>
<td>No. of Inhabited Villages</td>
<td>3108</td>
</tr>
<tr>
<td>No. of Unhabited Villages</td>
<td>186</td>
</tr>
<tr>
<td>No. of Grama Panchayats</td>
<td>944</td>
</tr>
</tbody>
</table>

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**THE STATE OF PUBLIC HEALTH IN VISAKHAPATNAM**

Visakhapatnam has registered good progress in improving life expectancy at birth, reducing mortality due to Malaria, as well as reducing infant and maternal mortality over the last few decades. In spite of the progress made, a high proportion of the population, especially in suburban areas, continues to suffer and die from preventable diseases, pregnancy and childbirth related complications as well as malnutrition. In addition to old unresolved problems, the health system in Visakhapatnam is facing emerging threats and challenges. The rural public health care system in Visakha regions is in an unsatisfactory state leading to pauperisation of poor households due to expensive private sector health care. Visakhapatnam is in the midst of an epidemiological and demographic transition – with the attendant problems of increased chronic disease burden and a decline in mortality and fertility rates leading to an ageing of the population. Non-communicable diseases such as cardio-vascular diseases, cancer, blindness, mental illness and tobacco use related illnesses have imposed the chronic diseases burden on the already over-stretched health care system Visakhapatnam. Premature morbidity and mortality from chronic diseases can be a major economic and human resource loss for the region. The large disparity in the region places the burden of these conditions mostly on the poor and on women, scheduled castes and tribes especially those who live in the tribal areas of the region.

It is observed that public spending on preventive health services has a low priority over curative health. The private sector health care in Visakhapatnam is unregulated pushing the cost of health care up and making it unaffordable for the sub-urban poor. Persistent malnutrition, high levels of anemia amongst children and women, low age of
marriage and at first child birth, inadequate and safe drinking water round the year in many areas, over-crowding of dwelling units, unsatisfactory state of sanitation and disposal of industrial wastes, environmental pollution constitute major challenges for the public health system in Visakhapatnam. Most of these public health determinants are correlated to high levels of poverty and to degradation of the environment in the region. Thus, the city has to deal with multiple health crises, rising costs of health care and mounting expectations of the people. The challenge of quality health services in remote rural areas has to be met with a sense of urgency. Given the scope and magnitude of the problem, it is no longer enough to focus on narrowly defined projects. The urgent need is to transform the public health system into an accountable, accessible and affordable system of quality services. An organisation, whether small or large, be it a business or an industrial enterprises, needs for its growth survival, continuance and reaching affordable, quality health care to the poorest households in the remotest regions. Much before it became an industrial hub and a strategic centre with the establishment of the Eastern Naval Command, Visakhapatnam was famous as an educational centre and health care provider.

MEDICAL FACILITIES IN VISAKHAPATNAM

Visakhapatnam has the best Hospitals that offer Emergency Health Care services. Both the Government-run hospitals as well as the Corporate Hospitals, Nursing Homes and Trust Based Hospitals that provide quality health services round the clock. Almost all top-notch hospitals have resident doctors whose services can be availed at any time of the day.

Government Hospitals

These public hospitals are run by governments and these hospitals are reachable to the poor people. There are many public clinics in Visakhapatnam. Governments are establishing many public health care hospitals in Visakhapatnam. Few of the government hospitals are King George Hospital (KGH), Victoria Government Hospital (VGH), Visakhapatnam Steel Plant General Hospital (VSPGH) etc.

The King George Hospital, established more than 150 years ago as a small hospital now has grown into one of the biggest and famous hospitals in the country which is
affiliated to Andhra Medical College and has gained equal fame in its 88 years of existence. KGH is really a "Peddasupatri", providing medical care to the people of not only the coastal Andhra region but also the neighbouring States of Orissa, Madhya Pradesh and now Chhattisgarh. Till the 60s patients from even Kakinada, Rajahmundry and places in West Godavari would come to KGH for treatment, before the Government General Hospital in Kakinada became a full-fledged one. Even during the present time, when private and corporate hospitals are cornering a major share, KGH retains its position as a major health care provider. Still for the people in the border districts of Orissa and Chhattisgarh prefer KGH in the city for treatment as it is convenient for them in all respects. KGH has over 1,000 beds and has every clinical and surgical department along with some super speciality wings. Over a period of time modern equipment has been established, old students are donating money and equipment to their alma mater and the Government is also generous to an extent regarding funds.

In addition to the KGH, the city also has Government Victoria Hospital for Women and Children (Ghosha Hospital) in the old city area which is another old hospital established some decades ago. Rani Chnadramani Devi Hospital is also one of the oldest hospitals in the city which was initially established as a Trust Based Hospital in 1965. With generous heart, she donated a building known as 'Lakshmi Mahal which was situated in 32 acres of land and also Rs.1,00,000.00 in 1965. The Trust was formed with four members under the chairmanship of the Superintendent of the King George Hospital with the object to render medical service to physically challenged children. Later on, the hospital was taken over by the government in the year 1967. Regional Eye Hospital, the Government Hospital for Chest and Communicable Diseases, Government ENT Hospital, RCD Hospital and the Government Hospital for Mental Health, which was established more than 60 years ago and an important and major treatment centre for mentally ill-patients of not only Andhra Pradesh but many other States. All these hospitals are attached to Andhra Medical College (AMC) as its teaching hospitals.

Though the city has many government and private hospitals, the super specialist facility of high order is still eluding. People of north coastal Andhra are waiting for the Visakha Institute of Medical Sciences to be completed and put into use. VIMS, planned on
the lines of NIMS in Hyderabad and SVIMS in Tirupati is meant to provide the poor people of this region advanced and latest super speciality treatment. But the Government is not forthcoming with the funds required and only the first phase of six blocks is ready. Some efforts are being made to start some super speciality wards in these blocks and it is time for the Government to take a decision. While the public sector hospitals are beset with problems like funds crunch, vacancies of doctors and specialists continuing, hospitals and nursing homes in private sector have come up in a large number.

Corporate Hospitals

The corporate hospital sector of the country is all set to take away a significant share of the tertiary healthcare service business from individual private health care providers by 2010. Existing corporate hospitals like Apollo, Fortis, Wockhardt, NRI hospital, Max, etc., have all announced plans for setting up new healthcare facilities. Corporate groups like Apollo Tyres and Paras are among the new entrants in the healthcare business. The move is triggered by the growth in the GDP, emergence of health insurance and expected growth in the medical tourism.

Hospitals run on commercial lines with profit as the primary objective, and of course listed too - corporate hospitals - are a couple of decades old in India. The unmet demand for good healthcare in India coupled with the growing opportunities to raise resources through the capital market set off a few hospital projects in the last decade. A prospective corporate hospital entity seeking to attract investment in this environment will need to demonstrate industry defining business initiatives that circumvent all of these issues to create a commercial enterprise with a profit motive. A systematic business approach to address various sufficiencies in this segment can dramatically improve the ability of a for-profit institution to attract capital. Participatory role of physicians in the institution, enforcing standards in medical care, operational improvement techniques, rationalising capital expenditures and ethical business practices are a few that need attention.

There are many good private hospitals in Visakhapatnam. Though there are public hospitals, many people go to private hospital only. Though the fee charged by these private clinics in Visakhapatnam is high, people prefer these only due to their reputation.
Nowadays, many private health care hospitals in Visakhapatnam are being established day by day. There are efficient private doctors in these private hospitals in Visakhapatnam, to give high quality treatment through private health treatment. To mention a few of them are Apollo hospital, Queen’s NRI hospital, Lazarus hospital, CDR hospital, Nikitha hospital, Mahatma Gandhi Cancer Hospital & Research Centre, Panchavati Hospital, Seven Hills Hospital, St Ann’s Hospital etc. Thus it has many corporate hospitals providing the latest medical care and they have also performed some rare surgeries. They are also referral hospitals for many major industries and government organisations. Many patients from neighbouring states are treated at the corporate hospitals as well as big and small private hospitals.

Trust based Hospitals

Trust hospitals provide services in primary, secondary and tertiary sectors and therefore are located at small as well as big centres. On the other hand, most of the corporate hospitals wish to operate in tertiary sector and therefore, prefer to be located in major cities/towns. Trust hospitals aim to provide healthcare services to a wider section of people including the economically vulnerable ones at affordable rates. In case of trust hospital, service charge collected from the patients is one of the sources of the income. They are entitled for getting donation and it is a very important source of revenue for them. Since trust hospitals are allowed to receive donations, the charity becomes one of the objectives for them. They have to treat 40 per cent of cases free of cost as per existing law. But this is not the case with corporate hospitals. They are not obliged to do any charitable service.

The Visakhapatnam city also has major hospitals run by voluntary organisations. The Krishi Trust Hospital, The Sankar Eye Hospital run by the Sankar Foundation, the Lions Cancer Hospital, the Prema Hospital, where corrective surgeries are done for polio victims, are some of such hospitals providing treatment to the poor free of cost or at a nominal cost. During the last 10 or 15 years many dental clinics and hospitals providing advanced treatment have come up and the city also boasts of some diagnostic labs that have the latest equipment. The following table depicts the number of hospitals existing in Visakhapatnam.

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### Table III.1
Different Type of Hospitals Existing in Visakhapatnam

<table>
<thead>
<tr>
<th>SL.No.</th>
<th>Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Government Hospitals</td>
<td>14</td>
</tr>
<tr>
<td>2.</td>
<td>Corporate Hospitals &amp; Nursing Homes</td>
<td>208</td>
</tr>
<tr>
<td>3.</td>
<td>Hospitals Mental Care</td>
<td>04</td>
</tr>
<tr>
<td>4.</td>
<td>Hospitals run by Voluntary organisations</td>
<td>05</td>
</tr>
<tr>
<td>5.</td>
<td>Nature Cure Hospitals</td>
<td>01</td>
</tr>
</tbody>
</table>

**Source:** Directory Information, published by P.V.Rao (Ex-army), Journalist, P.V.R. Publications, Visakhapatnam

### Table III.2
PRESENT STATE OF MEDICAL AND PUBLIC HEALTH IN VISAKHAPATNAM-2011

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALLOPATHIC</strong></td>
<td></td>
</tr>
<tr>
<td>a) General Hospitals</td>
<td>14</td>
</tr>
<tr>
<td>b) Hospitals for special treatment</td>
<td></td>
</tr>
<tr>
<td>i) King George Hospital</td>
<td>1</td>
</tr>
<tr>
<td>ii) Mental Hospital</td>
<td>1</td>
</tr>
<tr>
<td>iii) Victoria Maharani Hospital (Women)</td>
<td>1</td>
</tr>
<tr>
<td>iv) T.B.Hospital</td>
<td>1</td>
</tr>
<tr>
<td>v) Eye Hospital</td>
<td>1</td>
</tr>
<tr>
<td>vi) E.S.I.Hospital</td>
<td>1</td>
</tr>
<tr>
<td>vii) Rani Chandramathi Devi Hospital (PH)</td>
<td>1</td>
</tr>
<tr>
<td>c) Dispensaries</td>
<td>12</td>
</tr>
<tr>
<td>d) Beds</td>
<td>2819</td>
</tr>
<tr>
<td>e) Doctors</td>
<td>583</td>
</tr>
</tbody>
</table>
AYURVEDIC
a) Hospitals 

b) Dispensaries 20
c) Doctors/Vaids 13

UNANI
a) Hospitals and Dispensaries 2
b) Doctors/Tah 1

HOMEOPATHY
a) Hospitals and Dispensaries 16
b) Doctors 11


Table III.3
STRUCTURE OF MEDICAL AND HEALTH INSTITUTIONS DURING 2011 VISAKHAPATNAM DISTRICT

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Type of Institution</th>
<th>Plain</th>
<th>Tribal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Director of Health control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>No. of Primary Health Centres</td>
<td>46</td>
<td>36</td>
<td>85</td>
</tr>
<tr>
<td>2</td>
<td>No. of Sub-Centres</td>
<td>389</td>
<td>195</td>
<td>584</td>
</tr>
<tr>
<td>3</td>
<td>No. of Urban Health Centres</td>
<td>04</td>
<td>0</td>
<td>04</td>
</tr>
<tr>
<td>4</td>
<td>No. of Rural Health Centres</td>
<td>01</td>
<td>0</td>
<td>01</td>
</tr>
<tr>
<td>5</td>
<td>No. of Urban Family Welfare Centres</td>
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<td>0</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>No. of Government Dispensaries</td>
<td>04</td>
<td>0</td>
<td>04</td>
</tr>
<tr>
<td>7</td>
<td>No. of Mobile Medical Units</td>
<td>0</td>
<td>09</td>
<td>09</td>
</tr>
<tr>
<td>8</td>
<td>No. of Post Partum Units</td>
<td>01</td>
<td>0</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>Under ABVVP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>No. of Area Hospitals</td>
<td>02</td>
<td>0</td>
<td>02</td>
</tr>
<tr>
<td>10</td>
<td>No. of Community Health Centres</td>
<td>08</td>
<td>02</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Under Director of Medical Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>No. of Teaching Hospitals</td>
<td>07</td>
<td>0</td>
<td>07</td>
</tr>
<tr>
<td>12</td>
<td>No. of Blood storage units</td>
<td>03</td>
<td>01</td>
<td>04</td>
</tr>
<tr>
<td>13</td>
<td>No. of Blood Bank units</td>
<td>02</td>
<td>0</td>
<td>02</td>
</tr>
</tbody>
</table>

Source: Visakhapatnam District Profile-2011

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SERVICE QUALITY IN HOSPITALS

Some years back, the editor of one of the most prestigious business magazines made the following observations. "We live in interesting times. For the first in 48 years, the customer has come on to his own. No longer is he content to accept inferior quality, limited choice and monopolistic competition has shrunk comfort zones, and with the mantle of protection torn as under, global competition has shrunk comfort zones. Today, the customer is demanding quality in products and services. Only those of us will survive the century who upgrade to global standards right now. So far only a handful of companies have woken up to the need to imbibe quality strategies. On the positive side, interest is definitely stirring. But companies seem to be doing little about quality."

One of the yardsticks to measure the success of any service organisation is the quantum of satisfaction it will produce in the public. This is very much true with the hospital where the quality of treatment to a large extent can be measured from the level of patient satisfaction.

Quality of health services has been a subject of concern and criticism of late because of increasing public awareness and expectation and inability of the health care providers to improve the services and measure up to the expectation. One of the reasons perhaps, is inadequate knowledge of health care professional about the concept and techniques of quality management. In scientific terms the simplest meaning of quality is, "the degree of adherence of a product or service to the predetermined specification". It may be termed as good or bad, high or low, depending upon the extent of conformity to the expected specified criteria.

Definitions of Quality of Health Services

Joint Commission on Accreditation of Healthcare Organisations (JCAHO) (USA) defines quality of health services as "the degree to which health services for individuals and populations increase the likelihood of the desired health outcomes and are consistent with the current professional knowledge."

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1 Business Today, January 7-21, 1995

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As defined by International Organisation for Standardisation (ISO 8402) quality of a service is "the totality of features and characteristics of a service that bear on its ability to satisfy the stated and implied needs of the patients."

In the context of health service the stated needs can be availability, accessibility, appropriateness, effectiveness, efficiency and affordability of the service to the community. The implied needs on the other hand may be the kind of service that is comprehensive enough to prevent the diseases form occurrence, educate the community on how to promote positive health, cure the disease promptly on occurrence and help in rehabilitation of the unfortunate disabled to lead a self reliant and productive life.\(^2\)

One of the major reasons of poor service quality is that services are more difficult spheres of operation than goods. They are more complex to create and market than goods. What makes services more complex is their nature. Many of the drivers of poor service quality are attributable to their characteristics. Therefore, need was felt to discuss service characteristics and their marketing implications.

Unique Characteristics of Services

1. **Intangibility**: According to Bateson\(^*\) intangibility is the most important and critical future of services that distinguishes services from good. Intangibility means 'palpable' intangibility by which a customer cannot touch a service product, as well as 'mental' intangibility by which service becomes difficult to grasp mentally.\(^3\)

In the product service continuum, hospitals fall in the bracket of highly intangible where the service has credence qualities.

i) The services of a doctor i.e., the consultation provided by the doctor, his diagnosis etc cannot be touched or felt or seen. One can only visualize the same.

ii) They can also not measure the benefits. These can only be experienced by the customer.

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\(^3\) Bateson J “Do We Need Service Marketing?” on Consumer Services, New Insights, Report 75-115, Marketing Science Institute, Boston, 1977
There is no ownership over the doctor or the services provided by him.

2. **Heterogeneity**: Services are performed by ‘people’. Therefore, there is possibility of variations and fluctuations in their performances from time-to-time, from performer-to-performer and from customer-to-customer. The quality of service may vary depending on who provides it as well as when and how it is provided.

3. **Inseparability**: In case of goods, they are first produced, they sold and then consumed. On the other hand, services are first sold and then produced and consumed. The production and consumption of services is simultaneous. The interaction between production and consumer is wide (spread over time) or quickly passing, and it may involve interaction between customers and service employee. This interaction is the essence of services marketing, since it is during this interaction that the customer makes judgment on the level of services being received by him. (For e.g. An operation cannot be conducted without the doctor’s presence. As a result a number of patients due to geographical distances lose out on the opportunity to get them treated from the very best surgeons and doctors.)

4. **Perishability**: The unique characteristic of services is that they cannot be stored, resold or returned like goods. A service not delivered in time is gone waste and the selling opportunity of the same is also gone forever. (For E.g. If a doctor does not reach his dispensary on time or has his clinic locked for that particular day. He loses all his patients for that day). Whereas in the case of manufactured goods, unsold items can be put into inventory and can be sold the next day. Marketers have to find ways to ‘tangibilise the ‘intangible’ to increase the productivity of providers who are inseparable from the product; to standardise the quality in face of variability; and to influence demand movements and supply capacities better in the face of service perishability.

**Service Quality**

The poor state of quality in services has been primarily due to lack of clarity and consensus on the issue of what it exactly means, "Quality is especially difficult to define, describe, and measure in services. While quality and quality control measures have long existed for tangible goods, few such measures have traditionally existed for services."
essence, quality determined by imprecise individual factors: perceptions, expectations and experiences of customers and providers, and, in some cases, additional parties such as public officials.4

Quality is essentially conceptualised as the discrepancy between customer expectations and perceptions of what is delivered. In case of goods, quality can be judged objectively. Objective quality referees to the technical superiority or excellence of a product against measurable and verifiable standards (Speed in miles per hour of a car). Whereas services are intangible entities and lack physically quantifiable or measureable dimensions like weight or size. In this case, customers evaluate quality based on their perception of what has been received as against their expectations. Quality in services held in the eyes of the customers is therefore called perceived quality. It is customers' personal judgement about product's excellence or superiority on a set of criteria that form their expectations.

Dimensions of Service Quality

One of the early attempts to unravel the mystery associated with service quality, a team of researchers—Parasuraman, Valerie Zeithal and Leonard Berry—did a comprehensive probe. Their study probed into quality issues using focus groups of customers in four services namely, retail banking, credit cards, security brokerage besides product repairs and maintenance. The most revealing and most unique insight emerging out this research was the criteria used by customers to evaluate service quality. In services, quality is not objective. Rather, it is perceived. Quality in service is based on customer's judgement of superiority on intangible dimensions.

In their investigation Parasuraman, Valerie Zeithal and Leonard Berry initially found ten general dimensions: tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding of the customer. But after statistical analysis of psycho-metric properties of quality scale, the initial dimensions got clubbed into five dimensions only. Service quality and quality dimensions are shown in the following figure III.I.

Figure III.1 Dimensions of Service Quality


1. Reliability: The service should be performed with dependability, and as per its promise.

2. Responsiveness: This concerns the attitude of the service provider to be willing to provide service. It also includes their sensitivity as well as timeliness in responding to customer requests.

3. Assurance: This relates to the knowledge, skill and competence of the service providers. It also indicates their ability to generate trust and faith and also capability in service delivery with politeness and consideration.

4. Empathy: This dimension includes caring, feeling as well as the ability to give personalised service.

5. Tangibles: This is a measure of the effectiveness of the physical evidence of the service provider like design, lay-out, physical facilities, equipment, personnel and communication materials.

Purasuraman and others asked over 1900 customers of five well-known companies to allocate 100 points across these five service dimensions. They developed a model of service quality called the "gaps model". They came up with a way to measure service quality by measuring these 'gaps' through a 22-item questionnaire called SERVQUAL. Their gap model clearly indicated that the consumers quality perceptions are influenced by a series of five distinct gaps occurring in organisations. These gaps which can impede delivery of services which consumers perceive to be of high quality are illustrated below.\(^6\)

\[\text{Figure - V.2}
\]

Requirement for Delivering Quality Service


From the above chart, it can be observed that there are five gaps which cause unsuccessful service delivery which can be described as:

1. **Gap between consumer expectations and management perceptions:** Management does not always perceive correctly what the consumer want. Hospital administrator may think the patients want good food and facilities for their comfortable stay but patients may be more concerned with nursing responsiveness.

2. **Gap between management perception and service-quality specification:** Management might perceive the customers wants but cannot set a specified performance standard. Hospital administration may tell the nurses to give “fast” service without specifying it quantitatively.

3. **Gap between service quality specification and service delivery:** The personnel might be poorly trained or overworked and incapable or unwilling to meet the standards or they may have to meet conflicting standards, such as taking time to listen to patients and serving them fast.

4. **Gap between service delivery and external communication:** Patients expectations are affected by statements made by hospital representatives and advertisements. If a hospital brochure depicts a beautiful room by the patient on arriving finds it to be shabby looking, then the external communication have distorted the customer’s expectations.

5. **Gap between perceived service and expected service:** This gap occurs when the patients or their relatives measure the hospital’s performance in a different way and misperceive the service quality. The physician may keep visiting the patient to show care. But the patient may interpret this as indication that something is really wrong.

**Need for Service Quality in Hospitals**

In services, there is a great possibility of overlapping of marketing and operation. Hence, the quality of service would imply management of quality of all service marketing mix. Just as shoddy goods have no sale, acceptance or viability, similarly, poor service
quality will find survival difficult in a highly competitive market-place. Sohail mentions the fact that with competitive pressures and the increasing necessity to deliver patient satisfaction, the elements of excellent services are of priority. Li and Collier are of the opinion that service quality in hospitals, is a key to financial success and survival.

Orava and Tuomine did a study to analyse the quality of a professional surgical service, and found that the relationship dimensions of service quality to be the most important in the medical context. The following points will briefly illustrate the reasons for the need or importance of quality in services:

**Lower costs:** Higher quality of services imply fewer mistakes for any repeat tasks, service recovery exercise or refunds to disgruntled customers. Preventive and corrective measures through quality control processes lower costs and increase productivity of the hospital.

**Immune or less vulnerable to price war:** Service quality creates competitiveness for hospitals and is associated with successful hospitals. It has been said that hospitals offer a similar service of similar quality, and that the differentiation between them is the superior service quality that is offered to the patient. Thus, the hospitals offering superior quality service can afford to have a higher price as they offer more benefits than the competition.

**Higher Customer Loyalty:** Service quality has an effect on customer loyalty. This is perceived by the hospitals when the perceived service quality experienced by the patient exceeds that which is offered by the competitors. The customer will stay loyal until proven wrong by continuous dissatisfaction. The delivery of service quality to customers is required in the long run if the hospital is to experience the benefit of customer loyalty.

**High market share:** Loyal customers contribute to positive word-of-mouth publicity, which broaden customer base with minimal costs.

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Committed internal customers: When the hospital is quality conscious, employees feel proud of their organisation; having a sense of belonging is known for inspiring and delivering high quality services which in turn lowers attrition levels, lowers manpower and training costs and the hospital can leverage on the knowledge and skill of its employees.

Customer service is a prerequisite for customer satisfaction. In this sense satisfaction is defined, according to Lilijander and Strandvik\(^{11}\) as the feeling emerging if the performance of a service equals or exceeds the perceived quality services. Therefore, for greater patients' satisfaction, the hospitals are needed to deliver good quality services.

**MARKETING OF HEALTH SERVICES**

Marketing is the management process responsible for identifying, satisfying and meeting customer's requirements profitably. By marketing of healthcare services, it means, making available quality healthcare services to the users at a reasonable cost. Hospitals are similar to industries, but hospital and health administrators feel uncomfortable using proven industrial techniques to effectively develop an appropriate market for hospital services. In this era of open competition, the concept of competing with other hospitals and health services institutions for a larger share of the market place must now be accepted. Whether it is marketing of goods or services, traditionally there are Four entities that comprise the essential elements of marketing everywhere. These are together referred to as the “Marketing-Mix”. These elements or 4 ps in the context of hospital services comprise the following:

1. **Product**: A product is a set of attributes assembled in an identifiable form. The product is the central component of any marketing mix.\(^{12}\) The product component of the marketing mix deals with a variety of issues relating to development, presentation and management of the product which is to be offered to the market place. It covers issues such as service package, core services and peripherals, managing services offered and developing services offered.

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The different types of services that are offered in the hospitals in the form of preventive "Cure" and "Care" with diagnostic equipment, therapeutic equipment, clinics, medicines and treatment procedures. These are viewed in terms of the benefits to the patient – relief from pain, longer life, less disability, etc. Usually modern hospitals offer different types of services such as core services, supportive services, peripheral services and preventive services to the intended users. Core services are directly related to the promises which the users are being charged and they include emergency services, Diagnostic services, operation theatre, and intensive care unit, in-patient and out-patient services etc. Supportive services include Central sterile supply, laboratory, radiology, nursing catering and laundry etc. Peripheral services play an important role in improving the quality of health care services and include transport, communication, entertainment facilities, sanitation, water, power, lighting ventilation, accommodation, sewage etc. Preventive services include treating the patients of communicable and non-communicable diseases, notify to the recognised authorities of any communicable disease of which it has knowledge and assist in vaccination programme etc., and so on. In hospital services, a suitable basis for segmenting the market is income. This would help hospitals in charging more for high income groups, charging equal to cost for the low income group and making available free services to the no income group. However, the product has to be adequately priced. This involves the cost, consideration of profit margin, the concept of right price.

The Products of King George Hospital

Anesthesiology; Anatomy; Cardiology; Cardio Thoracic Department; Central Sterilisation Section Department (CSSD); Clinical pharmacology; Chest clinic; Dental; Dental surgery; Dermatology Department Dialysis Department; Endocrinology; Ear Nose Throat (ENT) Department; Forensic medicines; Gastroenterology Department; General medicine; General surgery; Gynaecology; Intensive Care Unit (ICU); Medical oncology; Nephrology; Neurology Department; Neuro Surgery Department; Obstetrics & Gynecology Department; Ophthalmology; Orthopedic Department; Pediatric Surgery Department; Pediatric Department; Neonatal Intensive Care Unit (NICU); Pediatric Intensive Care Unit (PICU); Pediatric Ward; Pediatric Out Patient Department (OPD);

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The Products of Queen's NRI Hospital:

Orthopaedics; Cosomotic Surgery; Nephrology; General Surgery; General Medicine; Cardiology; Endocrinology; Gynaecology; Neonatology; Radiology; Dental; ENT; Urology; Neurology; Oncology; Internal Medicine; Pulmonology; Gastroenterology; Obstetrics & Infertility; Paediatrics; Ophthalmology; Physiotherapy.

The Products of Krishi Trust Hospital

KTH being the Super Speciality Hospital offers specialist services in Gynaecology, Pediatrics, Dermatology, Ophthalmology, General Surgery Dental, Urology, Neurology, Surgery, Endoscopy, UT Scan, Orthopaedics, ENT and Cardiology as well as Ayurveda. The other Services provided are Ambulance, Housekeeping, Arogya-sree, Stores & Purchases, Dialysis, Pharmacy, etc.

KGH being teaching hospital offers a wide range of products (Services) to meet the medical needs of different types of customers (patients) compared to NRI and KTH. But the service quality of these products (services) in case of KGH and KTH unable to satisfy the ever growing number of patients due to lack of funds, commitment on part of the staff, and lack of professional management etc. The special type of products that are offered by the NRI hospital include “Health Diagnosis Programme” which is a complete, comprehensive, periodic health check up offered for busy executives, professionals, business persons and so on. The health diagnosis programme comprises of the following:

1. Master health check up.
2. Executive Health check up.
3. Diabetics health check up, etc.

2. Pricing plays a crucial role in marketing mix as it has a greater bearing on the existence and development of the hospital and which attracts the customers towards a particular hospital services. Generally, customers are found sensitive to prices; their tendency is to
get the best quality services at a least possible cost. Especially, in the Indian perspective, where, nearly 60 per cent of the population still live below the poverty line, formulation of appropriate price mix for all healthcare organisations is found to be a challenging task. Hospitals are required to adopt such a pricing strategy that would help them to survive and grow and on the other hand it would be affordable to the users. Hospitals follow variable pricing structure depending upon the length of stay, level of illness, frequency of visits, type of room, use of equipment, treatment procedures.

The three selected hospitals have no belief in profit maximisation and these hospitals aim at providing quality service for their customers at reasonable price. In general, KGH has no service charges and from the private room patients’ very nominal fee is collected. The NRI Hospital charges the service charges depending upon the length of stay, level of illness, frequency of visits, type of room, use of equipment and treatment procedures, etc. The charges are collected at bill section and are considered reasonable when compared to the other hospitals in Visakhapatnam. It provides best services to the patients. In case of Krishi Trust Hospital, subsidised amount of fee is collected from the card holders’ i.e., milk producers. The product has to be adequately priced. This involves the cost, consideration of profit margin, the concept of right price.

3. Place: It refers to contact point between the customer and the service provider, who gets the benefit of the service. This element in the marketing mix leads to the identification of a suitable location.

The two major issues considered, regarding the decision of a place are accessibility and availability of the service to customers. Accessibility refers to the ease and convenience with which a service can be purchased, used or received. Availability refers to the extent to which a service is obtainable or capable of being purchased, used and received. Factors influencing the place of decision are market size and structure by geographical regions, number and types of competitors in the region, location of potentially attractive consumer segments, local infrastructure, good road access facilities and public transportation network. A hospital must be ideally located and must be easily accessible to all.
Among the three selected hospitals, the **King George Hospital** is ideally located in the heart of the city, Visakhapatnam (opposite to Collectorate), in Maharani Pet and close to the railway station. It is easily accessible. It serves patients round the clock.

The **NRI Hospital** is located in a decent residential area at Seethammadhara in Visakhapatnam, somewhat accessible to A.P.S.R.T.C. Bus Terminal and provides 24 hours service to the public. The hospital enjoys good reputation. People from far off districts and neighbouring states also come to this hospital for treatment.

The **Krishi Trust Hospital** is located at far off place in Sheelanagar, nearly 20 KM away from Visakhapatnam. It is neither easily accessible to railway station nor to Bus Terminal and has no locational advantage.

As far as accessibility and convenience are concerned among the three selected hospitals, KGH is better placed. But, it suffers from excessive pollution and noise. NRI hospital though situated in a residential area, no easy, convenient and frequent transportation is available from railway station and bus terminal and reaching the hospital itself is somewhat expensive. In case of KTH, the place of the hospital is not easily accessible.

4. **Promotion**: It involves the transmission of message to present, past and potential customers. Customers need to be made aware of the existence of the service offered, develop an interest in using a service, actually utilise it, use it regularly and recommend the organisation to friends and relatives etc. Hospitals need to promote services in an innovative fashion so that potential customers are informed and sensed in the right perspective and motivated. This draws attention to the different constituents of promotion mix such as advertising, publicity, sales promotion, personal selling, word-of-mouth promotion and telemarketing and presently internet.

Promotion function of any service organisation involves the transmission of message to present, past and potential customers. Customers need to be made aware of the existence of the service offered, develop an interest in using a service, actually utilise it, use it regularly and recommend the organisation to a friend etc. Promotion is the aspect of selling and advertising, sales promotion and publicity. In other words, it is communicating the benefits of the service to the customers in order to persuade them to purchase such services.
The NRI Hospital and KTH conduct camps in rural areas to give medical check-up at a reasonable price so that the rural people approach the hospital again in future. They also sponsor frequent visits to the spastic society, old age homes, etc. The promotional programmes of NRI Hospital include advertisements on hoardings and in T.V. Channels, Cine Slides, leaflets, small booklets, posters, health and fitness magazines, publicity, word of mouth and public relations. The KTH does not normally undertake aggressive promotion; it relies a lot on a favourable word of mouth and public relations. To increase the clientele, a hospital may continuously introduce different health services like the master health programmes and diabetes health check-up, Mammography tests for female apart from annual health, T.B. Check-ups for rural poor, check-up offered to different companies and public. In KGH, there are no promotional programs, it also depends on the word of mouth from its own patients and their relatives.

The Extended Marketing Mix of Healthcare Services

For service industries, it was observed that the traditional marketing mix i.e., 4 Ps was inadequate for successful marketing of services and hence the marketing mix was extended beyond 4 Ps for marketing of services. These additional 3 Ps viz., People, Physical Evidence and Process are added to meet the marketing challenges posed by unique characteristics of services. The role of each additional “P” of services in the marketing mix of hospital is described below.

Marketing Elements - The complete marketing for services is depicted in Figure III.2.

![Fig.III.3. The complete Marketing Mix for services](image-url)
People Mix in Hospitals: Judd in 1987, came out with yet another ‘P’ People. Judd’s argument was that it is the employees of an organisation which represent the organisation to the customers. If these employees are not given training in how to go about face-to-face customer contact, the entire marketing effort may not prove to be effective. Paramkusam and Berry also suggested that a service organisation can be only as good as its people. A service is a performance and it is usually difficult to separate the performance from the people. If the people don’t meet customers’ expectations, then neither does the service. Investing in people quality in a service business means investing in product quality.

People play an indispensable role in the marketing mix of healthcare organisations, where there is a greater need for public interaction. There is not exaggeration to mention here that without this “P” hospitals cannot survive. The importance of staff in the marketing of hospital services is captured in the people element of the services marketing mix. The people can be described “as all of the human actors who play a part in service delivery and thus influence the buyer’s perceptions” namely the firm’s personnel, the customer and other, and other customers in the service environment.

In the context of hospitals, the term people include-doctors, specialists, nurses, nursing aids, housekeeping, technicians, paramedic, dieticians, physiotherapists and yoga masters, front office and security personnel etc. The success and brand image of the hospital, to a large extent, depends upon the behaviour and attitudes of theses employees. Because these people form an integral part in delivering the quality services to the users.

Patients also play a key role in hospital service delivery. For this, apart from maintaining quality staff, many hospitals also conduct customer education programs to enable patients and the attendants to appreciate the value and quality of services. Because it is not possible to have an efficient delivery, if the patient is not confident and supportive. Thus, the key to marketing of services is the direct interaction between the service people and the customer. The customer provider interaction is the ‘movement of truth’ when the services either marketed or demarked.

A strategy framework known as the services triangle visually reinforces the importance of people in the ability of firms to keep their promises and succeed in building customers relationships. Fig No.1 illustrates this.

Fig. No.4
Service Triangle in Hospital

The triangle shows the three interlinked groups that work together to develop, promote, and deliver services. These key players are labelled on the points of the triangle: the company or hospital or management; the customers; and the providers. Here the providers can be firm's employees i.e., doctors, nurses who actually deliver the company's services. Apart from this between these three points on the triangle, three types of marketing must be successfully carried out for a service to succeed: external marketing, interactive marketing and internal marketing.

**External Marketing:** The efforts that the firm engages in to set up its customers expectations and make promises to customers regarding what is to be delivered. Anything or anyone that communicates to the customers before service delivery can be viewed as part of this external marketing function.

**Interactive Marketing:** This is also called real-time marketing. Here is where promises are kept or broken by the firm's employees, subcontractors or agents. People are critical at this juncture. If promises are not kept customers become dissatisfied and eventually reach.

**Internal Marketing:** Outstanding services can be expected from outstanding employees only. In case of hospitals, customer is the focus of all value activities and his satisfaction is
the ultimate goal of the hospital. One of the important customer groups is not outside but within the health care organisation itself. The organisation runs more smoothly if everyone in the organisation treats the other employee as customer. Maintaining a positive relationship with them is as vital as with the external customers. The following groups form the internal or indirect customers of healthcare organisations.¹⁷

- Physicians
- Employees of service providers

Benoy¹⁸ very aptly defined Internal Marketing as "The application of marketing, human resource management and allied theories, techniques and principle to motivate, mobilise, co-operate and manage employees at all levels of the organisation to continually improve the way they serve external customers and each other. Effective marketing responds to employee needs as it advances the organisation's mission and goal. "He further adds that healthcare business which is labour intensive and demands high levels of personal contact between employees of service providers and customers, no market plan can be considered complete unless it includes strategies for reaching out and winning over its internal customers.

Gronross¹⁹ clarified that the basic objective of internal marketing is to develop motivated and customer conscious employees. If this is the case, then it has strategic as well as tactical implications. The essentials of internal marketing are shown in the following figure. III.5

In service marketing, internal marketing plays a critical role. Promises that have been made to customers implicitly or explicitly are required to be fulfilled by the employees for which building team spirit and customer orientation among employees is very much essential. The activities involved in internal marketing include training employees, empowerment, knowing employees needs, good internal communication and measuring and rewarding quality.

By virtue of over-dependence on people, internal customers in healthcare organisations also play a role as ‘front line’ service people. These people are referred to as ‘boundary spanners’ because they operate at the organisation’s boundary. Boundary spanners provide a link between the external customers, environment and internal operations of the organisation. What the level of skill or pay, boundary-spanning positions are often high-stress jobs. In addition to mental and physical skills, these positions extraordinary levels of emotional labour, frequently demand an ability to handle
interpersonal and inter-organisational conflict, and call on the employee to make real-time trade-offs between quality and productivity on the job. These stresses and trade-offs can result in failure to deliver services. Arlie Hoch child referred these people as ‘emotional labour’ that goes beyond the physical or mental skills needed to deliver quality service.\(^{20}\) It means delivering smiles, making eye contact, showing service interest, and engaging in friendly conversation with people who are essentially, strangers and who may or may not ever be seen again emotional labour draws on people’s feelings to be effective in their jobs.

However, front line personnel are not a homogeneous group. The hospitals housekeeping maid and the surgeon are both front-line employees in that they both deal directly with customers. Some of the skills that they both are required are common to both jobs. These core skills have become common requirements of all front-line staff regardless of the specific service that they provide.

Frontline staff can provide a quality service if they possess all the qualities required, both ‘core’ and ‘supplementary’.\(^{21}\)

Frontline people often face interpersonal and inter organisational conflicts on the job. Because they represent the customer to the organisation and often need to manage a number of customers simultaneously. Their frustration and confusion can, if left unattended, lead to, job dissatisfaction, a diminished ability to serve customers, and burnout.


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Service Profit Chain

Heskett Jones, Loveman, Sasser and Schlesinger\textsuperscript{22} proposed the idea of service profit chain. It proposes that there are direct and strong relationships between business profitability and customer loyalty on one side and employee satisfaction, loyalty and productivity on the other. The service profit chain proposes links between various elements:

- Profit and growth of business are stimulated primarily by customer loyalty.
- Customer loyalty is a direct result of customer satisfaction.
- Customer satisfaction is largely influenced by the value of services provided by the firm to the customer.
- Satisfied, loyal and productive employee can only create value.
- Employee satisfaction is determined by the quality of support services and support services and policies of the firm that enable them to deliver results to customers.

In case of healthcare services, it is only through satisfied employees that a hospital creates satisfied patients. Employee satisfaction leads to employee retention and productivity. These two drives the nature of value generated for the customer which in turn, affects customer satisfaction further leading to the outcome of customer loyalty. The service profit chain draws attention to internal quality. While most managers focus their entire attention on external service quality, internal service quality never catches attention.

It can be concluded that internal quality, in its entirety, refers to the feelings of the people in the firm have towards their jobs, colleagues and the organisation. People link up in the system to form a chain in which one serves the other in order to finally create value for the external customer. The logic of customer satisfaction must pervade internally. One link must aim to crate satisfaction at the next link. Employees within the system must identify their customers and try to satisfy them.

Strategies for Customer (Patient) Oriented Service Delivery in Hospitals

The real propellers for effective functioning of hospital system is its people, because it is they who are the fountainhead of imagination, creativity and sensitivity to varied issues. In order to build a patient oriented and service-minded workforce, the hospital must:

(a) Hire right people
(b) Develop to deliver quality service
(c) Provide needed support system
(d) Retain the best people
(e) Empowerment

Patients' Role in Hospital Service Delivery

In the concept of 'People', apart from the employees i.e., doctors, nurses, supporting and administrative staff, patients and other hospital services utilisers (attendants and visitors etc.) also play a very important role in the marketing mix of hospital services. Because, customers (patients) are indispensable in the production process of service organisations and they actually control and contribute to their own satisfaction. In hospitals, customers play. Three major roles in the service delivery.

(a) Customers as productive resources.
(b) Customers as contributors to quality and satisfaction, and
(c) Customers as competitors.

Hospital customers have been referred to as 'partial employees' of the organisation-human resources who contribute to the organisation's productive capacity23 and hence experts believe that hospital services can be delivered most efficiently, effectively and economically, if the customers are truly viewed as particular employees and their participative roles are designed in such a way so as to maximise their contributions to the service creation process.

Patients also act as contributors to quality and satisfaction in the sense that in case of hospitals unless and until the patient co-operates in the treatment process by taking prescribed medicines, diet in time and monitors his habits, the desired outcome of service

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is not possible and thus he also plays an important role in the ultimate quality of hospital services.

Customers are competitors of the hospital service, what it supplies. Because, customers not need the provider or entire service for themselves. These customers can be viewed as resources of firm, or as ‘partial employees’. Therefore hospitals have to remember, that in many types of services delivered by it, the customer can choose fully or partially for themselves. Thus, in addition to recognise that customers can be productive resources and concreters of quality and value hospitals also need to recognise the customer’s role as a potential competitor.

Enhancing Patient or Customer Satisfaction in Hospitals

Enhancing customer or patient participation is the key for effectiveness of service delivery in the hospitals. Usually, customers in the participation of service production and consumption will be influenced by different factors like, customers goals, time variables, importance of the service value of the service, other employees, co-customers, physical environment, impression formed on contact employee, situation pressure, mood, etc. Hospitals need to identify the factors influencing the customer participation and develop appropriate strategies for encouraging effective participation of customers.

People in the Selected Hospitals: The people as an element of marketing mix occupies a place of special significance in almost all the organisations more so in healthcare services. Under hospital marketing, all human actors like doctors, specialists, nurses, nursing aides, technicians, paramedics, dieticians, security and front office staff participating in the delivery of a service provide cues to the customer regarding the nature of the service itself. Service personnel play an important role in an organisation which offers service. The uniforms of the staff, their personal appearance, their attitudes and behaviours, all influence the consumer’s perception of service. Customers are a source of influencing other customers by word of mouth. It is necessary that the staff in hospital are trained to offer quality patient care with a human touch using state of the art technology.

People Mix in KTH: The people mix in KTH comprises of different categories of personnel such as departmental heads, doctors, nursing staff, paramedical and other supporting staff, managerial administrative personnel and other service users. Besides,
post graduate doctors, house surgeon students and nursing students also form a part of people. The success of marketing as service is tied closely to selection, training, motivation and management of these people. There are many instances of services failing in KGH as a consequence of ineffective management of these people. The object of providing quality service in government hospital can be achieved by motivating employees to be efficient, dedicated and loyal to the organisation, providing regular on-job-training to ensure continuous improvement in the services rendered and the use of modern technology. The personnel policy of KGH should be made in such a way as to attract the professionally competent people towards government service.

People Mix in NRI Hospital: In this hospital people mix consists of doctors, nursing staff, paramedical and supporting staff front office executives and administrative managerial personnel. The hospital manages the people through an efficient Human Resource Department which effectively performs diversified functions relating to personnel such as manpower planning, staffing, supporting, motivating, communication, coordinating, evaluating and rewarding training. In order to provide world class quality services, this hospital has been concentrating more on making competent service oriented personnel. NRI hospital is having training system and infrastructure basically to meet the objective of developing and enhancing communication skills and service skills among employees. Sometimes it also hires specialists for its training needs. Besides direct compensation, NRI hospital is providing extended benefits to the employees like employee measures within the organisation such as children education, functions and social interactions etc. An encouraging rewarding system is also designed to motivate the best performing employees. The hospital is successful in maintaining the eminent specialists, competent skilled staff and service oriented employees with smile on their faces without much turnover.

People Mix in KTH: For appropriate people mix, KTH is concentrating on finding qualified people who have the attitude for service job and orientation. The management of KTH is giving importance to the attitude of the people. The hospital superintendent with the help of the hospital administrator looks after all the aspects relating to man management in the hospital. Often, some kind of discontentment is found among the people to the extent that they are not getting handsome remuneration as it is being paid to the employees of other hospitals in the city. However, these people are motivated well by
the managerial staff by regular liaison with them, showing real interest in their problems, providing medical concessions to the near and dear of their people and constantly making the people realise the fact that there is nothing greater in life than serving the humanity.

**Conclusion:** Under hospital marketing, the marketing mix variable *people* includes all the different people involved in the service providing process-internal customers of the hospitals which includes doctors, nurses, supporting staff etc. The earliest and the best way of having control on the quality of people will be by approving professionally competent doctors and other staff and external customers which include patients.

Hospital is a place where small activity undertaken can be a matter of life and death, so the people factor is very important. One of the major classifications of hospitals is private and government. In the government hospital the people factor has to be specially taken care of. In Indian government hospitals except a few almost all the hospitals and their personnel hardly find the behavioural dimensions significant. It is against this background that even if the users get the quality medical aid they are found dissatisfied with the rough and indecent behaviour of the doctors and other staff.

Under hospital marketing a right person for the right job has to be appointed and they should be adaptable and possess versatility. The patients in the hospitals are already suffering from trauma, which has to be understood by the doctors and other staff. The people of the hospital should be constantly motivated to give the best of their effort.

**PHYSICAL EVIDENCE IN HOSPITALS**

G. Lynn Shosstack\(^{24}\) once observed, “A physical object is self defining; a service is not” and therefore the marketing task in service industries is “defining for the service what the service cannot define for itself”. Though a customer cannot see a hospital service. But definitely he can see various tangible clues of the service offer like, facilities, communication, material, objectives, employees, other customers; price etc. On the basis of his perception on the tangible clue, the customer makes the decision-whether to go to a particular hospital for treatment or not. These clues might be both intended and unintended ones and, therefore, managing evidence is integral to the hospital service marketing.

Shostack even observed that the management of evidence comes first for service marketers.

Nature of Physical Evidence

An organisation's extended value mix; 7 Ps represents the controllable aspects of the service delivery of which the changing physical environment can be monitored and kept up to date and in good taste.\(^{25}\)

According to Ziethaml \textit{et al.}\(^{26}\), physical evidence refers to the tangible cues included in quality service. They include all aspects of the hospital’s physical facility (the services cape) as well as other forms of tangible communication.

New research indicates that United State patients and physicians are more and more likely to base their choice of hospital on physical evidence.\(^{27}\) Having realised the importance of physical evidence for all stakeholders it is of essential to understand the nature of the physical evidence in a hospital.

Physical evidence is of specific essence in the hospital setting. From a strategic perspective, the importance of managing the organisation’s physical evidence stems from the firm’s ability to focus on these important aspects.\(^{28}\) The authors indicate that successful businesses constantly monitor their physical environments. They believe that when response on quality of a service become more negative the management has to evaluate the physical evidence and whether its lacking or not keeping up with the trends in the market share\(^{29}\) to Ziethaml \textit{et al.} describe physical evidence in the hospital as building exterior, parking, signs, waiting areas, admission office, patients’ care room and medical equipment.

Role of Physical Evidence


\(^{29}\) \textit{Ibid.}, p.120..
Obviously the primary role of evidence management is to support the organisation’s marketing programme by making it possible to manage both intended and unintended clues which can give adequate evidence to a customer and thereby influence his perceptions. Interestingly, the physical evidence also influences employees who ultimately interact with customers during the service delivery. The following points envisages the role of physical evidence.

**The servicescape and other elements** of physical evidence essentially “wrap” the service and convey to patients the external image of what is “inside” the hospital and is used for positioning the service. It is a visual metaphor for the intangible service. The physical surroundings offer the hospital the opportunity to convey an image in a way not unlike the way an individual chooses to dress for success.

**Felicitator:** The service escape can also serve as a facilitator in aiding the performances of persons in a particular environmental setting like a hospital. The design can enhance or inhibit the efficient flow of activities in the service setting, making it harder or easier for the patient and employees to accomplish their goals. A well-designed functional facility can make the service a pleasure to experience from the patient’s and employee’s point of view. On the other hand, poor and unattractive design may frustrate both patients and employees.

**Differentiator:** The design of the physical facility in hospitals can differentiate from its competitors and signal the market segment. The service is intended for changes in the physical environment can be used to reposition a hospital and/or to attract new market segments. The design of a physical facility can also differentiate one area of a hospital from another. Price differentiation is also often partially achieved through variations in physical settings, rooms in hospitals with more physical amenities cost more, and others may change less. Taking advantage of this alternative, patients who are willing to occupy the rooms by paying higher price can experience the service in an entirely different environment.

31 Ibid., p. 319.
Influences Human Behaviour: Human behaviour is also influenced by the physical facility in hospitals. Environmental psychologists suggest that individuals react to places with two general, and opposite forms of behaviour i.e., approach and avoidance. Approach behaviours include all positive behaviours that might be directed at a particular place, such as desire to stay, explore work and affiliate. Avoidance behaviours reflect the opposite i.e. a desire not to stay, to explore, to work, or to affiliate. In addition to its effect on their individual behaviours, the physical facilities influence the nature and quality of consumers and employee interactions. It has been stated that “all social interaction is affected by the physical container in which it occurs”.

Contributes Physiological value: The physical evidence may also affect the patients and their attendants in purely physiological ways. Noise may cause physical discomfort, the temperature of patient rooms may cause to shiver or perspire, the air quality may make it difficult to breath, and the glare of lighting may decrease ability to see and cause physical pain. A vast amount of research in engineering and design has addressed human physiological responses to ambient conditions as well as physiological responses to design i.e. called ergonomics.

Socialiser: The design of the physical facility aids in the socialisation of both employees and consumers in the sense that it helps to convey expected roles, behaviours, and relationships. The design of the facility can also suggest to consumers what their role is relative to employees only, how they should behave while in the environment, and what types of interactions are encouraged.

Performance and Communication: Eiglier and Langeard often refer to the physical environment that facilitates the performance and the communication of service.

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The Components of Physical Environment: Physical evidence has several important components that are all important aspects of physical evidence as they influence the customer’s perceptions.35

A number of components of physical evidence can be identified, namely servicescape and other tangibles as seen clearly in Table.7

Table III.7
Components of physical Environment

<table>
<thead>
<tr>
<th>Service</th>
<th>Servicecape</th>
<th>Other tangibles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>Facility Exterior</td>
<td>Uniforms</td>
</tr>
<tr>
<td></td>
<td>Exterior Design</td>
<td>Reports/Stationery</td>
</tr>
<tr>
<td></td>
<td>Parking</td>
<td>Billing Statements</td>
</tr>
<tr>
<td></td>
<td>Signage</td>
<td>Websites</td>
</tr>
<tr>
<td></td>
<td>Landscape</td>
<td>Business Cards</td>
</tr>
<tr>
<td></td>
<td>Surrounding aAeas</td>
<td>Stationery</td>
</tr>
<tr>
<td></td>
<td>Facility interior</td>
<td>Employees Dress</td>
</tr>
<tr>
<td></td>
<td>Interior Design</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Signage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Layout</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Air quality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Temperature</td>
<td></td>
</tr>
</tbody>
</table>

Source: Ziethaml, et al. 2006:31736

According to Ziethaml, and others Servicescape is defined as an organisation’s (the place where the service is delivered) physical facility and refers to both exterior attributes (such as building exterior, signage, parking, waiting areas, admission office and the landscape) and interior attributes (such as design layout equipment and décor) hospitals rely heavily on physical evidence to communicate and create the expectations of customers. The physical evidence particularly the servicescape can have a profound effect on the customer’s experience. This is particularly true when the experience is personally meaningful, for example bathing room in a hospital.

In the views of Hoffman and others, servicescape refers to the use of physical evidence to design service environments. In turn, servicescape consists of a number of dimensions, namely ambient conditions, space/function, and signs, symbols and artefacts which are clearly depicted in Table III.8.

Table III.8
Dimensions in Servicescape

<table>
<thead>
<tr>
<th>AMBIENT CONDITION</th>
<th>SPACE/FUNCTION</th>
<th>SIGNS, SYMBOLS AND ARTIFACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>Layout</td>
<td>Signage</td>
</tr>
<tr>
<td>Air quality</td>
<td>Equipment</td>
<td>Personal artifacts</td>
</tr>
<tr>
<td>Noise</td>
<td>Furnishings</td>
<td>Style of décor</td>
</tr>
<tr>
<td>Music</td>
<td>Etc</td>
<td>Etc</td>
</tr>
<tr>
<td>Odor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Ziethmal et al. 2006, 328.37

Biter's model of Servicescape highlights music as just one of a range of ambient conditions influencing behaviour. Studies reveal significant relationships between specific musical variables and desired consumer behaviour outcomes and are displayed in a visual framework entitled the musicscape, and that is why in some hospitals piano or some pleasant music is being played in lobbies to reduce stress. In hospitals, patients and their families believed that unpleasant odors signified an unclean facility, whereas the odor of cleaning solvents signified that unpleasant odors were being covered up. As a general rule, ambient conditions affect the five senses. Sometimes such dimensions may be totally imperceptible (gases, chemicals, infrasound) yet have profound effects, particularly on employees who spend long hours in the environment.

The inanimate objects that assist the hospital in completing tasks such as layout, furniture, equipment, bathroom facilities and pictures are of importance as to how patients experience their hospital stay.

37 Ibid., p.328.
The third component signs, symbols, and artefacts are particularly important in forming first impressions and for communicating new service concept in the hospital. Many items in the physical environment of the hospital service as explicit or implicit signals that communicate about the place to its users. Signs displayed on the exterior and interior of a structure are examples of explicit communicators. They can be used as labels i.e., name of the hospital, name of the section and so on, for directional purpose i.e. entrances, exists and to communicate rules of behaviour like no smoking, do not use cell phones etc. Adequate signs have ever been shown to reduce perceived crowding and stress. Other environmental symbols and artifacts may communicate less directly than signs, giving implicit cues users about the meaning of the place and norms and expectations for behaviour in the place. Quality material used in construction, artwork, and display of awards, certificates won by doctors/hospital, eye pleasing photographs on walls, beautiful sceneries with meaningful and inspiring quotes and personal objects displayed in the environment can all communicate symbolic meanings and create an overall aesthetic impression.

The Effect of Physical Evidence in the Medical Setting

Hutton and Richardson\textsuperscript{38} found that the physical environment in a health care setting has a significant effect on customer satisfaction, perceived service quality, intention to re-patronize and willingness to recommend. The effect of the physical evidence in the medical setting is as follows:

1. Customer Satisfaction: Customers have a high regard for a pleasant physical environment and express the satisfaction easily as Reimer and Kuen\textsuperscript{39}, mention that the servicescape has a direct and indirect effect on perceived service quality and ultimately the satisfaction of the patient.

2. Perceived Service Quality: Physical evidence influences the customer's perception of the quality of service, Reimer and Kuehn are of the opinion that

patients staying longer in a facility, like a hospital, emphasise the servicescape more in their perception of quality service.

3. **Intention to patronise**: The customer can overlook a lot of quality issues if the physical environment is pleasing.

4. **Willingness to recommend**: Customers more readily recommend a physically pleasing environment to friends.40

5. **As a Communication Tool**: Physical evidence is particularly important as communication tool for hospital services which are dominated by experience attributes. Because services are intangible, customers often rely on physical evidence to evaluate the service before they purchase and to assess their satisfaction with the service during their pregnancy and after consumption.41

They mention the importance of the effective physical layout to close the gap between the expectations of the patients and their perceptions. Customers expect good service if the physical evidence is of high standard42 say that due to the intangibility of services, customers often have trouble evaluating service quality objectively. Therefore, they rely on physical evidence that surrounds the service to help them with their evaluation.

Lawson and Wells-Thorpe43 conducted a study about the experience and health outcome of mental health patients when they moved a new facility with enhanced physical evidence. The outcome of the research showed in the new facility with the enhance physical outcome, the patients were less aggressive and the length of stay was shorter.

Servicescape usage is potentially influence by the patients, their families and friends, the doctors and the employees. As the service in a hospital is of an interpersonal relationship in nature, the servicescape is very important, even for initial perception. The

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initial perception of hospital’s servicescape can influence the complete experience of the role players. Dorrian\textsuperscript{44} calls this one of the important moments of truth for the patients.

Presently, corporate strategists are giving much more attention to experiences that the customers perceive. They recognise that the physical evidence of the service will influence the flow of the experience. The meanings that the customers attach to it, their satisfaction, and their emotional connections with the company delivering the service are all important aspects.\textsuperscript{45} Ideas and concepts are also taken from environmental psychologists to perfect the physical evidence that the patients are experiencing.

**Physical Evidence Strategy**

Physical evidence management is crucial for success in service organisations, especially in case of hospitals. It has a powerful impact on employee and patients behaviour. Some of the guide lines for effective evidence management are:

1. **Recognise Importance**: Before one sets out to manage physical evidence strategically, it is important that first its significance is appreciated by the management. When such appreciation is missing, the hospital has the risk of managing physical evidence without a coherent strategy thereby missing on exploiting its potential strategically.

2. **Service Mapping**: The integration of physical evidence must be such that the potential benefits are realised to their maximum. The starting point at this stage could be to map the service process.

3. **Clarify Role**: The role of physical evidence must be understood considering the service provided. The hospital services are inter-personal in nature. Hence, the evidence strategy must pay attention to the requirements of both the parties.

4. **Flexibility**: The physical evidence or servicescape cannot be created to last forever. With the changing requirements of the patients, the servicescape needs to be changed. There should be openness to incorporate changes in servicescape as the need arises.

\textsuperscript{44} Op.cit., Ref.42.
Physical Evidence in the Sample Hospitals:

KGH Physical Evidence –I

KGH Physical Evidence –II

Patient ward

Operation Theatre

158
Patient ward

Physical Evidence in NRI Hospital:

NRI Hospital Physical Evidence-I

Operation Theatre
Diagnosis Equipment

Children Ward

161
KTH Physical Evidence-I

Patient ward

Operation Theatre

163
Except NRI hospital, in case of other two sample hospitals i.e., KGH and KTH are unable to create favourable physical evidence that contribute to the positive image over the hospital patient’s satisfaction. In case of NRI hospital, right from the reception onwards they are maintaining right environment to create a positive feeling in the minds of the patients and visitors. The interior decoration in NRI is very much eye pleasing and creates a sense of ‘feel good’. This hospital is also maintaining good ventilation, safe drinking water and sewerage. For uninterrupted power supply the hospitals has installed latest power generators and maintaining well. Transportation system and communication facilities are maintaining up to the level in the hospital. The NRI is rightly placing the awards and service certificates won by the doctors for building confidence in the minds of patients. On the whole, it is observed that NRI hospital is having good physical evidence mix compared to the other two sample hospitals.

**Process in Hospitals**

Hospital service production and delivery involves performing a process of operations besides utilising materials, equipments and personnel. The process by which the service is produced and delivered is critical to the success of service operations. **Service delivery is the outcome of the service process.** ‘Process’ is termed as ‘Interactive Marketing’ in services marketing. It is one of the important seven components of service marketing mix. Interactive marketing may be defined as the ‘managerial process through which a series of interactions between service provider and consumer are organised to facilitate efficient participation in service production and consumption that satisfies the needs and wants of the consumers and create positive- perceived quality.\(^{46}\)

Interactive marketing takes place between contact employee of the service hospital and service consumers. Through internal marketing, service hospitals prepare contact employees, physically and mentally, to perform the service. Consumers are also educated and trained to participate in service production and consumption through external marketing. The actual process of service production, delivery and consumption takes place simultaneously during the interactions of contact employees and consumers. The meeting between contact employee and service consumers is called ‘service encounter’.

The hospital service process involves services for inpatients and services for outpatients. The initial process in both types, however, commences with reporting at the reception counter at the appointed time and meeting the doctor concerned for diagnosis and treatment. If the doctor prescribes simple medication, then the patient can avail of the services as an outpatient. On the other hand, if the doctor says that the patient needs continuous medical care for treatment, then he will be admitted as inpatient. The service process in hospital for inpatients is spread over Registration, Admission, and Diagnostic, Operation Theatre, Intensive Care Unit, Emergency Units, Wards Dietary, Linen, Stores Medical Records and Security etc.

The patients interact with a variety of service variables while he is passing through the service package of hospital physical setting of service-outlet.

Physical Setting of the Service Outlet

Patients interact with the location, exterior of the service outlet, interior service layout and other elements of the physical environment.

Tangibles: The equipment, tools, furniture and so on.

Systems: The queue systems, process system, billing payment system, patient information recording system, communication system and so on.

Co-patients: The patients who are also seeking service from the hospital.

Contact Hospital Employees: The staff at the service counters for interaction with patients.

Other Staff on the Line of Visibility: The supporting staff that may not interact with patients directly but are visible to the patients.

Signage and Other Communication Material: Sign boards, directions, displayed rules and regulations, cautions and other material.

Other Facilities: Drinking water, toilets, ventilation, canteen facilities, and recreation facilities so on.

Difference in the service product is nothing but difference in service process. Goods are differentiated on the basis of their physical attributes while services are differentiated on the basis of the processes that comprise of them. The service process that creates the service experience may involve processing of people, information and
materials. Hence, three kinds of service processes can be distinguished as people processing, processing of information and material processing. All these kinds must be designed in the hospital's service process to offer the patient a satisfying experience.

The hospital process can be divided into three phases. This can be explained in the Fig. No. III.9.

**Fig No: III.9**
A Typical Process in a Hospital

- Joining Phase
- The Intensive Consumption Phase
- Detachment Phase
- Feedback

**The Joining Phase**

When the services are providing by the hospital, the patient begins with the joining phase. The three important activities in this phase are the arrival of the patient, registration and the direction to the next contact. At the arrival phase, the patient looks for parking place. He also interacts with the watchman or parking boy and seeks assistance. Easy identification of the entry points the ease of entry and courteous welcome influence the quality perception of the patient. During registration, easy identification of the registration counter, where a patient has to make an initial deposit at the in-patient billing counter after which a file is opened in the patient's name to know the patient's medical history, the speed of the recording process, the equipment used for recording, the employ and patient roles during recording, the instruments used, the courteous intention and empathy from the side of contact employee, the understanding of patient problems, the space, furniture and the layout at the registration counter. Finally, the directions to the next contact are the issues that influence the patient. At the entry level as well as during registration, patient
may need to wait for some time. How the wait line is organised and what facilities are provided for managing the waiting time also matter at this phase. Providing well furnished rooms, latest magazines, and entertainment facilities reduce waiting pressure.

The Intensive Consumption Phase

This phase includes diagnosis — where the consultant diagnoses the illness by making the patient's undergo various tests — treatment — when the illness is treated with proper medication or surgery etc. Information about the actions — the consultant will instruct the patient regarding the diet to be followed, the medication to be taken when to consult him again etc.

There are many factors that influence the effectiveness of the process at the stage. Documentation, queue system, time consumed, accuracy, transparency, easy flow, equipment used, performance of the equipment, piracy, flexibility and exceptions are some of the factors that influence the quality. At the end of the intensive consumption phase, the hospital personnel should try to get confirmation from the patient as to whether the service provided was as per his expectations or not. This is the next phase is called feedback.

The Detachment Phase

The detachment phase includes, discharge of the patient, a patient can be discharged from the hospital on the advice of the consultant. Payment after the patient is discharged, the bill will be paid at the billing counter.

Feedback

At the phase, the patient is required to fill an evaluation form, which helps the hospital authorities to know the level of satisfaction delivered by the patient. Patient's suggestions are always valued and considered and many times are very useful for improving the service of the hospital.

General process in the Three Selected Hospitals

Within the hospital, it can be observed that the activities of different departments are interrelated and interdependent. For example, purchase department serves the needs of stores and the billing department to finance department and etc, so in this way, each
department is a customer to another department, while at the same time it might be a supplier to another department. Each department is an “Internal customer” or the other department. This kind of customer-supplier relationship helps to provide an important system of checks and balances and makes the hospital more focused patient oriented. In order to increase the effectiveness of Interactive Marketing in the hospitals, some important measures are:

a) **Enhancing Patient Participation**: Hospitals need to identify the factors that influencing the patient lively participation in service production and consumption and thereby develop appropriate strategies. Some of such strategies are-identifying clearly the process where the patient participation is vital for service quality. For instance, patient’s participation at the level of diagnosis followed by treatment by taking medicines in time as prescribed by the doctor is important for service quality.

b) **Providing an Appropriate Patient Mix**: In hospital services delivery process, patients interact quite often with other patients. The status, culture and behaviour of the other patients will influence the level of participation of a patient significantly. The hospital should study the feelings and dispositions of various categories of patients and schedule the services, taking into consideration the compatibility of patient mix. In hospitals compatibility management is very important. According to Martin and Prant compatibility means “a process of first attracting homogeneous consumers to the service environment, their actively managing both the physical environment and customer-to-customer encounters in such a way as to enhance satisfying encounters and minimise dissatisfying encounters. In order to find the right registers, the hospitals offer consumer orientation programs to help patients understand the roles they are supposed to play and the kind of expectations they should have before experiencing the service. In addition to the above, the code of conduct for consumers training employees to observe consumer-to-consumer interactions and to be sensitive to potential conflicts will help in enhancing participation of consumers in the service process mix.
Thus, hospital services are process driven. The process generally forms different tasks that are to be performed by the hospital. The process factor is mainly dependent on the size of the hospital and kind of services it offers. Some processes tend to be visible while others take place behind the line of visibility. There are other allied activities like record keeping, administration, administration at services etc., which fall under the process factor. These stages do not exist separately but are interlinked. The most important elements are lines of communication within the set-up. The experience of the patient depends on the final interplay of all these factors.

Conclusion

Since the traditional 4 Ps of marketing mix becomes inadequate because of its distinctive characteristics, managing the hospital services and marketing requires competency in three additional areas namely people or participants, physical evidence and processes. Upon entering the hospital, the patient comes in contact with service personnel, processes and physical evidence. People element is critical in determining the perceived quality of services. People are service and they represent service organisation. Some of the issues in managing the people element in services include- the choice of right person for right job, employee training, selling jobs within and internal marketing.

Managing of physical evidence assumes importance because the customer comes in contact with the service system. It is in the form of service package, service facilitation and socialisation. For effective management of physical evidence one has to recognise the importance of evidence in the hospital settings, service mapping clarifying roles.

Hospital services are process driven. One way of looking into the processes is their visibility. Some processes tend to visible while others take place behind. The hospital service processes that create service experience may involve processing of people, information and material. All kinds of process must be designed to offer the patient a satisfying experience.