

## **PART II: INTRODUCTION TO INDIAN PHARMACEUTICAL INDUSTRY:**

### **2.1 Industry Scenario:**

Indian pharmaceutical industry of present day which is comprised of approximately more than 20000 registered companies could consolidate in global as well as national front. Although the number of registered companies have grown drastically where approximately 250 companies capturing almost 70% market share while industry leader is holding approximately 7% market share(Appendix-III).In global scenario in terms of value as well as volume, 14<sup>th</sup> and 3<sup>rd</sup> ranking Indian pharmaceutical industry can be classified in many categories (Smarta 1999)<sup>1</sup>.

Organizations showing strength in manufacturing may not be having enough marketing strength as own marketing set-up involve high cost, however after USA maximum number of US-FDA approved manufacturing unit is available in India. This reflect the manufacturing capability or strength of Indian pharmaceutical industry(Appendix-IV).In spite of the fact that pharmaceutical industry is knowledge driven as well as research and development oriented, but on new product development Indian scenario is not at all a match in comparison to global standard.

A critical analysis on growth pattern of Indian pharmaceutical industry will always revel the fact that Indian companies could grow between 1970 to 2005 when government policies like process patent & monopoly restricted trade practices (MRTP) supported the industry and product patent was not implemented rather country was following only process patent(Chaudhuri 2005)<sup>2</sup>. In process patent period many a companies in India could develop some process through which they could market even patented molecule and generate revenue.

Though skilled manpower was never been a problem in Indian pharmaceutical industry but at research and development front Indian pharmaceutical industry could not make any significant advancement. Period after 1<sup>st</sup> January 2005, in other word post patent period, though industry could grow up to present time but companies started realizing the fact that without product innovation survival and competition from multinational companies will be a daunting task for them both in India as well as overseas market.

Indian giants in pharmaceutical sector to quote few examples here namely Ranbaxy, Nicholas Piramal and Paras pharmaceutical could sold out their entire business empire or part of it to multinational companies. Further possibilities of similar developments are expected for more Indian companies as quoted in many business platforms.

Indian pharmaceutical market as well as products has been classified in many categories on the basis of its usage. Usually major classification can be considered as lifestyle medicines as well as general medicines. Under lifestyle medicines major consideration is those diseases where patient has to take medicine lifelong once disease has been diagnosed. Diseases like diabetes, blood pressure, asthma and obesity are considered as lifestyle disease where value of prescription is also high because of lifelong treatment.

On the other hand we have general diseases like cough and cold, malaria, general infection and others where patient have to take medicine for a specific period after which they stop the medicine by the advice of a physician or doctor. On the basis of disease pattern pharmaceutical industry classify segments which is known as therapeutic segment and might be possible one company is not operating in all the therapeutic segments. Entire volume of business is the business from various therapeutic segment and many a time some therapeutic segment becomes

less attractive because of lower profitability however there is a business volume for the company.

On the other hand few therapeutic segments are highly attractive because of high profitability however depending upon own competency, organizations opt for a specific therapeutic segment which is a major strategic issue also. There are companies who are having presence in more than one therapeutic segment which separate field force with the strategic business unit concept.

In the process of explaining Indian pharmaceutical industry it is always pertinent to put forward the analysis of the persons who are having adequate critical opinion of industry from policy to practice point of view. Under this purview article of Mr. D P Dubey<sup>3</sup>, who has worked adequate number of years in industry with an academic inclination to analyze policy framework of government as well as companies. According to him globalization is a process which involves economic inter-dependence of countries world-wide removing all barriers for economic integration as if the whole world is a single village.

Obviously, in this process, the rich nations with their superior financial power, control the scenario and the poor and the developing nations are forced to integrate surrendering their economic independence knowing fully well what they are forced to accept is really prejudicial to their own interest. In this process the world financial institutions like the World Bank, IMF and now the WTO advance the interest of the rich countries alone. The draconian policies of the World Bank and the IMF under the structural adjustment programme resulted in the net transfer of \$178 billion between 1984 and 1990 from the poor countries to the commercial banks of rich nations. (UNDP Human Development Report, 1994).

The Transnational Corporations (TNCs) of the rich nations are practically controlling the world finances. Today, the whole world is colonised by global finance and the TNCs supported by the neo-colonial structure including the World Bank, IMF and WTO are controlling the financial situation world-wide. The governments of third world countries are powerless against global finance and are unable to control its movement within their own national boundaries.

The situation of the world drug industry is no different. 'Operating at the behest of the Pharmaceutical Research and Manufacturers' Association (PhRMA) for a decade and a half, the U.S. Government has waged a ruthless crusade to force third world countries to adopt strait jacketing intellectual property rules at the expense of protecting public health', says the editorial comment in the June 1998 issue of *Multinational Monitor*<sup>4</sup>, a journal published from Washington.

The structural adjustment programme introduced by the government of India at the behest of the IMF, World Bank and WTO created a serious impact on India's drug industry, health care system, on the workers engaged in the industry and ultimately on the people of the country. These reform policies are mainly the reduced role of the Government, cut in subsidy in the social sector, increase in administered prices, and liberalization of trade by increasing tariff rates providing incentives for foreign investment, privatization of the public sector, equating foreign companies with Indian companies, de-regulating the labour market etc. This is aimed at the withdrawal of the state initiative from the social and welfare sectors like health, education, public distribution etc.

Present debate in the article showed how the workers of the drug industry and the people of our country are affected by the impact of globalization.

### **2.1.1 Pharmaceutical industry situation prior to the Indian Patent Act, 1970:**

At the time of independence, the total drug production in our country was around Rs. 10 Crores. At that time the MNCs taking the help of the colonial Patent and Designs Act, 1911 exploited the drug market of our country. They were engaged mainly in the import of drugs from their country of origin. Between 1947-57, 99% of the 1704 drugs and pharmaceutical patents in India were held by foreign MNCs. During that time the MNCs who were controlling 80% of the market did not come forward with financial investment and technological help to establish drug production centres in India.

Drug prices in India were amongst the highest in the world. In 1954, the first public sector drug company Hindustan Antibiotic Ltd. (HAL) was established with the help of WHO and UNICEF. The Indian Drugs and Pharmaceutical Limited (IDPL) was established in 1961 with help from the Soviet Union. The establishment of these two public sector units and the coming into force of the Drug Policy of 1978 had been mainly responsible for the availability of drugs and medicines at relatively lower prices in India. The country became almost self-sufficient in the production of drugs.

### **2.1.2 Indian Patent Act 1970:**

The Patent Bill was first introduced in Parliament in 1967, but the Patent Act, 1970 came into force only in 1972. The Indian Patent Act 1970 which is in operation in our country does not allow product patents on medicines, agricultural products and atomic energy. This is the most suitable patent act for the developing world. Here, process patents are allowed for 5-7 years. Mainly with the help of the Indian Patent Act 1970 India is today self-sufficient in the production

of basic drugs covering various groups of drugs. Indian scientists developed new processes for 107 drugs.

Indian companies are now among the world leaders in the production of bulk drugs from basic stages. At present, the prices of drugs in India are comparatively cheaper than many other countries. As per UNIDO, India is identified to produce its own drug needs with its own technology and manpower indigenously. After 1970, many new drug firms were established by Indian businessmen. At present, around 23 thousand small, big, and medium factories are producing drugs in India.

Attempts to change the Indian Patent Act 1970 are a part of this globalisation programme. The imposition of an unequal trade treaty like the World Trade Organisation (WTO) is a step towards globalisation in favour of the MNCs of rich nations. With its help, the market of the developing nations is forced open for the developed countries. Most of the developing countries were forced to sign the WTO agreement without realising its implication: as a result, the developed countries are the gainers. Already, at the dictates of the IMF, World Bank and WTO, the Government of India is slackening all checks and controls to invite the MNCs in all industries including the pharmaceutical industry.

FERA and MRTP Acts have been amended. Customs duties and corporate taxes have been lowered. Relief, concessions and facilities have been extended to the MNCs as to Indian companies. All these, already, had an adverse impact on the indigenous drug industry. As per the requirement of WTO guidelines for the product patent regime, the availability of new drugs in our country may be delayed depending on the desire of the patent holders.

As per the guidelines, a product patent is granted for 20 years and a process patent for another 20 years. At present, newer drugs are made available in our country within a 4-6 years period. Prices of drugs will go up by 5 to 10 times as it is evident from the prices of drugs in India and other countries like Pakistan, U.K. and U.S.A. where product patents are in force. Ranitidine is sold by Glaxo in India at Rs. 7.20. The same product is sold by the same company in Pakistan at Rs. 65 and in the U.S.A. at Rs. 545. Similarly, the anti-viral drug Aciclovir costs Rs. 33.75 in India while the same drug is sold in Pakistan at Rs. 363. There are many such examples.

The drug prices in the U.S.A., U.K. and other developed countries have gone up so high that the health care expenditure in those countries is predominantly funded by insurance companies at a very high premium. In those countries people cannot think of treatment without insurance coverage. Product patent regime will definitely hamper India's drugs exports as countries will be forced to purchase from patent holders only.

### **2.1.3 Dilution of Drug Policy and Drug Price Increase:**

Unlike consumer goods, drugs are not purchased by the preference of a person, but on a doctors' prescription. Consumers have no choice of their own on this matter. Entire dynamics has been mentioned well in chapter well to establish the point why and how this study is needed in present scenario.

Prices of drugs are increasing by leaps and bounds along with the prices of other commodities in recent times. The drug manufacturers are flouting the Drug Price Control Order (DPCO). The DPCO was first introduced in 1970.

In 1970 most of the drugs were under price control. In 1987 this was diluted and the number of drugs which were restricted declined to 347, in 1987 it was brought down to 163 drugs and in 1994 only 73 drugs were under DPCO. Even then industry is not happy; they want the control to be abolished totally. They have already demanded decontrol of 17 bulk drugs and further recommended full decontrol within 3 years time (*Economic Times*, 28th September, 1998).

Many developed countries of Europe control drug prices directly. In the U.K., the government determines the profit level of drugs supplied by individual companies. A company has to reimburse excess profits to the Department of Health (Appendix-IV).

A recent study shows that the prices of many life-saving bulk drugs have gone up steeply. Drugs policies in our country are decided not by the need of our people, the pattern of diseases or by the purchasing capacity of the people, but by the profit motive of the industry and the Central Government is playing the role of a silent onlooker.

We are giving below the prices of twelve essential drugs before the liberal decontrol of DPCO in 1995 and today.

**Table - 2**  
**“Percentage increase in price”**

<b>Name of drug</b>	<b>For treatment</b>	<b>Packing</b>	<b>Price1995</b>	<b>1998</b>	<b>Percentage increase</b>
<b>Diazepam</b>	<b>Depression</b>	<b>10</b>	<b>3.13</b>	<b>9.50</b>	<b>204%</b>
<b>Ampicillin</b>	<b>Antibiotic</b>	<b>4</b>	<b>12.85</b>	<b>23.15</b>	<b>80%</b>
<b>Cephalexin</b>	<b>Antibiotic</b>	<b>10</b>	<b>45.07</b>	<b>113.15</b>	<b>151%</b>
<b>Ethambutol</b>	<b>Anti T.B.drugs</b>	<b>10</b>	<b>5.92</b>	<b>33.00</b>	<b>457%</b>
<b>Rifampicin</b>	<b>-do-</b>	<b>10</b>	<b>24.00</b>	<b>64.00</b>	<b>167%</b>
<b>Pirazinamide</b>	<b>-do-</b>	<b>10</b>	<b>17.01</b>	<b>46.95</b>	<b>176%</b>
<b>Lignocaine Hcl</b>	<b>Anaesthetic</b>	<b>30 ml.</b>	<b>4.16</b>	<b>12.40</b>	<b>198%</b>

<b>Promethaxine Hcl</b>	<b>Anti-allergic</b>	<b>10</b>	<b>1.25</b>	<b>3.23</b>	<b>158%</b>
<b>Antacid liq.</b>	<b>Gastritis</b>	<b>200 ml.</b>	<b>13.00</b>	<b>23.00</b>	<b>77%</b>
<b>Oxyfedrine Hcl</b>	<b>Angina pectoris</b>	<b>10</b>	<b>10.44</b>	<b>21.41</b>	<b>105%</b>
<b>Discopyramide Phosphate</b>	<b>Cardiac problems</b>	<b>10</b>	<b>16.50</b>	<b>50.46</b>	<b>206%</b>
<b>Dipyridamole</b>	<b>Anti angina</b>	<b>10</b>	<b>2.00</b>	<b>4.73</b>	<b>137%</b>

Further, under the WTO agreement and the imposition of a products patent regime, the prices of all new drugs (patented) will go up without any control of domestic law. The DPCO will become further irrelevant and Indian people's accessibility to newer drugs will be restricted only to the rich of the country. We are giving below the high prices of some of the new drugs introduced in 1997 in the Indian market.

**Table - 2 Continued..**

<b>Drug</b>	<b>Company</b>	<b>Strength</b>	<b>Pack</b>	<b>Price</b>
Sporanox	Ethnor	100 mg	4 tablets	173.00
Lumicil	Novartis	250 mg	14 capsules	1247.00
Spariex	Sun Pharma	200 mg	6 tablets	154.00
Rispid	Panacea	50 ml	1 mg/ml capsule	141.00
Livial	Infar		28 tablets	1225.00

Pipracil	Cyanamid	2 G	Vial	215.78
Amate	Mesco Pharma	50 mg	12 tablets	180.00
Adnoject	Inca	3 mg	2 ml. vial	210.00
Roxisara	Sarabhai	300 mg	6 tablets	165.00
Celex	Glaxo	250 mg	4 tablets	140.00

(Source: Paper of A. Guha, in the seminar held at Delhi in May, 1998)

World-wide concern has been expressed about the sharp rise of drug prices. The WHO's goal of Health for All by 2000 AD will remain a distant dream. At this juncture if we compare the prediction by author on the point Health for all, interesting scenario will emerge because still we are struggling with the objective.

Moreover, with the rapid development in technology, a greater number of new drugs are being introduced. Experts say that very few of them are having therapeutic advantages over the existing drugs.

Therapeutic advantage meaning when we introduce any new product or molecule in the market same must or should have adequate medical advantage over the last one in the same category, so author raised a pertinent point on therapeutic advantage. Out of 348 new drugs introduced by 25 big US companies during 1981 to 1988 only 3 per cent made important potential contribution while 84 percent made little or no potential contribution' said the US federal authority. Hence the introduction of new costly drugs should be properly monitored by the central government<sup>5</sup>.

## **2.2 Impact on Public Sector:**

With the reduced role of the state under globalization the public sector drug companies are faced with serious problems including imminent closures. Public sector drug companies like Indian Drugs and Pharmaceuticals Ltd. (IDPL), Hindustan Antibiotics Ltd. (HAL), Bengal Chemicals and Pharmaceuticals Ltd. (BCPL), Bengal Immunity (BI) and Smith Stanistreet Pharmaceuticals Ltd. (SSPL) played an important role in the production of essential drugs at affordable prices.

Under the globalisation process the role of the public sector has been marginalised and they have been made sick. Attempts have been made to either privatise or close them. The Penicillin Plant in HAL, the biggest in the country, has been handed over to private hands. Its Streptomycin plant also has been leased to a private company for manufacture of other drugs. IDPL which is having the biggest pharmaceutical plant in Asia is closed from 1996 for want of proper financial assistance from the government.

The public sector drug companies used to supply raw materials to the small scale sector companies. Now, these companies are facing difficulties in procuring raw materials. Similar is the fate of BCPL, B.I. and SSPL. These three units were taken over by the government after they were made sick by the private owners. Proper utilisation of their capacity could not be made due to lack of will on the part of the government, mismanagement at the administrative level and high level corruption. It is not because of any inherent weakness but due to the lack of political will, deliberate efforts to destroy them, corruption and mismanagement that these public sector units have been rendered commercially unviable.

Moreover, the number of workers engaged in these units have been reduced drastically. When IDPL was established it had a strength of more than 15,000 workers. Today, it has been reduced to less than 7,000.

With the pharmaceutical industry taking a leap towards biotechnology development world-wide, only the public sector drug companies, with the backing of the Central Government, could have faced the challenge effectively from the MNCs in the new situation<sup>6</sup>.

### **2.2.1 Mergers and Acquisitions:**

International and national level mergers, acquisitions and takeovers have now become a common phenomenon in the pharmaceutical industry. Internationally American Home Product merged with Cyanamid, SKB with Sterling, Rhone Poulenc took over Fashions, BSF with Boots, Glaxo with Burroughs Welcome, Ciba Geigy with Sandoz, Warner Hindustan with Parke Davis, Hoechst with Rhone Poulenc etc. are some of the examples of big take overs.

By mergers and acquisitions these companies became even larger with more financial power at their disposal over their competitors. In coming days, with the help of international financial companies the MNCs will capture and take control of Indian companies to control the Indian market.

To match the situation created by international mergers and takeovers, Indian companies are adopting the same path. For example Wockhardt took over Merind and Tata Pharma, Ranbaxy took over Croslands, Nicholas Piramal took over Roche, Boehringer, Sumitra Pharma. The inevitable results are job loss of workers. Because of overlapping of jobs large numbers of workers are declared surplus. After merger Glaxo-Welcome and Ciba-Sandoz announced a

reduction of 15 thousand and 10 thousand of their work force respectively world-wide. Upjohn and Pharmacia decided to close 24 of their 57 plants in different countries after their merger.

Some countries are adopting the 'buy and grow' method. They are taking over some popular brands and increasing their business. SKB took over Crocin from Duphar, Ranbaxy took over 7 leading brands from Gufic, Dr. Reddy's Lab purchased 6 products of Dolphin and two each from Pfimex and SOL Pharma. Sun pharma purchased all leading brands of NATCO, after selling the popular brands the companies are becoming sick and closing their shutters throwing the workers on the street.

The government's permission to the MNCs to come to India with 100% equity have threatened the existing companies with the same origin and their workers. Through the process of mergers, acquisitions and takeovers MNCs will gradually perpetuate their grip on the Indian industry by the creation of a limited number of mega companies having monopoly control and domination worldwide. In the absence of competition people will have to pay any price as it happens in the seller's market<sup>7</sup>.

### **2.2.2 Conclusion of Present Discussion:**

Narashimha Rao government at the centre had brought a bill (as quoted by author in his article) in the winter session of Parliament to change the Indian Patent Act 1970. The change in the Act is not in the interest of the people of the country. Now patents have become an object of business instead of development. Considering the wide gap of industrial and technological development between developed and developing countries monopoly rights through the patent system should not be allowed to the rich nations. Today 85% of the patents are being controlled by the TNCs of the rich nations. 'Globalisation is hurting poor people, not just the poor countries.

In this process poor countries and poor people will become increasingly marginalised', says the 1997 world development report of UNDP. So, on patent there will always remain an argument on need, benefit and social impact.

The question is why this pressure and hurry? The main aim is to impose the conditionalities of WTO and to change the Indian Patent Act as MNCs need more markets and are eyeing Asia which is the largest continent of the world where 60% of the world population lives but contributes only 20% of the world pharmaceuticals business. With a high rate of population growth it is expected that the need of drugs will tremendously increase in the third world countries including India in the next millennium. India contributes 16.1% of the world population, but it produces only 1.2% of world drug production. Hence the MNCs are trying to have more control over the pharmaceutical markets of the developing nations.

Developed countries are backing their own big companies to capture markets in other countries even at the cost of the interest of the people there. The United States has successfully battled for the inclusion of strict intellectual property rules in international trade agreements such as NAFTA and GATT. Often the U.S. position has literally been drafted by PhRMA. These trade agreements disregard public health considerations and have forced dramatic changes in the intellectual property rules the world over. Still PhRMA is not satisfied. And when PhRMA is not happy the office of U.S. Trade Representative (USTR) is not happy, says the editorial comment of *Multinational Monitor*. The above comments clearly indicate the intention of the USA and other rich nations. Unfortunately, the Government of India is dancing to their tune. Against this, it is necessary to develop and launch broad-based movements everywhere with the active support of people hailing from all walks of life to force the government to change their stand.

### **2.3 Growth of Indian Pharmaceutical Industry:**

The first Indian pharmaceutical company, Bengal Chemicals and Pharmaceutical Works, which still exists today as one of 5 government-owned drug manufacturers, appeared in Calcutta in 1930. These five public sector drug-manufacturing units under the Ministry of Chemicals and Fertilizers are: Indian Drugs and Pharmaceutical Limited (IDPL), Hindustan Antibiotics Limited (HAL), Bengal Immunity Limited (BIL), Bengal Chemicals and Pharmaceutical Limited (BCPL) and Smith Stani street Pharmaceutical Limited (SSPL).

In addition, there are a number of pharmaceutical manufacturing units under the control of state governments such as Goa Antibiotics Ltd. and Karnataka Antibiotics Ltd. For the next 60 years, most of the drugs in India were imported by multinationals either in fully-formulated or bulk form. There are 24,000 licensed pharmaceutical companies. Of the 465 bulk drugs used in India, approximately 425 are manufactured here.

India has more drug-manufacturing facilities that have been approved by the U.S. Food and Drug Administration than any country other than the US. Indian generics companies supply 84% of the AIDS drugs that Doctors without Borders uses to treat 60,000 patients in more than 30 countries.

The Indian pharmaceutical industry currently tops the chart amongst India's science-based industries with wide ranging capabilities in the complex field of drug manufacture and technology. A highly organized sector, the Indian pharmaceutical industry is estimated to be worth \$ 6 billion, growing at about 10 percent annually. It ranks very high amongst all the third world countries, in terms of technology, quality and the vast range of medicines that are

manufactured. It ranges from simple headache pills to sophisticated antibiotics and complex cardiac compounds; almost every type of medicine is now made in the Indian pharmaceutical industry<sup>8</sup>.

The Indian pharmaceutical sector has expanded drastically in the last two decades. The Pharmaceutical industry in India is an extremely fragmented market with severe price competition and government price control. The Pharmaceutical industry in India meets around 90% of the country's demand for bulk drugs, drug intermediates, pharmaceutical formulations, chemicals, tablets, capsules, orals and injectable.

### **2.3.1 Future Ahead:**

In future it will be a growth period of the Indian Pharmaceutical Industry. The growth is expected to emerge from three major areas:

1. Contract research and development services.
2. Export led business of generics and bulk drugs and
3. Growth in specialty therapeutic areas in the domestic market.

The growth in the institutional segment is likely to raise the market for diagnostics. Increasing industrialization, literacy levels and urbanization are likely to increase the health awareness of the general public. Consequently the demand for preventive medicine in general and immunological like tetanus toxoid, triple antigen (DPT), measles vaccine, Hepatitis vaccine, anti-rabies vaccine, polio vaccine and typhoid vaccine are likely to increase.

Companies are likely to pay greater attention to their human resources development effort in general and management developmental programs in particular. The present state of armed truce

between the trade and the industry is likely to continue in the future but with a difference. The industry is likely to be united more closely than before.

Companies, which have strong research, focus and competence only can achieve a sustainable growth and performance in the borderless future market place. Now the companies are steadily increasing their investment in Research and Development.

Companies that think strategically are the ones that are likely to succeed in the future. Marginal firms are likely to be marginalized. Strategic thinking plays an even greater role in the coming years. Unless the pharmaceutical companies in India start preparing for future competition right now by upgrading in all areas it could be very difficult to exploit growth opportunities. It might become difficult even to survive any longer.

The industry will continue to be in consolidation mode and mood. The last few years have seen a spate of mergers and acquisitions of brands as well as companies. Indian companies continue to be aggressive in pursuing merger and acquisition strategies to gain access to international markets and to reinforce their position. Strategic alliances too will be on the rise particularly in the areas of contract research, contract manufacturing and product licensing<sup>9</sup>.

### **2.3.2 Advantage India:**

As regards the pharmaceutical marketing in the world, India is becoming one of the front runner destinations because of its second largest population in the world, the pace of development of its economy, adoption of technological advancements, economical medical treatment cost and also availability of world renowned physician's etc. Following are the advantages of Indian Healthcare Scenario:

**Competent workforce:** India possesses a skillful work force with high managerial and technical competence. In India after USA we have the largest number of US-FDA approved manufacturing facility which is again reflection of the expertise of manufacturing India is having.

**Cost-effective chemical synthesis:** The track record for development, particularly in the area of improved cost-beneficial chemical synthesis for various drug molecules is excellent.

**Legal and Financial Framework:** India is a democratic country with a solid legal framework and strong financial markets. There is already an established international industry and business community.

**Information and Technology:** It has a good network of world-class educational institutions and established strengths in Information Technology.

**Globalization:** The country is committed to a free market economy and globalization. Above all, it has a 70 million middle class market, which is constantly growing<sup>10</sup>.

## **2.4 Medical Tourism:**

The concept of medical tourism is an age old concept. In this digital era, half a million people travel across the globe for health purposes. People from developed and affluent countries are moving out of their own countries to other destinations, seeking solitude, natural and holistic remedies and eco-friendly experiences. Medical Tourism is one such new area that is ripe with potential.

**Medical travel:** When an individual travel across the border and outside one's customary environment to seek healthcare services.

**Medical Tourist:** Upon arrival, such an individual is called a medical tourist.

**Medical Tourism:** Traveling to a destination in another country to receive medical, dental and surgical care because the destination enables better access to care, provides higher quality care or offers the same treatment at a more affordable price. India is economical medical tourism hub, major or minor, and is equal to the major hubs in terms of quality of staff and equipment. Prices average at a fifth of the United States, with particular deals in dentistry and diagnostic imaging, which approach a tenth the price.

India deals with a higher proportion of major surgery tourists than minor surgery and checkup tourists than the other major hubs, which has given rise to specialist hospitals across India .These hospitals are far out of the reach of most Indians and cater specifically to foreign tourists for very specific needs – for example some centers will focus strongly on the heart surgery while others will deal with joint replacement.

Medical tourism is actively promoted by the government's official policy. India's National health policy 2002, for example, says, "To capitalize on the comparative cost advantage enjoyed by domestic health facilities in the secondary and tertiary sector, the policy will encourage the supply of services to patients of foreign origin on payment. The rendering of such services on payment in foreign exchange will be treated as 'deemed exports' and will be made eligible for all fiscal incentives extended to export earnings.

Best hospitals for medical tourism in India: The list is not exhaustive but illustrative.

1. Apollo Hospital, Chennai
2. Indraprashta Apollo Hospitals, New Delhi
3. Escorts heart Institute and Research Centre, New Delhi
4. Max Super Specialty Hospital, New Delhi
5. Wockhardt Hospital and Kidney Institute, Kolkata

**India's strengths in Medical Tourism:**

- Indian medical centers provide services that are in fact uncommon elsewhere.
- World-class treatment at competitive prices is available.
- Availability of skills, knowledge and resources.
- India's quality of care is world class, competing with any other industrialized country.
- With Ayurveda becoming increasingly popular across the globe, this ancient Indian therapy can be used as a non-surgical treatment for various ailments along with the meditation and yoga. This gives the touch of Indian way to the treatment.
- The diversity of tourist destinations availability: Leisure tourism is already very much in demand in India as the country offers diverse cultural and scenic beauty. India has almost

all sort of destinations like high mountains, vast deserts, scenic beaches, historical monuments, and religious temples, etc. known for its hospitality for tourists.

- Medical tourism in India is growing at a rate of 30 percent per year. It is estimated that India will earn US\$ 2.2. Billion a year through medical tourism by 2012.<sup>11</sup>

## **2.5 Pharmaceutical Export Promotion Council (Pharmexcil):**

The Department had played a pivotal role in the formation of Pharmexcil consequent to the recommendation from 9th Five Year Annual Plan Working Group Report on Drugs and Pharmaceutical. In the light of this, the Department constantly interacts with Pharmexcil in their work areas. The role of Pharmexcil is for facilitation of exports of Drugs, Pharmaceutical, Biotechnology products, Herbal medicines and Diagnostics, to name a few. It is authorized to issue Registration-cum-Membership Certificate (RCMC) which is one of the requirements for the importers and exporters of commodities.

In addition to this, Pharmexcil is concerned with giving export thrust to the various products through visits of delegations to various markets abroad, organizing of seminars, workshops and exhibitions. As a major area of work, Pharmexcil also holds Buyers/Sellers meets and compiles detailed data base on pharmaceutical exports and problems in exporting pharmaceutical group products of Pharmaceutical.

Patent Act removed composition patents from food and drugs, and though it kept process patents, these were shortened to a period of five to seven years.

The lack of patent protection made the Indian market undesirable to the multinational companies that had dominated the market, and while they streamed out, Indian companies started to take their places. They carved a niche in both the Indian and world markets with their expertise in reverse- engineering new processes for manufacturing drugs at low costs. Although some of the larger companies have taken small steps towards drug innovation, the industry as a whole has been following this business model until the present.

Until the 1970s, India's pharmaceutical market was mainly supplied by large international corporations. Only cheap bulk drugs were produced domestically by state-owned companies founded in the 1950s and 60s with the help of the World Health Organization (WHO). These state-run firms provided the foundation for the sector's growth since the 1970s. Back then, Indian government aimed to reduce the country's strong dependence on pharmaceutical imports by flexible patent legislation and to create a self-reliant sector.

In addition, India introduced high tariffs and limits on imported medicines and demanded that foreign pharmaceutical companies reduce their shares in their Indian subsidiaries to two fifths. This made India a less attractive location for international companies, many of which left the country as a consequence. Especially Indian Drugs and Pharmaceutical Ltd. (IDPL) are credited with speeding up the development of a national pharmaceutical industry. In the 1980s, however, the decline of state-run companies began - among other things because of increasing central government bureaucracy and insufficient corporate governance.

By contrast, the weakening of the Patent system and numerous protectionist measures sped up the development of a major national pharmaceutical industry on a private-sector basis, which made it possible to provide the population with a large number of drugs.

Legal changes in India, in 2005, made it considerably more difficult to produce "new" generics. Foreign pharmaceutical, which enjoy 20 years of patent protection, can no longer be copied by means of alternative production procedures and sold in the domestic market. Hence, a reorientation was required in India's pharmaceutical industry. It now focuses on drugs developed in-house and contract research or contract production for western drug makers. The sector's

development is slowed by major infrastructure problems. These are, above all, qualitative and quantitative shortcomings in the power and transport sectors.

In 2001, India's pharmaceutical industry became the focus of public debate when CIPLA, the country's second-largest pharmaceutical company, offered an AIDS drug to African countries for the price of USD 300, while the same preparation cost USD 12,000 in the US.

This was possible because the Indian company produced an all-in-one generic pill which contains all three substances (Stavudine, Lamivudine and Nevirapine) required in the treatment of AIDS. This kind of production is much more difficult in other countries as the patents are held by three different companies. In the final analysis, the price slump was a result India's lax patent legislation. In 2005, patent legislation was tightened, so India's pharmaceutical sector had to adjust<sup>12</sup>.

### **2.5.1 Consolidation of India's Pharmaceutical Industry:**

Up until the 1970s, India's pharmaceutical market was mainly supplied by large international corporations. Only economical bulk drugs were produced domestically by state-owned companies founded in the 1950s and 60s with the help of the World Health Organization (WHO). These state-run firms provided the foundation for the sector's growth since the 1970s.

In 1970, Indian government aimed to reduce the country's strong dependence on pharmaceutical imports by flexible patent legislation and to create a self-reliant sector. In addition, it introduced high tariffs and limits on imported medicines and demanded that foreign pharmaceutical companies reduce their shares in their Indian subsidiaries to two-fifths<sup>13</sup>.

### **2.5.2 Large Market Share for Generic Drugs:**

As there was no efficient patent protection between 1970 and 2005, many Indian drug producers copied expensive original preparations by foreign firms and produced these generics by means of alternative production procedures. This proved more cost-efficient than the expensive development of original preparations as no funds were required for research, which contained the financial risks. This spending may come to as much as EUR 600 m for only one drug. This kind of money could previously only be raised by large corporations in the industrial countries.

The competitiveness of generics producers is based on cost-efficient production. In this field, Indian companies are currently in top position. At one-fifth, India's share in the global market for generic drugs is considerably higher than its share in the overall pharmaceutical market (approx. 2%).

At the same time, India's pharmaceutical companies gained know-how in the manufacture of generic drugs. Hence the name "pharmaceutical country of the poor" which is frequently applied to India. This is of significance for the domestic market as disposable income is as little as EUR 1,900 per year for roughly 140 million of the total of 192 million Indian households, which means the majority of Indians, cannot afford expensive western preparations<sup>14</sup>.

### **2.5.3 Exports of Pharmaceutical Products:**

In 2006, India's pharmaceutical industry exported products worth EUR 3 bn, up from only EUR 650 m in 1996, which was due to the fact that demand for low-cost generic drugs is strongly on the rise, above all in the US, Europe and Japan. At 22%, export growth in 2006 was even twice as high as the global average and in Germany (roughly 11% each).

Meanwhile, India's export ratio has reached 32% about double the figure registered ten years ago. For some time now, India has exported more pharmaceutical products than it imports. Over the last ten years, the export surplus has risen from about EUR 370 m to currently just under EUR 2 bn. Slightly over 80% of the drugs are sold to the US and Europe, where Indian companies are benefiting from the population's purchasing power as well as regulatory changes (greater cost-consciousness).

By contrast, traditional sales markets such as Russia, Southeast Asia, Africa and Latin America have lost its importance. However, only 60 production locations of India's pharmaceutical sector have been certified by the World Health Organization, which implies they comply with the strict quality standards imposed by the US Food and Drug Administration (FDA). Compliance with FDA standards is the precondition for selling products on the important US market<sup>15</sup>.

#### **2.5.4 Population Growth and Pharmaceutical Business in India:**

India's pharmaceutical sector is receiving a major boost from population growth. According to UN estimates, the population total looks set to rise from 1.1 bn at present to 1.4 bn in 2020. Up until 2020, India will see as many children being born as there are people living in Germany, France, the UK and Italy together.

By 2025, India will probably have overtaken China as the world's most populous Country. Its population growth results, not least from higher life expectancy. This is attributable, among other things, to improved preventive healthcare. Of course, though, average life expectancy in India is still markedly lower than in western countries. While the figure is 64 years for men and 66 years for women in India, life expectancy in Germany is 76 years for men and 82 years for women.

The ageing of the population in India offers considerable market opportunities. According to a UN estimate, the share of people over the age of 65 in the total population will rise from 5% currently to 8% in 2025. This would mean roughly 55 million more people aged 65 and over, than today. As a result, typical age-related illnesses such as cancer, diabetes and cardio-vascular diseases will be more wide-spread.

The pharmaceutical sector will also receive a boost from the gradual spreading of civilization diseases such as obesity and diabetes. According to PricewaterhouseCoopers (PwC), the number of Indians with diabetes will reach approx. 74 m in 2025 (currently 34 m); this is roughly the population of Turkey today. In the developing countries as a whole, there could be just fewer than 230 m. diabetes patients. This development should benefit India's generics manufacturers<sup>16</sup>.

### **2.5.5 Upcoming Extra-Urban Markets in India Rural Market Coverage:**

Indian pharmaceutical companies are eyeing the global markets and employing tactics to grab a piece of the international consumers' wallet. But for long, rural market in India was unattended by most of the pharmaceutical companies. The top companies cover over 80% in urban markets but rural reach is around 30% whereas 70% of Indian population stays in rural market.

This fact is been realized by most of pharmaceutical companies and thus they have started focusing now on rural coverage either through the separate division or through existing field force<sup>17</sup>.

### **Marketing Activities of Pharmaceutical Companies in Rural Areas**

Rural marketing activities of many pharmaceutical companies have been traditionally restricted to markets with stocks of the concerned product; and stocking them with the chemists or dispensing doctors. Not much emphasis was given to employing novel marketing strategies to woo the rural Indian doctors and patients.

The pharmaceutical industry as such needs a lot of facilities and experts. As these facilities and experts are available only in the urban areas, our market comprises predominantly of urban areas (70 percent of the total market) and hardly 30 percent in rural areas.

About 70 percent of India resides in villages, which (according to various sources) comes approximately to 74,26,17,747 of the whopping 1.1 billion of the total Indian population. In India, only 30 percent of the population has access to quality medicines and the treatment gap in almost every chronic disease segment is more than 65 percent. Therefore, the opportunity is huge.

The best and the largest of pharmaceutical companies used to reach only Class 1 and II towns. Still in many pharmaceutical companies, marketing in the villages possibly includes some unplanned taxi tours or they leave it to the stockiest network to make the goods available without any doctor promotion in the rural areas. Hence, the villages present a huge untapped market.

The rural market is indeed very large and is growing. There is an estimated 20 million middle class households spread across 6,00,000 villages in rural India, which is equal to the number of middle class households in urban India. In addition, the disposable income in rural India is much more as compared to urban areas. Food, shelter and primary education are virtually free in rural areas, whereas a substantial chunk of the income in urban areas is spent on these. As a consequence, they spend on healthcare in rural India is also increasing<sup>18</sup>.

### **2.5.6 The Rural Market Area:**

Given the potential of the rural markets, these days, companies are more open to reaching the rural consumer than even before. However, most of the products that are being advertised and marketed aggressively are the low risk-low involvement products like pain balms, lozenges, cough and cold syrups.

The high risk-high involvement products like cardiac or cancer products are not advertised or marketed through media as regulations prevent this. However, companies have often taken the community-welfare route to educate the rural consumers about a particular disease segment and make them aware of the treatments available. Companies are conducting healthcare workshops in the rural areas by tapping the doctors there. Such programmes offer mutual advantages to both the parties concerned. The doctors benefit through the increased footfall of prospective patients and companies benefit through the brand awareness and possibility of increased prescriptions.

They have also done rural road shows in the interiors of Maharashtra in a traditional lawani set up. The objective was to generate sufficient word- of-mouth so that the brand remains on tip of the tongue when the consumers actually decide to make the purchase.

As far as Pinkoo Gripe Water, the flagship brand from the Ajanta Pharmaceutical stable, is concerned, the product was a rural product from the very beginning. The promotion too was rural oriented, ranging from stalls at fairs to showing slides in cinema halls. They also have vans that move across regions. They also educate tertiary health workers, who work in smaller villages. They train and brief them so that they can try to promote the products. For Pinkoo Gripe Water, the entire promotion strategy is executed in local languages.

High fundas of metro marketing do not work in rural markets and companies should focus more on what the rural customer/consumer understands and what he likes. One of the strategies implemented by the company is by organizing a 'healthy baby' contest.

A good example of rural promotion of healthcare products is the Goli Ke Humjoli Campaign, which helped trigger the sales of a whole range of oral contraceptive brands. The entire market grew by a good 22 percent and created an excellent platform for low-priced contraceptives in India<sup>19</sup>.

### **The Speed Breakers:**

Despite of 70% population staying in rural India, thought comes to mind then what was stopping the pharmaceutical companies from exploiting the full potential of rural markets? Many companies try to make sense of the rural opportunity, but they often give up due to lack of skill sets, expertise and experience to reach these unexplored territories. This is because most of the companies evaluate this opportunity in a knee-jerk manner and give up when it becomes logistically unmanageable.

Few examples of companies like P & G and Reckitt, with their OTC offerings try to reach the rural markets, more through their FMCG expertise and network. The biggest problem that marketers face today is the cost of reaching the rural consumer. Rural markets tend to be far more spread out in geographical spread where political scenario of country also having an important role to play apart from cost of promotion for pharmaceutical companies<sup>20</sup>.

## **2.7 Few Indian Pharmaceutical Companies Progress as Case and Case-lets:**

In the process of establishing the fact of Indian pharmaceutical companies global competitiveness we can evaluate the standing of some of the Indian companies those have taken the shape of MNCs or global companies. Indian pharmaceutical corporate who could able to come up to the global standard are Ranbaxy Laboratories, Dr.Reddy's Lab, Nicholas Piramal, Wockhard, Sun Pharma & Lupin these are the few names to mention here. Growth and performance of Indian pharmaceutical corporate from 1996-2004 can be well understood from (table-4) this shows that Indian pharmaceutical industry started consolidating themselves.

As mentioned earlier, scenario of Indian pharmaceutical industry had changed drastically after 1990s. Some of the new generation Indian companies could progress and consolidate by throwing challenges to MNCs in Indian operation while could expand their operation in overseas market.

### **2.7.1 RANBAXY:**

Ranbaxy Laboratories was started in the year 1961 with a small step and could list the company in Bombay Stock Exchange in 1973. Ranbaxy's initial business focus was on manufacturing of active pharmaceutical ingredient (API) while they started looking for opportunity in international market too for their API business. In the year 1977, Ranbaxy could establish a subsidiary in Nigeria through a joint venture and expanded operation in 1984 to Malaysia.

Since its initial days in 1970, Ranbaxy could focus on their R&D activity with a small step focusing on process innovation because they could analyse opportunity in process innovation. In due course of time could develop a new process or novel way of manufacturing anti-ulcerant

drug Ranitidine, which is world's bestselling drug and generic version of Glaxo's(MNCs) Zantac. This was the beginning of manufacturing of generic drugs and ultimately they could establish their research foundation in 1985.<sup>21</sup>

Further boost for Ranbaxy's manufacturing process was when they got FDA approval for one of their plant in the year 1988. At this stage Ranbaxy could take initiative for development of a new process for a drug known as Cefaclor, patent was owned by multinational Eli Lilly, finally they could develop a new process for manufacturing of Cefaclor with a better yield.

Ranbaxy wanted to market Cefaclor in US but they had some doubt on their marketing skill for US market so they had gone for a 5 years tie-up with Eli Lilly for manufacturing as well as marketing of Cefaclor by forming a joint venture with headquartered in Indiana. This tie-up could not last long and they had to separate after 3 years of operation. After this Ranbaxy started their own operation in US and within four years of time could touched the US\$ 100 million mark for the sales in the US.

At this stage company was becoming a true global company by listing them in Luxembourg stock exchange and raised money for their global generic drugs business with the help of foreign investment and foreign acquisition. It acquired a FDA-approved US-manufacturer, Ohm Laboratories. In 1996, it started a joint venture with US based firm Schein Pharmaceuticals for marketing Ranitidine in US. In the year 1994 they could set up a subsidiary in UK and another manufacturing plant in Ireland in the year 1995. These steps could help Ranbaxy to enter European markets. In the year 2004, it could acquire the fifth largest generic company in France.<sup>22</sup>

Ranbaxy stepped up its R&D expenditure from year 1995, earlier it was 2% of sales to 5% of sales and could set up a state-of-the art multi-disciplinary R&D facilities at Gurgaon (Near Delhi). Researcher will attempt to develop this case further as future study.

### **2.7.2 Dr. Reddy's Laboratories:**

Operation of Dr. Reddy's Laboratories popularly known as DRL was started by Dr. Anji Reddy in the year 1986. Companies' initial focus was on manufacturing of active pharmaceutical ingredient (API) and became first Indian company to export API to Europe.

In domestic market as well as international market DRL could get reorganization very fast as quality manufacturer of API and formulation. Norilet was the first product which was well recognized by market a formulation from DRL and after that launch of OMEZ (Omeprazole) was a big success, price of the product was 50% lower than the rest of the brands which was due to superior process technology. OMEZ (Omeprazole) was in news because this product could throw a challenge to the world's number one product Zinetac (Ranitidine) of Glaxo.

In 1999 DRL submitted a Para IV application for Ompeprazole at the same time could market the product successfully in India. Before this in the year 1997 DRL filed its first ANDA for Ranitidine 75 mg tablets.

DRL could taste a great success in international market with their generic business by launching generic drug Fluoxetine (a generic version of Eli Lilly's Prozac) in US and recognized as first Indian company to do so. This success could increase their generic turnover massively and touched \$23.2 million for the third quarter of 2001 with Fluoxetine sales contributing 87% of these sales. After this DRL could launch other products like Ibuprofen tablets 400, 600 and 800

mg in the US under its own brand name. During 2003 DRL started building strong distribution network in US for their own product which was a major achievement being Indian company.

Further consolidation took place in their international business by strengthening international manufacturing facilities as they could enter Russian market by a joint venture with Biomed in 1992 and in the year 2002 they could convert this joint venture to a subsidiary. At domestic front DRL merged Cheminor Drug Limited (CDL) which was engaged in API manufacturing and by this they could meet the demand of North America and European market. In 1999 DRL's acquisition of domestic company American Remedies Limited could make them number three company in India after Ranbaxy and Glaxo, with this they could consolidate their manufacturing as well as marketing power.

DRL could start their international fund raising exercise in the year 2001 with the objective of consolidation of international operation by utilizing those fund in improving production facilities as well as improving network They could become a listed company in New York Stock exchange by initial public offering of US\$ 132.8 million ADS ( American depository shares ).

Some of the acquisition took place in the year 2002 like acquisition of BMS Laboratories and its wholly owned subsidiary on the other hand with the help of Meridian UK they could enter and expand operation in European market. Acquisition of US-based Trigensis could provide advantage to DRL in dermatology segment with some proprietary technologies and in the year 2004 they could acquire the company. In the year 2003 DRL invested US\$ 5.25 million in the equity capital of Bio Sciences Ltd.<sup>23</sup>Researcher will attempt to develop this case further as future study.

### **2.7.3 Pharmaceutical Marketing Practices in India:**

In the process of customer creation in industry like pharmaceutical formulation where organisations drive is to create a customer base for their products which takes a long process or chain. So organisations in Indian context must look for an approach which can provide them a sustainable growth with present set of product portfolio or basket (Smarta 1999). While analyzing the consumption pattern of pharmaceutical formulations in Indian context or even global scenario, either medical practitioners or retail chemists play an important role in consumption of medicine.

In our discussion we will mention these medicines as branded pharmaceutical formulation which is known as generic product also but with a brand name also out of patent products. In Indian context pharmaceutical companies as standard marketing or sales practice promote their products at doctor's level with the help of a structured sales force management popularly known as medical representatives and entire hierarchy as shown in (Table 1). In this process sales force work as link between medical practitioners and companies.

Medical practitioners provide adequate time to companies sales force by listening their presentation which is science based mainly (covering effect as well as side effect of a product along with detail usage and dose) on various products and when practitioners are finally convinced start prescription of those products to the patients whom they treat which are purchased by patients at retail chemists and consumed by patients accordingly. So in the entire consumption pattern registered medical practitioner or doctor play most important role.

Consequently, on the basis of available healthcare facility and practices in India, pharmaceutical companies focus or align their marketing strategy and products to capture a sizeable amount of market share. There are companies whose presence is very strong in metros

or cities where as some of the companies are strong in both the markets that is rural as well as urban. Considering the geographical spread of the country and cost of every call by medical representative to a doctor managing a large field force is another challenge for companies operating in India.

Every country is having own code of conduct of pharmaceutical products marketing practices which is mainly in line with the code of practice of International Federation Of Pharmaceutical Manufacturers & Associations (IFPMA) which mainly define how to promote pharmaceutical products. Here pharmaceutical product means all pharmaceutical or biological products (irrespective of patent status and/or whether they are branded or not) which are intended to be used on the prescription of, or under the supervision of, a healthcare professional, and which are intended for use in the diagnosis, treatment or prevention of disease in humans, or to affect the structure or any function of human body.

Promotion means any activity undertaken, organized or sponsored by a member company which is directed at healthcare professionals to promote the prescription, recommendation, supply, administration or consumption of its pharmaceutical product(s) through all methods of communications, including the internet. In the said guideline other terms like healthcare professional, patient organization, medical institution, Member Company, member association has also been defined in detail along with the scope.

All the pharmaceutical companies are supposed to follow the guideline which is considered to be a responsible marketing practices in pharmaceutical sector. In today's scenario in Indian context medical council of India (MCI) which is a regulatory body apart from other bodies who takes care of pricing (maximum retail price-MRP) of a pharmaceutical products creating

restriction on pharmaceutical companies on free physician sample distribution, gifts or even sponsoring a doctor in seminar or other related activities. Concern authorities are coming out with various regulations so majority of the pharmaceutical products are going under price control in other word authorities are guiding for maximum retail price (MRP) limit. Consequently Indian pharmaceutical industry is under pressure for product, price as well as promotion which ultimately going to affect overall return on investment so present scenario is another challenge for the industry.<sup>24</sup>

#### **2.7.4 Emergence Of a new era- Mankind Pharmaceutical:**

Pre-independence scenario of Indian pharmaceutical industry was few manufacturer who used to manufacture pharmaceutical products as there was a gap in demand and supply so companies like Bengal Chemical, Alembic, Sarabhai where present in the business. Post independence scenario is quite different where companies like Lupin, Ranbaxy, Dr. Reddy's and others could make their presence up to global standard while companies like Alchem, Aristo and others started throwing challenge to domestic companies with their strong presence in the Indian market.

Passion with professionalism could help them to be in top by creating a new empire 'Mankind Pharmaceutical' in Indian pharmaceutical industry. As quoted many a time, even a decade ago Juneja brothers of Mankind pharmaceutical might not be knowing that their company's products and market share had been talked in couple of sales review meetings of company's like Ranbaxy.

In the year 2001 in a sales review meeting of Ranbaxy former regional director Sanjiv Kaul commented on a product of Mankind which had been listed and quoted as their one of the

competitor product by saying nothing to worry because Mankind is a regional company only. Incidentally, after couple of months in another meeting of Ranbaxy, Kaul came across two products of Mankind as competitor of Ranbaxy's product and could realize the fact that this company must be tracked with due diligence. After couple of years Sanjiv Kaul led ChrysCapital invested around Rs108 crore in Mankind Pharma (Entrepreneur).

Growth and progression of some of the Indian pharmaceutical companies can always be quoted in business platform but growth of Mankind is having some difference. Business analysts may put forward different word but Mankind pharmaceutical could grow when Indian pharmaceutical industry was facing the challenge of product patent regime.

A detail study of the growth of Indian pharmaceutical companies like Ranbaxy, Sun pharmaceuticals, Torrent, Lupin, Alchem and Aristo to mention few will always suggest that all the companies could grow and consolidate during the period of process patent which was advantage or even a real support to their growth as in this period multinational companies facing problem with the industry regulation in India.<sup>25</sup>

#### **2.7.5 Launch Story of Mankind Pharmaceutical:**

Business philosophy as well as mantras may not support the idea of initiating a business without a clear plan or roadmap but Juneja brothers of Mankind pharmaceutical did it from scratch even without required manpower and infrastructure along with a very limited capital base. Starting a pharmaceutical business with Rs50 lakh capital and 20 field force in a single state of India shows entrepreneurial guts by Juneja brothers. In present scenario when they are quite significant in size and volume in the industry, consequently focusing on further value creation proposition along with consolidation (Entrepreneur).

Today R.C. Juneja who is founder and chairman of Mankind pharmaceutical born in 1955 in Meerut a known town of Uttar Pradesh can face press interviews with a charming face along with his brother Rajeev. Both the brothers having one common strength that is exposure of pharmaceutical product promotion or sales as medical representative.

In pharmaceutical marketing apart from knowing the markets management of sales force is always a challenge for the companies. This challenge both the brothers could face nicely because of their own sales management background which could be considered as prerequisite in pharmaceutical marketing business.

In the year 1975 R.C. Juneja was a medical representative at Kee Pharma and ultimately a first-line (Area Sales Manager) manager with Lupin pharmaceutical which is a company with all India market presence and commendable market share. R.C. Juneja and Rajeev Juneja could join their third brother and his company Bestochem in very early age where Rajeev could work as medical representative as well as area manager. Both the brothers left Bestochem to form Mankind Pharmaceutical in the year 1995.

Rajeev's experience of pharmaceutical business started with the interaction phase with medical representatives in his brothers company Bestochem, where initially he was doing some administrative work but when formed Mankind he was responsible for marketing operation while R.C. Juneja looked after the finance and production.

As quoted by Juneja brothers many a times, core of the business formation almost took two years time as they had approximately only 52 people working with them those days. However, they could achieve a turnover of Rs 4 crores in their first year of operation and which could double in the next year.

Strength of pharmaceutical formulation with ethical promotion is that organization can achieve highest profitability with even low turnover because of higher profitability in the industry. Today Mankind's turnover is Rs1500 crores plus and even planning to achieve a turnover of Rs5000 crore plus in another five years and hold number one position in country.<sup>26</sup>

### **Growth Strategy:**

In pharmaceutical product promotion achieving sales target has been always a major point for majority of the organizations where Mankind pharmaceutical is not an exception. However, Juneja brothers could adopt a bit different strategy where they could focus and communicate the same sales objective with transparency by sharing their views and listening to the views of 52 members of their organization. In sales review meetings as well as one to one interaction they could communicate the importance of achieving sales target while kept human touch as major stimuli.

Consequently whole organization could focus on sales oriented approach or objective achievement oriented approach. They always focus on moral and emotional support to their people. These 52 members team could be considered as highly dedicated as well as motivated team so they achieved the initial volume which consequently helped them for future expansion.

Indian pharmaceutical industry also experiencing price sensitivity, however medicines or pharmaceutical formulation products are ultimately consumed by patients after prescribed by a medical practitioner or doctor. Though lowest pricing of the product is an important tool and can be part of strategy and same has been adopted by Mankind but they had to face some challenges when offered lowest price products in the respective therapeutic segment.

Doctors, wholesalers as well as retailers even started putting a question mark on their quality in other word on efficiency of the products, which Mankind could face with focused and vigorous promotion at doctors level with dedicated team as quoted by R.C.Juneja. Another interesting marketing practice could be quoted here of Mankind pharmaceutical on their initial focus on rural market in India.

Majority of the organizations (Alchem and Aristo Pharmaceutical can be considered as few more with same approach) first focus on urban market but Mankind adopted the reverse strategy by concentrating on rural market first. Understanding the strength and potential of rural market many companies even created separate division to cover rural India.

As an organization since their initial days Mankind tried to adopt market oriented as well as marketing oriented practices. In market oriented front as they did not had any research product with them so focused on combination products (combining two or more pharmaceutical ingredients) and marketing products at lowest possible price many a time those combinations are even new for the market. As an example of pricing as strategy, they had launched a product Ofloxacin (antibiotic as pharmaceutical ingredient) with brand name Genflox. The existing products on the same category was costing Rs35 a tablet while Genflox of Mankind was costing at Rs12. There are other products also where they placed at a lowest possible cost.

Today Mankind is having more than 6000 dedicated field force working across the country and communicating to the doctors where in initial days convincing doctor community with this price advantage was challenge because question was raised on quality and how they could offer products at such a low cost. Justification was put forward on two fronts, one is after certain period price of active pharmaceutical ingredient (API) goes down which is the major cost of the

product and majority companies do not lower their price during this period which Mankind did secondly they could pass on the cost advantage to the patients while recording a moderate profitability.

Today Mankind is leader on various categories with one or more products with respective category or therapeutic segment while becoming number 8 company and one of the fastest growing company of the industry.

After achieving a turnover of Rs1500 crore plus and with 6000 plus field force while making presence in every district as well as talukas of pan India Mankind is aiming for top most position in Indian pharmaceutical industry with a revenue of about Rs5,000 crore as quoted by Juneja brothers.

### **Globalize Market & Strategy Ahead:**

Looking at recent developments in Indian pharmaceutical industry and developments like sell out of Ranbaxy to Daichii, Nicholas Piramals formulation business to Abbott and the case of Paras pharmaceuticals can well be considered as a strategic gap by Indian pharmaceutical companies. Strategic gap in a sense when Industry is research and development (R&D) as well as knowledge driven Indian companies could not create their R&D base sufficiently as a result now they are in a race to sell out their business empire while realizing the fact that new product development in India even considered to be impossible now.

Approximate cost of developing a new drug or molecule in R&D comes to approximately Rs10,000 crore and even 10 to 15 years of vigorous research and various trials which is equal to the sell price of Ranbaxy to Daichii. In this particular context Mankind is not also an exception

because they achieved their present volume in their domestic operation while they do not have any export operation which they are planning now to start.

Mankind's recent plan is to enter market like Srilanka where there is no concept of maximum retail price (MRP) and Bangladesh as well as Africa by setting up their own office and network. As they are having a strong presence in Indian market so in search of some multinational companies who are planning to enter Indian market and Mankind can look for a marketing tie-up with them.

Further, realizing the importance of R&D base they are planning to invest on this front also but debatable point is if they invest now on R&D when can they expect some new molecule to come out from their R&D in which Ranbaxy even tried their acumen? On one hand they do not have R&D with them on the other hand number of new molecules or products coming out of R&D has been reduced drastically in global scenario too. Interestingly at this point of time number of products with volume coming out of patent is very high. So considering the overall scenario in global as well as domestic market Mankind must look for a strategic choice to maintain their position or even for further consolidation which will test their business skill further (Appendix ix).

As per the guideline and recommendation of government of India and respective bodies for promotion of small and medium enterprises the conceptual framework for pharmaceutical industry also remains same as for other sector. There has been major as well as minor changes been observed in policy which has direct as well as indirect impact on pharmaceutical industry too. While analyzing the data and nature of pharmaceutical industry which is always science and knowledge driven focus on regulatory affair has been observed in the framework.

Classification of industry along with nature is based on types of products adopted for manufacturing like formulation; bulk further divisions are also there. While raised the question in individual discussion as well as focus group interview on the increase of number of registered pharmaceutical companies various points came in surface where most important point is profitability and opportunity are the major points of attraction for entrepreneurs in this sector. However, in conceptual framework during survey on the mode of organization it was quite obvious that lack of concrete planning is missing. Many a time because of government regulation and entrepreneur's past professional experience as chemist in pharmaceutical industry motivated them to initiate or form their present venture. Paradoxical point could well be observed because of capacity utilization of their unit they are surviving but always looking forward for a better opportunity. Capacity utilization in a sense is they have job work for other established companies as a result they can run the show however in job work profitability is low.<sup>27</sup>

## **2.8 Challenges in Small and Medium Enterprises:**

Government of India under the development along with encouragement of micro, small and medium enterprises could unfold a framework where turnover along with investment in plant and machinery is a major criterion. Present study could compare the nature of industry and investment pattern along with the government regulations where on a major point during interview a gap could well be observed.

In pharmaceutical manufacturing to full-fill the regulation like schedule-M, good manufacturing practices (GMP) along with world health organization (WHO) to upgrade the manufacturing unit we need to consider the further investment part which is much higher than the routine investment. Further, to meet the need of the customer whether domestic or overseas

depending upon type of product that is liquid, solid or injections on packaging front customers will always place the most modern and attractive options. For example in oral capsule form in Indian market there is a popular demand of alu-alu pack which is depended on availability of a particular machine and further cost is involved in it.

Paradoxical point is older manufacturing pattern is replaced by the modern machines which is costly affair for entrepreneurs and in majority of the cases entrepreneurs fail to upgrade their production unit in time. However as quoted in reports production efficiency is always depended on few factors like:

- a) Capacity utilization is a key driver in cost management and production efficiency
- b) Contract manufacturers have lower product margins, resulting in higher conversion costs as a percentage of total sales
- c) Too much variety in product types can lead to under-utilized equipment and diluted management, maintenance and quality focus.

While compared with the entrepreneurs view point they could agree on all three points and they look for expert support on all three to improve their production efficiency. They are with the view point that with their own marketing set-up better profitability can always be achieved which they lack at this point of time.

While conducting focus group interviews as well as personal interviews of some of the entrepreneurs it was quite obvious and evident that primary data generation is quite difficult from them, consequently same became limitation of this study. However from available data following case-lets can be presented without disclosing the identity of the organization as requested by the entrepreneurs.

One case-let is presented here by mentioning name of the organization because some published data was available and some could be collected from pharmaceutical professionals. Present case-lets will provide enough direction for future in depth study which can provide further direction to the problem areas.<sup>28</sup>

### **2.8.1 CASE-LET 1:**

Mr. Ravi Saxena (name changed for identity purpose) never had a dream even that someday he will own a pharmaceutical production unit though as small and medium enterprises. With a smiling face he could reply yes sir I own this plant which is producing approximately one hundred products in liquid form of various composition. Surprising to note but he is running the business with required profit though looking for further volume with profit.

When enquired we could found that he used to work with the company as employee and had a very good relation with the owner who was the first generation entrepreneur and started this company and Mr. Saxena is also continuing with the same name now. Initiator as first generation entrepreneur could realize that his sons are not interested to run the business so the most reliable employee of him Mr. Saxena got the offer from him to continue the show.

Mr. Saxena though not qualified enough and used to work in the same unit with few hundred rupees salary took the opportunity and took over the charge as owner. After approximately fifteen years of operation which he is managing independently now, with a profit and no liability is worried too for future growth. While interaction with Mr. Saxena who is a very down to the earth personality and to some extent very clear and open in his thought could summarize few points as his problem area. He is worried because of following points:

- a) He could control his operation up to present level single handedly and surviving but worried for further growth because his turnover is less than 1 crore in a year.
- b) His unit is located in a small town of Gujarat where at local level even qualified pharmaceutical professionals are not available while he is ready to offer good remuneration but people are not even ready to accept his offer from nearby bigger towns/cities. He could even share his view that whether, we as professional can help him or not?
- c) Though he can assess the point that he should expand his operation mainly in terms of market and marketing but unable to do so because not having skilled professional with him.
- d) At manufacturing level he is not expanding to other section like oral solids (tablets/capsules) or even injectable because he cannot control the required marketing expertise. Further, he could upgrade his plant up to schedule-M as per the guideline and planning for GMP (good manufacturing practices) but when asked about why not WHO-GMP? His reply was when he cannot reach up to domestic market fully so why to plan for export as WHO-GMP compliance is pre-requisite for exporting products to other countries.

**Managerial implication and suggestion:**

On the basis of discussion we had with the entrepreneur (Mr. Saxena) following points could be placed before respective bodies and authorities for future research and consideration. Pharmaceutical business because of profitability is highly attractive but always knowledge driven in nature so authorities must consider followings for their policy framework.

- a) Pharmaceutical sector should not focus only on production front but must provide enough support to entrepreneurs in market as well as marketing front.
- b) Academic research must be supported and encouraged to explore more data to identify problem areas to provide a sustainable growth to the SME sector.
- c) Product selection to positioning must be supported in professional manner as a result healthy competition can be encouraged.

### **2.8.2 CASE-LET 2:**

In Indian pharmaceutical industry rise and fall of regional companies are known to all keeping updated information on sector. Rise of Ranbaxy from scratch to the present level up to sell out to Japanese giant Daichi is a lesson for strategist too. As quoted in story of Ranbaxy by Bhupinder arora in his book Ranbaxy also started journey as pharmaceutical trading house. In this case-let we are presenting a case which is again example how number of registered pharmaceutical companies growing in India? When conducted the interview it was again evident that Arora brothers (Name changed) inspired by profitability in pharmaceutical formulation business started their operation sometime in 1980's. Neither they have registered the company nor the products (brands) with trade mark authority but they could arrange for a loan license production arrangement at Gujarat.

Loan license arrangement is a production arrangement under another company having entire production facility so here two organizations are in business transaction. Arora brothers could even provide a name to their company as they will market their products in a particular state by

promoting products at doctors' level. To promote their company's products (formulations with a specific name) they could recruit some medical representatives who will directly report to them.

Pharmaceutical formulations those days even could provide a profit of 400%, while cost of the products are even lowest in India (Table 2) so survival with a small volume was possible for them because of higher profitability. As quoted in the book of Hisrich (entrepreneurship) and types of entrepreneur Arora brothers could fall under as life style entrepreneur though entered in a business where high profitability is there.

In loan license arrangement those days regulation was even if you do not produce any product in a particular month you have to pay a fixed amount to the manufacturer for the license. They have to keep an office in that particular town where loan license arrangement has been taken so that was another cost of business. This has been observed many a time in present style of pharmaceutical entrepreneurship entire financial planning is based on credit mainly in backward integration which is another area of detail study. Because of improper financial backup in the case of Arora brothers also after few years of operation they failed to pay even their loan license fee to the manufacturer.

Consequently they had to work for another business model as a result they invited another partner who is the production in charge of the production unit where Arora brothers having loan license. Entire data could be gathered through this person for our present case-let whose name also we have to change for identity purpose. While interviewed the person (Mr. Ravi) he could share the profitability attracted him to the business though not having much idea on pharmaceutical marketing as his core area is manufacturing.

From our study even it is clear as per the form of organization entire arrangement is very vague as they cannot approach financial institutions even for working capital because of structure of the organization. Mr. Ravi could arrange some finance from private source in tune of rupees 10 lakhs to boost the operation while took a risk of launching marketing operation in another state with independent control.

As Mr. Ravi not having enough marketing experience so too help of another person who is his colleague having some experience of marketing. They launched their marketing operation in a state with a structure of 16 medical representative and 3 area sales manages along with 1 regional managers with a sizeable amount of fixed cost.

Because of improper financial planning and back-up operation could survive for six months only and entire marketing operation of the state could collapse, however organization as business entity is surviving till date.<sup>29</sup>

## **Learning:**

While comparing both the case lets as discussed in brief we can summarize following points:

- a) In case-let one there is financial planning so Mr. Saxena is surviving but looking for professional help for future growth.
- b) In case-let two there is a lack of financial planning which is again a professional help Mr. Ravi is looking for to survive in the business.
- c) If further study could be conducted on this sector possibility of finding out too many similar cases like present cases can not be ignored.

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