CHAPTER – I

INTRODUCTION

1.0 INTRODUCTION

The pharmaceutical industry in India is among the highly organized sectors. This industry plays an important role in promoting and sustaining development in the field of global medicine. Due to the presence of low cost manufacturing facilities, educated and skilled manpower and cheap labor force among others, the industry is set to scale new heights in the fields of production, development, manufacturing and research. Pharmaceutical manufacturing involves manufacturing of equipments and drugs in healthcare. Any drug development in pharmaceutical is an intensive and costly process. In the field of pharmaceutical, any drug producing company has a commercial license to research, develop, market and distribute drugs which are mostly concerned about healthcare.

India currently represents U.S. $6 billion of the $550 billion global pharmaceutical industry and its share is increasing at 10 percent a year, compared to 7 percent annual growth for the world market overall. Also, while the Indian sector represents just 8 percent of the global industry total by volume, putting it in fourth place worldwide, it accounts for 13 percent by value, and its drug exports have been growing 30 percent annually.

The “organized” sector of India's pharmaceutical industry consists of 250 to 300 companies, with the top 10 firms representing 37% of total Indian Pharmaceutical Market. However, the total sector is estimated at nearly 20,000 businesses, some of which are extremely small. Around 90 percent of India's demand for medicines is met by local manufacturing.
The Indian pharmaceutical market has achieved a tremendous growth and has showed further potential in terms of infrastructure, development and technology.

1.1 HEALTHCARE MANAGEMENT AND EXPENDITURE IN INDIA

The 1983 National Health Policy is committed to providing health services to all by 2000. In 1983, health care expenditures varied greatly among the states and union territories, from ₹ 13 per capita in Bihar to ₹ 60 per capita in Himachal Pradesh, and Indian per capita expenditure was low when compared with other Asian countries outside of South Asia.

Although government health care spending progressively grew throughout the 1980s, such spending as a percentage of the gross national product (GNP) remained fairly constant. In the meantime, health care spending as a share of total government spending decreased. During the same period, private-sector spending on health care was about 1.5 times as much as government spending.
In the mid-1990s, health spending amounted to 6% of GDP (Gross Domestic Products), one of the highest levels among developing nations. The established per capita spending is around ₹ 32000 per year with the major input from private households (75%). State governments contribute 15.2%, the central government 5.2%, third-party insurance and employers 3.3%, and municipal government and foreign donors about 1.3 %, according to a 1995 World Bank study. Of these proportions, 58.7% goes toward primary health care and 38.8% is spent on secondary and tertiary inpatient care. The rest goes for no service costs.
The expenditure on healthcare will be more than double by 2012 and the healthcare spending is expected to increase from ₹ 86,000 crore (₹ 860 billion) in 2002 to ₹ 1,94,000- ₹ 2,70,000 crore (₹ 1,940- ₹ 2,700 billion) over the next ten years, according to a CII-Mckinsey (Confederation of Indian Industry-Mckinsey) study on healthcare in 2002.

**Graph 1 : Criticality of Affordability of Medicines in India**

![Graph showing distribution of expenditure on treatment](image)

**Source:** National Pharmaceutical Pricing Authority

Initially much care was not taken in relation to healthcare and pharmaceutical products. This was due to less number of pharmaceutical companies, lack of capital, and low income group of the major portion of the population. Accordingly it was felt essential to look forward for better healthcare management and allocation of funds. The graph below shows the impact of healthcare sector evident with households spending 11% more on
medical care compared to 1996. During the period of the study this percentage has gone up still higher because of increased economical status and health awareness.

Table 1: Percentage growth in household expenditure on various items (1996-2006)

<table>
<thead>
<tr>
<th>Type of expenditure</th>
<th>Aggregate</th>
<th>Medical care</th>
<th>Restaurants/hotels</th>
<th>Education</th>
<th>Appliances</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Growth</td>
<td>4.5</td>
<td>11</td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Fig. 2: Impact on the Healthcare Sector

Impact on the Healthcare sector evident with households spending 11% more on medical care compared to 1996

- Household consumption expenditure has moved up in line with the economic growth and expansion
- Although there is a shift in spending from essential items (food, clothing, electricity) to less essential (durable goods)
- Urban disposable income is moving up the ladder: Partly attributed to more and more women joining the corporate world, leading to a phenomenal increase in double-income families.

Source: National Council for Applied Economic Research (NCAER)

The fifth and sixth five-year plans (FY 1974-78 and FY 1980-84, respectively) included programs to assist delivery of preventive medicine and improve the
health status of the rural population. Supplemental nutrition programs and increasing the supply of safe drinking water were high priorities. The sixth plan aimed at training more community health workers and increasing efforts to control communicable diseases. There were also efforts to improve regional imbalances in the distribution of health care resources. Even in the present day context the same trend is predicted.

**Primary Health Services and Medical Education in India**

Health care facilities and population increased substantially between the early 1950s and early 1980s, but because of fast population growth, the number of licensed medical practitioners had fallen from the 1981 level of four per 10,000 to three per 10,000 by the late 1980s. In 1991 there were approximately ten hospital beds per 10,000 individuals.

In India, Primary Health Centers (PHCs) are the cornerstone of rural healthcare. Each PHC is targeted to cover a population of approximately 25,000 and is charged with providing preventive, curative and rehabilitative care. This implies, offering a wide range of services such as health education, promotion of nutrition, basic sanitation, the provision of mother and child family welfare services, immunization, disease control and appropriate treatment for illness and injury. The PHCs are hubs for 5-6 sub-centers that cover 3-4 villages and are operated by an ANM (Auxiliary Nurse Midwife). These facilities are a part of the three tier healthcare system; the PHCs act as referral centers for the Community Health Centers (CHCs), 30-bed hospitals and higher order public hospitals at the taluka and district levels. The Pyramid of the Health Services in India has district hospitals at its peak, followed by rural hospitals at tahsil and the P.H.C. (Primary Health Centers), Auxiliary Nurse Midwife in villages. Accordingly the need of the hospitals and the pharmaceutical products is consistently increasing. The following can be
stated to be the scope of development under the Ministry of Health and Family Welfare. The state wise data explains that the thickly populated state like UP has less number of hospitals as compared to Kerala. This also shows the uneven distribution of medical and pharmaceutical facilities.

The fast pace of development of the private medical sector and the burgeoning middle class in the 1990s; have led to the emergence of the new concept in India of establishing hospitals and health care facilities on a for-profit basis.

Indigenous or traditional medical practitioners continue to practice throughout the country. The two main forms of traditional medicine practiced are the ayurvedic system, which deals with mental and spiritual as well as physical well-being, and the Unani (or Galenic) herbal medical practice. A Vaidya is a practitioner of the ayurvedic tradition, and a Hakim (Arabic for a Muslim physician) is a practitioner of the Unani tradition. These professions were frequently hereditary. A variety of institutions offer training in indigenous medical practice. In the early 1990s, there were ninety-eight ayurvedic colleges and seventeen Unani colleges operating in both the governmental and non-governmental sectors.

With the increase in medical institutions in India, the pharmaceutical marketing has ample scope for the marketing its products. Especially in the changing economical environment and introduction of new science and technology, the pharmaceutical marketing is becoming more critical. The new medical professionals will look in a more scientific approach; accordingly, the pharmaceutical business has to play the significant role in this area. Following table shows the number of medical colleges, state wise in India, in 2008.
## Table 2: Number of Medical Colleges in India (state wise)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the State/UT</th>
<th>Number of Medical Colleges</th>
<th>Total number of Medical colleges</th>
<th>Total number of MBBS seats</th>
<th>Total number of PG seats</th>
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<tr>
<td></td>
<td>Govt.</td>
<td>Private</td>
<td>32</td>
<td>4225</td>
<td>925</td>
</tr>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>11</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Assam</td>
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<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bihar</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Chandigarh</td>
<td>1 + (PG 1)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Chhattisgarh</td>
<td>3</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Delhi</td>
<td>5</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Goa</td>
<td>1</td>
<td>-</td>
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<tr>
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<td>Gujarat</td>
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<td></td>
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<td>Manipur</td>
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<td>18</td>
<td>Orissa</td>
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<td>19</td>
<td>Pondicherry</td>
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<td>Rajasthan</td>
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<tr>
<td>22</td>
<td>Sikkim</td>
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<td>-</td>
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<td>23</td>
<td>Tamil Nadu</td>
<td>15</td>
<td>10</td>
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<td>25</td>
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<tr>
<td>26</td>
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<tr>
<td>27</td>
<td>West Bengal</td>
<td>9</td>
<td>-</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td>138</td>
<td>133</td>
<td>271</td>
<td>31172</td>
<td>11005</td>
</tr>
</tbody>
</table>

1.2 INDIAN PHARMACEUTICAL INDUSTRY AT A GLANCE

The Indian Pharmaceutical Industry today is in the front rank of India’s science-based industries with wide ranging capabilities in the complex field of drug manufacture and technology. It ranks very high in the third world, in terms of technology, quality and range of medicines manufactured. From simple headache pills to sophisticated antibiotics and complex cardiac compounds, almost every type of medicine is now made indigenously.

It is an extremely fragmented industry with severe price competition and government price control.

The pharmaceutical industry in India has been largely driven by regulatory forces - the DPCO (Drug Price Control Order), which regulated the prices of bulk drugs, and formulations and the Indian Patent Act, which granted process patent to bulk drugs in the past and product patent form Jan. 2005 onwards.

These regulations have resulted in the growth of the indigenous pharmaceutical industry, increased availability of bulk drugs at prices lower than those prevailing in other markets, high level of competition in the domestic market, and the emergence of the India as a key exporter of bulk drugs in the world market during the period 1970-1990.

In 1995, the Indian government as a member of the WTO (World Trade Organization) agreed to adhere to the product patent regime by 2005.

As part of Trade Related Intellectual Property Rights (TRIPS) the Pharmaceutical Industry will have the right to patent products as well as
processes throughout the world including India. The central theme of Trade Related Aspects of Intellectual Property Rights (TRIPS) is to ensure that the innovator's rights are protected.

Being a member of GATT/TRIPS (General Agreement on Tariffs and Trade/Trade Related Intellectual Property Rights), India is also now having a process and product patents that will be consistent with the patent laws prevailing in the most developed countries.

With the expectation of a product patent regime, the parent companies of a number of multinationals have begun the process of increasing their stake in Indian operations. Multinationals started increasing the pace of new product launch and aggressively building market share by expanding their field force.

Similarly, in order to increase their presence in domestic and international markets, Indian producers also started following a number of strategies, such as, setting up manufacturing and marketing joint ventures overseas, building world class facilities for bulk drug production, entering into alliances with multinationals to launch new drugs and conducting clinical trials in India to enable multinationals to reduce development costs of new drugs.

1.3 THE SWOT ANALYSIS OF THE PHARMACEUTICAL INDUSTRY

It reveals the position of the Indian pharmaceutical industry in respect to its internal and external environment.
Strengths

- Indian manufacturers are one of the lowest cost producers of drugs in the world. With a scalable labor force, Indian manufactures can produce drugs at 40% to 50% of the cost to the rest of the world.

- Indian pharmaceutical industry possesses excellent chemistry and process reengineering skills. This adds to the competitive advantage of the Indian companies. The strength in chemistry skill helps Indian companies to develop processes, which are cost effective.

- The growth of middle class in the country has resulted in fast changing lifestyles in urban and to some extent rural centers. This opens a huge market for lifestyle drugs.

- Today Indian pharmaceutical industry is cluttered with close to 20,000 pharmaceutical companies. This is quite high as compared to the number of companies in any other country. Out of these 20,000 companies around 250 to 300 are in organized sector, some 7,000 to 8,000 are in small scale sector whereas others are in unorganized sector.

- There are around 80,000 to 1,00,000 brands for different formulations available in the Indian market, which is mammoth.

Following table shows the growth drivers of domestic pharmaceutical industry which are broadly various factors like
demographic, epidemiological, macroeconomic, penetration and innovation factors-

**Fig. 3: Domestic Pharmaceutical Industry**

Strong Fundamental Drivers of growth which leads us to hold promise for the future ... to become $30 Bio by 2020

**Weaknesses**

- The Indian pharmaceutical companies are governed by the price regulation. Over a period of time, this regulation has reduced the pricing ability of companies. The NPPA (National Pharmaceutical Pricing Authority), which is the authority to
decide the various pricing parameters, sets prices of different drugs, which may lead to lower profitability for the pharmaceutical companies. The companies, which are lowest cost producers, are at advantage while those who cannot produce have either to stop production or bear losses.

- India with a population of over a billion is a largely untapped market. In fact the penetration of modern medicine is less than 30% in India. To put things in perspective, per capita expenditure on health care in India is US$ 93 while the same for countries like Brazil is US$ 453 and Malaysia US$189.

- Till January 2005, Indian pharmaceutical sector was marred by lack of product patent, which prevented on one hand, global pharmaceutical companies to introduce new drugs in the country and on the other hand discouraged indigenous innovation and drug discovery. However, this had provided an upper hand to the Indian pharmaceutical companies.

- Indian pharmaceutical market is one of the least penetrated in the world. However, growth has been slow to come by. As a result, Indian majors are now relying on exports for growth. To put things in to perspective, India accounts for almost 16% of the world population while the total size of industry is just 1% of the global pharmaceutical industry.

Following diagram shows the disease burden in India, which is high whereas our investment in healthcare is bare minimum-
Share of Indian pharmaceutical industry is estimated to be as low as 1-2% in the world pharmaceutical market. The Indian pharmaceutical industry ranks 4th in terms of volume and 14th in terms of value in the global pharmaceutical industry.

The amount spent on research and development by Indian pharmaceutical companies was roughly around 2% a few years back which has now increased in recent years, due to adoption of product patents from 2005 onwards. Now R and D expenditure is approximately 4 – 6%
Due to very low barriers to entry, Indian pharmaceutical industry is highly cluttered with most of the local pharmaceutical manufacturers.

**Opportunities**

The migration into a product patent based regime since Jan.2005 is likely to transform industry fortunes in the long term. The new product patent regime will bring with it, new innovative drugs. This will force domestic pharmaceutical companies to focus more on R&D. This migration could result in consolidation as well. Very small players may not be able to cope up with the challenging environment and may succumb to giants.

Large number of drugs going off-patent in Europe and in the US between 2005 to 2009 offers a big opportunity for the Indian companies to capture this market. Since generic drugs are commodities by nature, Indian producers have the competitive advantage, as they are the lowest cost producers of drugs in the world.

Opening up of health insurance sector, growing medical tourism industry and the expected growth in per capita income are key growth drivers from a long-term perspective. This leads to the expansion of healthcare industry of which pharmaceutical industry is an integral part.
Fig. 5: Indian Healthcare Industry

GDP and interplay of allied factors would help in pushing market to a new level

- Being the lowest cost producer combined with FDA approved plants; Indian companies can become a global outsourcing hub for pharmaceutical products.

- There is a much scope for development of pharmaceutical marketing as Health awareness due to various campaigns run by the Government and NGO’s (Non-governmental organizations) are in vogue. Pharmaceutical marketing should be looked from the business as well as social responsibility point of view.

Source: ORG – IMS
The income group is increasing this has created the demand for healthcare products. The purchasing power of the common man is consistently increasing which demands better quality products from Pharmaceutical industry.

**Threats**

- Threats from other low cost countries like China and Israel exist. However, on the quality front, India is better placed relative to China. So, differentiation in the contract manufacturing side may wane.
- The short-term threat for the pharmaceutical industry is the uncertainty regarding the implementation of VAT (Value Added Tax). Though this is likely to have a negative impact in the short-term, the implications over the long-term are positive for the industry.

The industry has since come a long way and is regarded as one of the robust industries supplying medicines at affordable price. In light of this “SWOT” discussion, the role of the sales personnel becomes more critical and hence it has been decided by the Researcher to study such a role in detail under the proposed study.

### 1.4 NATURE OF PHARMACEUTICAL BUSINESS

The drug industry, the medical profession and the patient have a unique relationship. The industry makes product which it cannot sell to the patient (consumer) directly. On the other hand, the medical profession cannot treat the patient without drugs produced by the industry. Thus the
industry and medical profession are interdependent with a common aim. The primary objective of this joint effort is to alleviate pain and suffering. It must make reasonable profits to help in the research of newer drugs.

Role of advertisement in Pharmaceutical marketing is controlled in nature as compared to other industries viz. Consumer, Consumer durables and Service industry. The word 'advertise' is derived from the Latin word 'advertere' which means 'to turn towards'. Advertising is generally regarded as a legitimate means of fostering the competition that drives a free market economic system. The moral justification is that consumers benefit. Businesses that satisfy consumers will prosper at the expense of those that do not. Drug advertisements which include product information are circulated thru medical representatives to health professionals through visual aids, journals, leave behind literatures and the mail. Persuasive advertising highlights the product's beneficiary properties. The market of the pharmaceutical products largely depends on how the pharmaceutical sales personnel can function or work. In light of this statement it becomes necessary to influence the working of the personnel.

The pharmaceutical marketing has lot of hindrances and barriers in deciding the sales territories; selection and recruitment procedures of the sales personnel should be scientific and qualitative. The pharmaceutical business has to work on two lines-

a) Ethics of the business and
b) Sales promotion of the business organization.

In light of this, nature of pharmaceutical business has to work for betterment of the society.
The marketing and sales of the pharmaceutical products is carried out by means of the marketing organization comprising Head of Marketing and Sales or Vice-president (Mktg.), General Manager (Mktg.), National Sales Manager, Product Management Team in Head office and Medical Representatives, field managers in the field. At each of this level, how the marketing strategies can be drafted in order to achieve the set sales targets is the prime concern area. Hence it is proposed to analyze in the study how to promote, educate and train the sales personnel so as to achieve, the desired result.

**Fig. 6 : Organogram of Marketing and Sales Department**

```
Managing Director
    ↓
Chief Executive Officer
    ↓
Director (Marketing and Sales)
    ↓
General Manager (Marketing and Sales)
```

<table>
<thead>
<tr>
<th>Sales</th>
<th>Product Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Sales Manager</td>
<td>Group Product Managers</td>
</tr>
<tr>
<td>Zonal Sales Managers</td>
<td>Product Managers</td>
</tr>
<tr>
<td>Area Managers</td>
<td>Product Executives</td>
</tr>
<tr>
<td>Medical Representatives</td>
<td></td>
</tr>
</tbody>
</table>

19
Marketing is an exciting dimension of human activity; all organizations are involved in marketing. The core of marketing is increasing the consumption of marketed products and services.

Pharmaceutical marketers offer samples, gifts, services to doctors to get prescriptions for their products.

Marketing is the value delivery process of companies or organizations. The objective of marketers is lifestyle change, increasing the customer base, ensure customer retention, and finally increased throughput from customers.

Marketing is improving market penetration, Marketing begins by visualizing the target market based on demographics and other market characteristics and titrating the product or service to the market.

Pharmaceutical marketers go geography by geography and target doctor segment by doctor segment. The idea of all marketers is to develop a huge market base for the product or service, and build habits.

Following are some of the dimensions, strategies, and tools of marketing:

**Essentiality of Sales Management for Customer Conversion**

For pharmaceutical companies the day of the medical representative starts and ends with customer conversion or doctor conversion. Customer conversion is the fundamental premise on which all pharmaceutical marketing activities are pegged on. Right from the highest authority in pharmaceutical marketing, to the MR, all activities are directed towards higher and higher customer conversions. Reams of market research data are analyzed to map
market characteristics, prescribing habits, Practice density, market receptivity, and pharmaceutical purchase patterns and so on. This is done to ultimately convert the doctor. Target audiences are identified, behavioral patterns analyzed, and their needs, wants, and desires are understood.

Value is something that is perceived by the prospect or customer. A doctor may find price advantage to patient to be of value; or a doctor may value a service input from a pharmaceutical company such as a sponsorship to a Continuous Medical Education (CME) program or a medical grant for conducting a free medical camp, and thereby a doctor will reward the company with prescriptions.

Value may also be in the form of regular visits, friendliness, and positive strokes from a medical representative - here the relationship is valuable to the doctor, value may come from intangibles or tangibles. Value can come from material things for the personal use of a doctor or for his clinical use. Ultimately there is an exchange process here, value from the company is transferred to the doctor, and the doctor rewards the company with prescriptions.

The ultimate pharmaceutical marketer sells hope to the doctor: a hope that the marketed products will satisfy the patient and will indirectly improve his or her practice, a hope that an association with the pharmaceutical company will empower the doctor and make the doctor upwardly mobile, and he can improve his status, personal life, quality of clinical services to his patients, personal material comforts and so on.

These may ultimately improve the physical, material and intellectual quality of life, educational attainments, moral and cultural fiber.
Among pharmaceutical marketers, competition is on value delivery. Better the value - more the customer delight.

It is the prescription generation for the pharmaceutical products which decides the value and volumes of pharmaceutical market. With this View, a survey was conducted in Mumbai region to find out the factors affecting the decision of doctors while prescribing a product:

**Sample Size**

100 Doctors have been chosen from different places. 10 doctors each from South Mumbai, Bandra, Borivali, Virar, Thane, Dombivli, Kalyan, Karjat, Panvel, Alibaug.

**Result and Discussion**

1) **Factors influencing prescription behavior of Doctors**

   After doing a pilot survey of doctors, major factors influencing their peer prescription behavior were found. Then respondents were asked to give marks out of 10 to each factor as per importance. Average marks were then calculated to find out important factors influencing prescription behavior.

2) **Most Important Factors**

   Following Table 3 indicates that Doctors are quality, price and availability conscious persons. Quality of medicines is most important for doctors, as it is not only helps curing the disease but also helps in building their reputation. Doctors on the basis of company image and consistent results with a product, judge the quality of products. So company image is
also on high priority in their mind while prescribing medicines along with Regular Visit of Medical Representative.

**Table 3: Factors determining the doctor’s preference**

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<thead>
<tr>
<th>Rank</th>
<th>Factors</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Product Quality</td>
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<tr>
<td>2.</td>
<td>Availability</td>
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<tr>
<td>3.</td>
<td>Price of Product</td>
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<td>4.</td>
<td>Regular Visit of Medical Representative</td>
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<td>5.</td>
<td>Company Image</td>
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<tr>
<td>6.</td>
<td>Research Molecule</td>
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<td>Literature/Updates/Journals</td>
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<td>8.</td>
<td>Personality of Medical Representative</td>
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<td>Sponsorship for conferences</td>
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<td>16.</td>
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</tbody>
</table>

Except for Alibaug, Panvel, Karjat, Virar, Purchasing power of patients in other area was not a concern area. Availability of products especially newly
launched drugs is questionable in doctor’s minds so physicians before prescribing a new drug either wait for sometime or check at near by chemist counters.

**Other Important Factors**

A regular visit by a smart, dedicated, well groom medical representative having soft skills is the best tool of promotion for a pharmaceutical company. Presenting good quality literature, journals and sponsorship for conferences or personal tours are preferable promotional tools in comparison to organization of free camps, personal small value gifts, samples.

**Factors which help in Brand Recalling**

Doctors have to remember many brands of different companies. After doing a pilot survey, the researcher short-listed five factors that help them in recalling brand names while prescribing. Doctors were asked to rank the factors in order of importance that help in brand recall.
Table 4: Doctor’s Preference for Short Brand Names

<table>
<thead>
<tr>
<th>Rank</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name related to Molecule/Disease/Organization</td>
</tr>
<tr>
<td>2.</td>
<td>Short and easy to remember/pronounce Brand Names</td>
</tr>
<tr>
<td>3.</td>
<td>Table top/in chamber reminders</td>
</tr>
<tr>
<td>4.</td>
<td>Constant reminder (Calls, mailers etc.)</td>
</tr>
</tbody>
</table>

Above table clearly shows that physicians prefer short brand names related to molecule or indication or organization.

Brand Shifting

Doctors were asked whether they shift from one brand to another brand in same therapeutic category:

- **Yes** 88%
- **No** 12%

Most of the Doctors shift from one brand to another brand in same therapeutic category due to one or the other reason.
Reason for shifting from one brand to another in same therapeutic category:

After doing a pilot survey, the researcher short-listed five reasons that lead to brand shifting. Doctors were asked to rank these reasons in order of importance-

**Table 5 : Reasons for Shifting from One Brand to Another**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Price</td>
</tr>
<tr>
<td>2.</td>
<td>Introduction of Newer Molecule</td>
</tr>
<tr>
<td>3.</td>
<td>Persistence of the Medical Representative</td>
</tr>
<tr>
<td>4.</td>
<td>Promotional effort of the company</td>
</tr>
<tr>
<td>5.</td>
<td>Trial of a new brand.</td>
</tr>
</tbody>
</table>

Table 5 depicts that a sharp drop in price by the competitor brand is the most important reason for a doctor to shift their prescription to the competitor brand. Physician also gives a trial to a new research molecule launched in the same therapeutic category. Regular visits and regular demand by medical representatives supplemented by promotional efforts of company also influence doctors.

**Relationship Marketing**

Many pharmaceutical companies have developed doctors’ database of their birth dates and anniversary dates. These companies greet their key
customers and present them with gifts to build long term relations. Physicians were asked whether such activities like greeting on birthdays, Anniversary etc. influence them to prescribe products of a particular company.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>42%</td>
<td>58%</td>
</tr>
</tbody>
</table>

58% of the doctors believe that such activities do not influence them to prescribe products of a particular company. Some doctors may consider it as an invasion of their privacy.

**Medium of Information and Communication**

Doctors were asked whether they use the Internet to know more details about products, new drugs, their efficacy and side effects.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>55%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Then Doctors were asked whether they are in favour of promoting medicines through Internet and mailers instead of Medical Representative.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>04%</td>
<td>96%</td>
</tr>
</tbody>
</table>

Doctors have accepted the Internet as mode of information providing but they have not accepted it as a medium of communication and promotion of medicines. A Medical representative is still considered by huge majority as a better medium of communication and promotion by physicians. The
researcher is of the opinion that medical representatives provide human touch and more personalized service to physicians.

**Sources of Information**

After doing the pilot survey, five sources of information for updating knowledge by doctors were short-listed. Physicians were requested to rank these sources in order of preference to update their knowledge.

**Table 6: Sources of Information**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Conferences and Continuous Medical Education Programmes</td>
</tr>
<tr>
<td>2.</td>
<td>Medical Representative</td>
</tr>
<tr>
<td>3.</td>
<td>Journals and Conferences</td>
</tr>
<tr>
<td>4.</td>
<td>Mailers from Pharmaceutical Companies</td>
</tr>
<tr>
<td>5.</td>
<td>Internet</td>
</tr>
</tbody>
</table>

Scientific conferences and continuous medical education programmes by reputed medical bodies or associations are considered to be best source of information.
Bonding with customers and CRM (Customer-Relationship-Management)

From gaining a real time market intelligence that aids strategy to building strong customer relationships, CRM plays a major role in shaping the pharmaceutical business in India.

Need for a Customer-Relationship-Management (CRM)

The pharmaceutical industry is changing rapidly. Specifically within the pharmaceutical industry, the era of blockbuster drugs is low, with product launches dropping and lots of drug patents expiring. The results are increased competition and margins trending down. This combined effect puts tremendous pressure on sales and marketing teams to drive revenue growth.

Pharmaceutical medical representatives get very limited time of doctors and physicians to make every interaction count. This is the only time, they get to interact with, and influence them. As with other industries, sales representatives act as the backbone for the Indian pharmaceutical sector, driving the huge business of drugs and therapies.

Marketing activities in the fields of pharmaceutical and healthcare, involve gifting, merchandizing, branding and other freebies; distribution of literatures, flyers, visual aids, and other marketing communication tools are done to strengthen the central message.

Training of the field force in pharmaceutical marketing is vital and required to successfully influence the target market segments. Training
ensures better body language, vocalization, verbalization, pronunciation, confidence, and eye contact. Thereby, the objectives of the pharmaceutical organization are realized.

The trick for successful marketing is ensuring positive word-of-mouth, support from opinion builders in society and conformity pressure in the target prospect group to achieve the desired objectives of the marketer.

Doctor will make a prescribing choice based on parameters such as friendliness of MR, service inputs from the marketer, safety, efficacy, quality, supply and availability of the medicines and other parameters of marketing communication activity.

1.5 COMPETITIVE MARKET AND MARKETING PROCESS

Marketing 'warfare' in the pharmaceutical market place cannot be wished away. Because in the process of marketing, there are various aspects relating to revenue flow and asset creation. The stakes are very high. A pharmaceutical product's success will be measured by its market share, ROI (Return on Investment), profits generated, and number of units sold. And all these quantitative parameters will matter a lot - because everyone has a higher authority to which he has to justify. Even the highest authority will have a board of directors or some powerful individuals/financiers, share holders to justify to and offer explanations.
Importance of Pharmaceutical marketing and Role of Sales Personnel

The importance of marketing is such that today marketing is no more a departmental function, it is an organizational process and applicable to all kind of organizations. In marketing of pharmaceutical, everyone is involved - from the highest authority to the receptionist.

Management science and marketing science are all the more important in the 21st century for organizations. Marketing is a sophisticated form of warfare. It involves communication, media management, positioning, promotion, influencing, and value delivery.

Marketing is vital for the nation's health and wealth. Without competition and marketing, market penetration of products and services will suffer. Healthy marketing competition is a must to ensure efficiency and effectiveness.

The main promotional thrust of the pharmaceutical industry is through its medical representatives. Medical Representatives profoundly affect the way a doctor prescribes. Their bottom line of detailing is "Please prescribe my drug". They are invariably polite and reasonably knowledgeable. Before meeting a doctor they study the doctor's prescribing habits on the basis of information gathered from local nearby chemists and a preview of patients' prescriptions. They also get to know something about the doctor's likes and hobbies, family life and social interests and generally cultivate them.

Some medical representatives categorize doctors according to whether they are 'conservative' or 'risk takers. Conservative doctors will not try out a
new product unless it has proven itself. Risk takers are willing to try out new products; reps will try and obtain a commitment to use new products on a few patients. Conservatives will start using new products only when used by opinion formers or local consultants, also called 'educationally influential physicians', hospital consultants in major hospitals whose prescriptions are imitated by other practitioners.

As the major source of information to a majority of doctors and pharmaceutical medical representatives have a role in helping practitioners to know about the drugs available in the market and their costs. It is the practitioner's duty to use drugs while taking care not to be unduly influenced by their sales speech. Give aways, Gifts, given under the sales promotion may be personal when given to an individual or impersonal when given for a cause. A donation to the AIDS (Acquired Immune Deficiency Syndrome) fund of the hospital may be impersonal; a donation to the hospital director is personal.

**Marketing Process**

While many pharmaceutical companies have successfully deployed a plethora of strategies to target the various customer types, recent business and customer trends are creating new challenges and opportunities for increasing profitability. In the pharmaceutical and healthcare industries, a complex web of decision-makers determines the nature of the prescription for which direct customer (doctor) of pharmaceutical industry is responsible. Essentially, the end-user (patient) consumes a product and pays the cost. Use of medical representatives for marketing products to doctors and to exert some influence over others in the hierarchy of decision makers has been a time-tested tradition.
Typically, sales force expense comprises an estimated 15 percent to 20 percent of annual product revenues, the largest line item on the balance sheet. Pharmaceutical marketing is a specialized field where medical representatives form the backbone of entire marketing effort. Pharmaceutical companies also appoint medical representatives and assign them defined territories. Medical representatives meet doctors, chemists and stockiest as per company norms. Medical representatives try to influence prescription pattern of doctors in favor of their brands. The pharmaceutical distribution channel is indirect with usually three channel members i.e. depot / C & F, stockiest and chemist. Pharmaceutical companies appoint one company depot or C & F agent usually in each state and authorized stockiest(s) in each district across the country. Company depot/ C & F sends stocks to authorized stockiest as per the requirement. Retail chemists buy medicines on daily or weekly basis from authorized stockiest as per demand. Patients visit chemists for buying medicines either prescribed by a doctor or advertised in the media. Here patient is end customer and doctor is direct customer for any pharmaceutical company. But for doctor, patient is more important so he wants an effective supply chain management from prescribed company. And for pharmaceutical companies their customer that is doctor is more important that's why they emphasize more on supply chain management. Ultimately end consumer is benefited out of this. For marketing of pharmaceutical products, companies require more and more skilled field force to develop good rapport with their direct customers (doctors). Moreover field force should have good product knowledge and USP (Unique Selling Points) of their products over other so as to convince doctors and PULL the demand for their products i.e. from Doctor to Retailer to Stockiest to C & FA (Clearing and Forwarding Agents) to company.
1.6 SALES PROMOTION AND PHARMACEUTICAL MARKETING

Sales promotion and Advertisement are basically the two important features used to promote the sale of the product. But they differ in their ways. Advertising Over The Counter products (OTC products) on one hand, is the form of mass media communication directed towards influencing the end consumers. Whereas sales promotion, on the other hand deals with the mass communication directly towards informing and influencing the customers i.e. doctors and channel partners of distribution. Both the sales promotion and advertisement help in product promotion; they enable a firm to face the competition in the market for its survival. They promote the brand and also are useful in the launch and introduction of new products. They lead to increase in production, which in turn reduces the overhead expenses. Hence it helps in bringing down the selling price. But, they also have certain disadvantages as its very costly method of product promotion.

Thus it can be concluded from the following study, that pharmaceutical marketing is to be done with a lot of restrictions, as it is a scientific marketing and should be implemented as per the guidelines of FDA (Food and Drugs Administration authority) and DCGI (Drug Controller of Government of India), the products should not be misrepresented to the consumer, which may seriously harm them.

Sales Promotion

To some advertising includes all forms of mass media communication directed towards influencing the end consumer. Sales promotion on the other hand, includes the forms of the mass communication directed towards informing and influencing the customers like doctors and channel partners
e.g. stockiest, distributors, retailers etc. The term sales promotion cannot be taken to mean what is commonly does. Sales promotion is only a part of the promotion. Basically promotion is an "exercise in information, persuasion and influence". Promotion has come to mean the overall coordination of advertising, selling, publicity and public relations. Promotion is helping function, designed to make all other marketing activities more effective and efficient. It is concerned with the dissemination of information to wholesalers, retailers, customers (both actual and potential) and to the salesman.

**Advertising**

The purpose of advertising OTC pharmaceutical products is no different from that of advertising any other product-namely, to produce an awareness that will favorably motivate the customer to utilize (or prescribe) your product. The major differences lie in the restrictions placed upon ethical pharmaceutical advertising by the availability of suitable advertising media and government regulation on both the federal and state levels.

Compared to other consumer use products, advertising in the ethical pharmaceutical market is extremely restricted. By definition, the ethical pharmaceutical market “prohibits” communication directly with the consumer. Mass advertising media, such as television, radio and national magazines, as well as local mass advertising media such as newspapers and hoardings are not utilized unlike for over the counter products.

The traditional pharmaceutical advertising media for exposing a product message are - professional/scientific journals, magazines, direct mail to doctors, hospital displays and service items such as educational films, medical illustrations, textbooks etc. In recent years an attempt has been
made to utilize other advertising media, such as TV/Radio for sponsoring Interview with doctors on different important scientific topics like diabetes, hypertension, cancer, Tuberculosis etc.

The distinction between the responsibilities of the advertising department and sales promotion department can best be described by their different methods of communicating the selling message. The advertising department primarily employs written or visual messages, while the sales promotion department primarily relies upon the use of sales personnel in personal, primarily oral presentations. (Source: Advertising by Max A. Ferm and Mickey C. Smith, Principles of Pharmaceutical Marketing)

Advertising is not only merely propaganda but it is a paid form of communication. The advertisers have to pay for the space and time used to communicate the message to his customers/consumers. A basic responsibility of a marketing manager is to ensure that the company's message reach its potential customers/consumers.

**Objectives of Advertisement**

- To create a demand for products by explaining it's utility for OTC (Over the Counter) products
- To announce a new OTC product or service
- To increase its sales by attracting new customers
- To create OTC brand preferences
- To expand the market for new buyers
- To assist the salesmen in their selling efforts
- To warn the public against imitation of the product of the firm
- To prepare ground for new products
- To make special offers through sales promotion
To neutralize competitors advertising
To enhance goodwill of the firm

Objective of any advertising is to communicate about the product and services to the prospective customers. Its long-term objective is to generate profit to firm. General objectives of advertising are to inform the customers about the attributes and uses of the product.

The advertisement of pharmaceutical products should be truthful. There should not be any wrong statement regarding its contents and their percentage. It should provide full details regarding the action and uses, proprietary name as well as the generic name, dosage form, mode of administration, side effects, treatment of toxic effects, precautions and contraindications. W.H.O (World Health Organization) has passed this resolution regarding advertising of the pharmaceutical products.

The majority of pharmaceutical products and their direct advertisement are prohibited according to the Drugs and Magic Remedies (objectionable advertisements) act, 1954. However, general/home remedies, OTC (Over the Counter) products, such as, pain balm, inhalers, antiseptic creams etc., which do not require any prescription for their purchase, can be advertised by any of the direct methods of advertisement. Except OTC products, a consumer (patient) should not use a medicine without proper prescription of a physician.

Television is the latest and the fastest growing medium of advertising especially for OTC products. It is very effective medium because it appeals to both the eye and ear. The product can be demonstrated and explained on the television. However, it is very costly method of advertising. Radio advertising
is becoming more popular these days and the advertisements are generally transmitted through commercial services of All India radio. Radio advertisements carry an effective appeal as they reach out to all sections of society. People can listen to them even when they are busy with other activities. The big pharmaceutical companies are creating goodwill amongst the customers by generally sponsoring health related programs (e.g. Hallo Doctor on Sahyadri channel) on TV and radio to popularize themselves and also as a part of social responsibility by educating consumers.

**Personal Contact or Detailing**

It is a process of sales promotion by personally meeting doctors by the medical representatives and sales personnel. The pharmaceutical companies engage persons (medical representatives, sales representatives and field managers) for making personal contacts with sellers or prescribe and influence them in favor of their products. Almost all the pharmaceutical companies for the following reasons, prefer it-

- It provides an opportunity to inform the doctors about new products of the company/new trials, studies conducted for the existing brands during their personal visit.
- It also helps to refresh the memory (brand reminders) of doctors regarding the old/existing brands of the company.
- Doctors may have doubts regarding a particular product of the company which can be clarified/sorted out during medical representative's call.
- It provides the company with an opportunity to demonstrate and explain its products.
Direct Mailing

In this method a mailing list of registered medical practitioners, chemists and druggists is prepared. Letter, leaflets, folders and catalogues are sent to them regularly through mail to inform them of the details of the products manufactured and marketed by the firm. Mail advertising has a personal appeal because it is addressed to a particular person. It also maintains secrecy in advertising. The main drawback of this technique is that it has the limited coverage.

Miscellaneous Methods

Posters, hoardings and electrical displays are also used for advertisements of OTC products. The posters are pasted on walls. Billboards are part on electrical poles and at crossings. Colorful electrical lights in artistic designs or neon signs are put up at railway stations, bus stops and other public places. Outdoor advertising is highly flexible and attracts immediate public attention. Many pharmaceutical firms offer gift items to the physicians and retailers for their ethical products. These table top items may be diaries, ball pen, penholders, desk trays, key chains, paperweights, calendars, etc. These table top articles are meant for the daily use and therefore they continuously remind use of the products. Generally the brand names/company name along with its composition and product positioning statement is printed or inscribed on these items.

Market Research

Marketing occupies an important position in the organization of a business unit. Pharmaceutical Marketing means the performance of business activities that direct the flow of medicines and services from manufacturers to patients via doctors, chemists/stockiest. The modern concept of marketing is
Now a days it is not possible to run a business successfully simply by guessing the demand of the product in the market. There has to be a systematic and scientific attempt to find out the capacity of the market to absorb a particular type of product. Such attempts to forecast the future of the market in regard to a product or services are collectively called 'Market research'.

Market research is defined as systematic objective and exhaustive research and study of the facts relevant to any problem in the field of marketing. Market research, deals with the facts and problems, relating to transfer and sales of particular products and services from producer to consumer.

**Indian Pharmaceutical Marketing: A Tight Rope Walk**

Typically, a pharmaceutical company (Research Pharmaceutical Company) spends around $800 million over 12 to 15 years to bring a single new drug into the market. The chance of any one drug eventually making it to the market after successfully completing all phases of clinical trials and regulatory scrutiny are 1 in 10.

As India has signed GATT and TRIPS agreement, product patent is now in vogue since Jan.2005, Indian companies will have to upgrade and make their R & D dept. more pro-active in terms of discovering new drugs. Financially also, they will have to keep themselves ready to shelve out huge spending on R & D which is presently around 4% as against 12-14% spent by the Multi National Companies.
In Indian context, a pharmaceutical company would need to launch at least four drugs every year, in order to maintain their growth. Considering the fierce competition in Indian Pharmaceutical sector, high R & D cost, the Product patent in vogue, less availability of physician’s time for Pharmaceutical company medical representatives, pharmaceutical companies in India have to fine-tune their marketing efforts to boost sales.

Quite clearly, pharmaceutical companies are taking their marketing activities more seriously than ever before. Currently the pharmaceutical market is faced with following challenges in the formulation and implementation of marketing strategies.

- Regulations with respect to what marketing tactics are permissible
- Pressure from the government, customers for controlling drug prices
- Getting eye share and mind share and thus substantial prescription share from the doctors
- More and more MNCs will now enter Indian market as now Product patent is in vogue.

In such a scenario, Pharmaceutical marketing has to think innovatively and cater to the market.

**The Legal and Regulatory Environment**

The legal and regulatory environment is another crucial aspect of a firm’s environment that impinges on long-term operations and alternatives. Government regulations of business everywhere have been steadily
increasing. Such regulations limit the choices that managers can make and may also affect the profitability of proposed projects.

The current legal and regulatory environment of the pharmaceutical industry in India is a result of several statutes enacted over a period of more than a hundred years. These statutes or enactments can broadly be categorized into two areas:

1. Those pertaining to quality control of the pharmaceutical industry such as quality control, safety and standards of all the drugs manufactured and marketed in the country and those imported in the country. All these are under the purview of the Union Ministry of Health (Directorate General of Health Services).

2. Those pertaining to other aspects of manufacture and marketing of drugs such as investment, foreign collaboration, licensing of production facilities, pricing, trademarks, patents, import of capital equipment, raw materials and technology. All these aspects come under the purview of different departments like the ministries of Petroleum, Chemicals and Fertilizers, Industry, Finance, Law, Commerce and labour of the Central Government.

Some of the more important legislations are listed hereunder. Pharmaceutical marketer has to be aware of these and also should posses some insight into these statues and their implications.

1. The Opium Act, 1878.
2. The Poisons Act, 1919.
3. The Dangerous Drugs Act, 1930.
4. The Drugs and Cosmetics Act, 1940.
5. The Industries (Development and Regulation) Act, 1951.(IRDA)
8. The MRTP Act, 1969.

**Consumer Movement**

Another important area of the regulatory environment is the consumer movement. Consumer movement is certainly intensifying. Drug Action Committee, Drug Action Forum – while these and other consumer groups, strictly speaking, do not regulate your business directly, they do generate government activity in the affairs of business. Their influence cannot be undermined; nor can their importance.

Following information gives an insight into few of the regulations affecting the pharmaceutical industry:

The Drug regulator annually fixes the maximum retail price of medicines that contain any one of the 74 raw materials that are under the price control of the government, as per the Drugs Price Control Order.

The Drugs Price Control Order (DPCO) 1995 is an order issued by the Government of India under Section 3 of the Essential Commodities Act, 1955 to regulate the prices of drugs. The Order provides the list of price controlled drugs, procedures for fixation of prices of drugs, method of implementation
of prices fixed by Government and penalties for contravention of provisions among other things.

National Pharmaceutical Pricing Authority (NPPA) is vested with the powers for implementing provisions of DPCO. Only 74 out of 500 commonly used bulk drugs are kept under statutory price control. All formulations containing these bulk drugs either in a single or combination form fall under the price control category.

The price is fixed through after considering all possible costs in packaging, conversion and material costs, as well as the excise duty, by the NPPA. Costs involving packaging and conversion contribute about one-third of the price that consumers pay for medicines.

NPPA carries out the price-fixing exercise as a step to bring in uniformity of cost among all the formulations containing price-controlled drugs across the country.

NPPA give a free reign for those drugs which do not come under price-control, allowing them to increase the price by up to 10% annually.

**Introduction to Patent Scenario**

Patent is a form of intellectual property rights. Copyrights, Trademarks, Geographical Indications, IC Layout designs, Trade Secrets, Industrial Designs are other forms of intellectual property rights. Copyrights protect original works of authorship. Trademarks (and Service marks) protect against misuse of a name and/or symbol. Patents protect innovation. Patent gives a right to prevent others from practicing a claimed invention.
A patent may be viewed as a contract between a nation and the inventor giving the inventor exclusive right to manufacture, use or license his invention for a specific period and in exchange the inventor describes the details of his invention to permit those skilled in the art to employ it and it rewards the patentee a legal monopoly to make use of his invention to his economic benefit.

No patent is granted in India for the end product in the case of food, medicinal items or chemical substances. Legal protections of such items only cover the method or process of manufacture. This means an imitator can escape the charge of infringement by producing a product already patented with minor variations in the process of production.

Some examples which are patentable include New Chemical entities, new process of manufacture, new fermentation process etc. and some examples which are not patentable include methods of detection/diagnosis or treatment of disease, analytical methods, and methods of agricultural cultivation, set of cards or games.

**Drugs which will be Affected by the New Patent Rules**

The TRIPS (Trade Related Intellectual Property Rights) Agreement requires WTO (World Trade Organization) member states to introduce patent protection only to products "invented" after 1 January 1995 i.e. products for which a patent application has been filed in a WTO State after 1995. This means that, in accordance with TRIPS, products already on the market cannot be given patent protection, because if they are already marketed, they are not new, and so do not meet the TRIPS conditions necessary to grant a patent. Therefore, only new drugs or new indications, formulations or processes invented after 1995 should be patentable in all WTO Member countries.
Impact of Patent Regime on Pharmaceutical Industry

With the introduction of Product Patent in India in January 2005, it was predicted by many that the golden age of Indian pharmaceutical companies was close to an end. From 1970 some of the Indian companies took full advantage of regulatory system, which supported Process patent in favour of Indian companies. This policy helped some of the ambitious Indian companies to develop and produce in India, cheaper versions of successful molecules, through indigenous alternative processes. The government's drug policy encouraged and supported domestic industry to lay a strong foundation due to lack of intellectual property rights. The price of drugs in India remained one of the lowest, basically due to three reasons:

1. Government Regulations like Drug price control order
2. Intense competition from large number of companies having similar or 'me-too' products.
3. Lack of intellectual property rights

Impact on Drug Promotion

The promotional strategies and promotional mix that were employed before the patent era are no longer adequate or effective. The promotional cost has increased substantially and likely to go up further. Only those companies that are innovative are likely to make a dent in the market. In today's highly competitive environment, it is not adequate to be just customer oriented; one has to be equally competition oriented.

During the pre-patent era, products were launched in India in a hurry to be ahead of the competitors in the race. The one that managed to launch the product first, had the edge in establishing the brand. It was a well-known fact that at least a few more competitors were in the fray. The objective of
the prime mover was to gain as much 'lead period' as possible, whereas the second and the third movers attempted to minimize this lead and to grab maximum possible market share. Companies will not hesitate to pump-in more resources because of the monopoly that they may enjoy for a particular new molecule.

In earlier days companies were not giving enough importance to marketing strategies like product differentiation, product positioning or market segmentation etc. Pricing was the most important factor deciding promotional strategies and inputs. However, in future, when one does not expect many other companies to launch the same molecule with different brand names, the strategy naturally has to be geared to the long term objective of building a mega brand. Marketing companies will be compelled to give high priority to the coining of an appropriate brand name, creating product differentiation to justify why customer needs to shift from existing brands to theirs and develop product positioning so that the customer perceives the product in the right perspective. Moreover, the brand needs to be targeted to the potential customers through a proper segmentation study. It is not entirely appropriate to say that these aspects were overlooked earlier. But the marketing companies are bound to focus on these aspects more seriously and are likely to take the help and expertise of market research companies or advertising agencies, as very few companies have their own market research department.

In the brand building process, companies will spend a considerable portion of the budget, before the launch of a new product, in initiating multi-centric trials involving the provision of sending samples to the 'Opinion leaders'. This will not only reduce the time for opinion leaders to start using the new product but also help the companies to prepare speakers for their
medical symposia and seminars at the time of the product launch. Multinational companies may prefer to bring the speakers for their symposia from their R & D centers; the scientists directly involved in the development of molecule or those who are involved in the clinical trials. This will also compel the Indian companies to organize their symposia and seminars in innovative ways, so that they are neither ignored nor belittled by their target customers.

The cost of participating in national conferences or conventions has become very expensive. Many multinationals have their stalls designed and erected by international advertising agencies. They have a tremendous impact on the participating delegates. This compels the Indian companies to also participate in more professional manner and assign this task to the event management agencies.

**Impact on Prices**

It is accepted that pricing includes developmental expenses. Beginning with R & D expenses to the stage of plant and machinery, all expenses go to the costing of finished product. But the amount recoverable on an annualized basis is related to both the market forces and the laws of the land. The main impact of the proposed globalization of patents would be on the prices of medicines which would go up and may make it extremely difficult for the poor people of India to afford them.

**Impact on Availability**

The availability of new drugs from indigenous sources of the domestic companies would be totally out of question. Availability could be an issue as only research organization will market its researched product initially for approved period.
Impact on Medium and Small Scale Sector

The existing industry, particularly in the medium and small scale sectors will over a period of a decade or so, after the introduction of new patent regime, may face serious de-growth as they will have no possibility of taking up new products. They will have to use innovative marketing techniques to sell their present product range and may be able to launch products whose product patents are expired.

Impact on Technology

With the acceptance of TRIPS, transfer of technology is likely to accelerate. Most of the leading multinational companies are present in India having substantial equity participation in their Indian counterparts. With the policy permitting them to increase the share-holding, they have already expressed interest in bringing their latest technologies to manufacture additional bulk drugs to improve present facilities.

Indian indigenous sector have better opportunities to enter into technical collaboration with the firms underrepresented in India.

Impact on Research and Development

To establish an identity in the International market, Research and Development (R & D) activities have to be strengthened with substantial investment by Indian firms. As a result of the availability of the patents in drugs and medicines, Multinational companies will not be interested to establish separate R & D centers in India. In fact, it will be difficult for domestic companies to be able to match multinational company’s potential in R & D sector, sales turnover and world-wide infrastructure for patenting and promotion of their products. Further to achieve significant performance on
the basic R and D front in India, Government will have to come forward in a big way to support public and private efforts on a long term basis.

**General Agreement on Tariffs and Trade (GATT)**

The General Agreement on Tariffs and Trade (typically abbreviated GATT) was negotiated during the UN Conference on Trade and Employment. GATT was formed in 1949 and lasted until 1993. In 1993, the GATT was updated (GATT 1994) to include new obligations upon its signatories. One of the most significant changes was creation of the World Trade Organization (WTO). The 75 existing GATT members and the European Communities became the founding members of the WTO on 1 January 1995. There are a total of 153 member countries in the WTO.

The purpose of the GATT is the "substantial reduction of tariffs and other trade barriers and the elimination of preferences, on a reciprocal and mutually advantageous basis."

Now that the GATT is a reality and has come into force, the Indian companies are visualizing the best possible means to encounter the situation.

The more forward looking and internationally minded among them have evolved a two-fold strategy:

1. To strengthen R & D capabilities during the 10 year transitional period.
2. To enter into strategic alliance with research-based companies abroad for setting up joint ventures in India or licensing in patented new Drugs.
Both the Government policy of granting automatic approval for joint ventures in which foreign investment is up to 51 percent (which is applicable to the Drug industry) and the new incentives being considered for total R & D should go a long way to encourage indigenous companies to adopt the future strategy.

There are a number of aspects concerning the prices of drugs in the Post GATT after January 2005 period. The first and foremost issue is that a real difference comes in only regarding drugs which are under patent in any one of the WTO member countries. For the large number of drugs on which patents have already expired there need not be “any fear of a price rise because there is no real change in any aspect. Indian Government has issued a list of nearly 300 essential drugs required in healthcare; high percentage, nearly 90% of these drugs are out of patent. These drugs are usually sufficient as far as major healthcare needs, i.e. about 90 to 95% of healthcare is covered by these drugs. In number of instances new patented drugs are only “me-too” molecules and it is not true that the newer drug is better than the old off-patent one. Very rarely is a new-patented drug absolutely irreplaceable in treatment.

The FDA should demand that every new drug should be tested against the best existing drug in that category and only if new drug shows some marked advantages, it should be allowed into the market. Doctors should also be explained that they should not easily discard existing drugs in favor of new drugs.

Another important issue is that many new drugs under patent coming mainly from the USA, is on what are called as life style drugs, such as for Obesity, against Parkinsonism, Alzheimer’s disease etc. and are not for what are called as diseases of the poor.
So after 2005, as per a WTO consultant, 85% of the Indian drug market will be generic and 15% will be covered by patents. Patented drugs may be costly. In 1970, Japan was in a similar situation. Now Japan is third in pharmaceutical production, i.e. the challenge coming due to globalized competition.

**Trade Related Aspects of Intellectual Property Rights (TRIPS)**

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) was negotiated with other international trade agreements during the Uruguay Round trade negotiations of the GATT (General Agreement on Tariffs and Trade) from 1986 to 1994. As one of the World Trade Organization (WTO) agreements, it is totally binding for all WTO member states.

The TRIPS Agreement sets minimum standards in the field of intellectual property (IP) protection (such as copyrights, patents, and trademarks) that all WTO Member countries have to respect. To achieve this goal, WTO Members have to modify their intellectual property laws to make them consistent with the new WTO standards. For instance, the TRIPS Agreement states that all patents shall be available for at least 20 years from the filing date, whereas before TRIPS the patent term varied greatly among countries (7, 10, 17 or 20 years). All WTO Members have to incorporate this 20-year patent term in their own patent law.

**Impact of TRIPS on Indian Pharmaceutical Industry**

Before TRIPS, pharmaceutical patents and other intellectual property rights on drugs were widely recognized among major industrialized countries, but not in many developing countries. As there were no international standards on the scope of patent protection, countries had very different
regulations on IP protection according to their own needs. Patents were simply not available for pharmaceutical inventions in these countries, which implied that no one could claim an intellectual property right on such products. As a result, copies of medicines protected by a patent in other countries were widely available, usually at a lower price than the original patented drug. The copies were either manufactured by local companies or imported, without having to ask the patent holders' permission. This practice is now coming to an end. Copies of patented drugs will remain on the market but it will no longer be possible to manufacture and market copies of new patented medicines, unless the original manufacturer has chosen not to seek any patent protection there.

Under the TRIPS Agreement, all WTO Members have to make patents available for pharmaceutical inventions in their countries. A company that has invented a new pharmaceutical product or process has, since 1 January 1995, been able to apply for at least a 20-year patent protection in any WTO Member country. The inclusion of pharmaceutical patents in the new WTO/GATT rules has the potential to exacerbate the problem of access to drugs in developing countries, by limiting or even disabling direct competition (generics) to new medicines until the relevant patents expire.

Taking into account the transitional periods allowed to developing and least-developed countries by the TRIPS Agreement.

It is only in regard to transitional periods that the TRIPS Agreement takes into consideration Member States' different levels of economic development. Developed countries were given until 1996 to comply with TRIPS standards by modifying their patent law if necessary, developing countries had until 2000, and least-developed countries have until 2006 (with
possible renewal). The transition periods were provided to developing and least-developed countries to give them enough time to implement the various TRIPS standards on intellectual property rights (copyrights, trademarks, patents, etc) at national level.

However, as patents were not available for any pharmaceutical products in some developing countries in the pre-TRIPS era, a supplementary transitional period is allowed for countries still not granting patents for pharmaceutical products when the WTO came into force in 1995. This 5-year supplementary period means that the developing countries affected do not have to grant pharmaceutical products patents before 2005, unless they decide to revise their patent law before.

**Developing Countries Obligations under TRIPS**

Since all WTO Members are bound by the TRIPS Agreement, its minimum standards for IP protection must be included and implemented in national laws within the transitional periods allocated. These are only minimum standards however, and WTO Member countries may provide for greater IP protection than required in the Agreement. For instance, in Europe and the United States, pharmaceutical patents may be extended (beyond 20 years) for up to 5 years, to compensate for the long delays in obtaining marketing approval for a drug. The patent extension will vary from country to country (since there is no international standard) depending on the date of marketing approval. However, the pharmaceutical patent cannot be extended for more than 15 years from the date of marketing approval in European countries, and 14 years in the United States.

The main TRIPS standards, relating to pharmaceutical, that countries must include in their patent law are:
- Availability of patents for both pharmaceutical products and processes inventions that are new, involve an inventive step and are capable of industrial application.
- Protection of the product directly obtained using a patented process;
- Availability of procedures at national level to enable patent owners to protect their rights against infringement.

In addition, if exceptions to patent rights and compulsory licenses are incorporated in patent legislation, they should be, respectively, limited and conditional to conform to the TRIPS Agreement.

Indians are very good in Process Technology and Indian Scientists could develop their own process once any new molecule was introduced overseas and the molecules were introduced in Indian Market within a span of 3 to 5 years. This is because India was not a signatory to the Paris Convention and was not member of GATT at that time. New molecule introduction with minor variations in process technology by Indian companies was called as Piracy by original Researchers.

However, with the policy of Industrial Liberalization and to bring a global discipline, a number of issues connected with International agreement on trade related Aspects of Intellectual Property rights have been discussed and the negotiations concluded in 1993. The outcome of the final Uruguay round of discussion is the GATT Agreements, 1994, the final text signed by 115 countries who are members of WTO.
The objective of the TRIPS agreement is protection and enforcement of intellectual property rights to promote technological innovation and to the transfer and dissemination of technology for the mutual advantages of producers and users of technological knowledge. It contains specific provisions and scope of Patentability of Drugs and agrochemicals. The TRIPS agreement also provides that patents shall be available and patent-right enjoyable without discrimination as to the place of invention, field of technology and whether products are imported or locally produced. On fulfillment of certain conditions EMR (Exclusive Marketing Rights) will be allowed to the patentee to protect the innovations or product patent and prevents other from making, selling or distributing such products even if manufactured by alternate process.

Since patentability extends to products or process the terms of the patent would be applied for twenty years for Product patent and then twenty years for process patent, particularly in the chemical field including drugs and pesticides. In the case of drugs and medicines, patents will be available for its usage forms, dosage forms and their combinations. New process would be patented and new dosage forms etc. would also be patented and this kind of monopoly protection in some forms or the other would in a period of 10 to 15 years, cover almost 70 to 80% of turnover in the pharmaceutical industry.

Under TRIPS agreement, developing countries including India are entitled to delay the enforcement by ten years for amending their Patent rules and regulations. Indian Drug industry shall have access to manufacture the drugs which are currently under Patent as a result of filing application before 01.01.1995 in any country in the world and the off-patent drugs in the generic forms, provided that the processing technology is developed in India.
Various aspects in pharmaceutical industry in relation to Patent right, GATT, TRIPS and other regulatory aspects has made it to determine newer strategies for the development of the market.

The pharmaceutical companies all over the world have been using well tried and time tested promotional strategies that have proven results. However, the rising cost of drug development and shortened product life-cycles have forced the companies to examine newer ways of creating innovative promotional strategies to maximize revenue potential for their brands. The cost and limited success of traditional marketing methods has been the major reason for the companies to look into alternative marketing strategies world over. Various challenges faced by the pharmaceutical marketers are:

- With increased patient load, doctors are busier
- There is an explosion of new and useful information
- Doctors are receiving more calls from pharmaceutical sales representatives and though the calls are typically for just two to three minutes, many doctors are refusing to meet or speak to pharmaceutical representatives
- Doctors are inundated with direct mail advertising, reducing the effectiveness of direct mail.

In the meantime, the pharmaceutical marketers are finding it difficult to recruit and train good medical representatives. Retaining good representatives has become even more difficult. The preference for the job of a medical representative is low among new graduates. This is mainly because of the poor working conditions, high sales pressure and intense competition within the industry. All these aspects will make the Indian pharmaceutical
companies to look at additional, more efficient and cost effective methods of marketing being tried by companies in developed countries. E-marketing has been adopted by many of the companies there, as an alternative, cost effective media. The internet has many of the qualities of traditional media; it can provide in-depth content seen in print advertising, the real time impact of television, the immediate response of direct mail and mass reach of outdoor advertising. The internet is however, not without challenges and is unlikely to replace direct selling or any other channels completely. Furthermore, a significant proportion of the doctor population still do not use internet in India and also the problems of availability of electricity, network etc.

In light of this introduction the researcher has undertaken the study of “Management of Sales Personnel in Pharmaceutical Industry”. The next chapter deals with Importance, Research Methodology, Objectives and Hypothesis of the Study.