CHAPTER - I
INTRODUCTION

1.1 BACKGROUND

The world pharmaceutical market is estimated to be around US$ 317 billion. The Indian pharmaceutical industry represents barely more than 1% of this market in value terms, i.e. around Rs. 414 billions\(^1\).

The pharmaceutical sector has transformed a great deal over the past few decades. The top five companies, which were vibrant 20 years ago, are hardly so anymore. Glaxo, Sarabhai, Pfizer, and Hoechst, which were leaders, in 1980s, are not even in the top five.

The pharmaceutical sector, once the domain of multinational companies, is now being led by professionally managed Indian companies. The downfall of many erstwhile pharmaceutical leaders can be attributed to their rigid marketing practices. Pharmaceutical promotion and marketing expenditure averages 20-30% of sales turnover\(^2\), which is about two to three times the expenditure on research and development. This expenditure is mainly directed at changing the prescribing behaviour of physicians.

Personal selling is the most widely employed method in pharmaceutical marketing the world over. Although a very costly method of promotion, it is most effective in generating prescriptions. The essence of every business is marketing, and the essence of pharmaceutical marketing is prescription generation. Marketers believe that the prescription decision is a combination of rational and emotional processes. A physician objectively evaluates all the alternative therapies and matches his needs with the need satisfying capabilities of the medicinal products and makes his choice accordingly.

While deciding the brand, he is swept away by product attributes and advertisement appeals that have no relevance with the need-satisfying capabilities of
the product. Thus the physician’s choice of a drug molecule for drug therapy is a rational decision, while his choice of a brand is an emotional decision3.

Every pharmaceutical company’s aim is to maximize return on investment (ROI), increase sales and earn decent profit for sustenance and growth of the company. Pharmaceutical companies have to primarily depend on personal selling to promote their products in the market as the target audience and customers are different, who are not the end users but merely influencers. These influencers are medical practitioners referred to as doctors or physicians by general public.

Companies direct all their efforts to sell the products to these distinct classes of customers i.e. doctors and train the field force to take on the task of promoting products to highly skilled and knowledgeable customers.

Hence pharmaceutical selling is distinct from other kinds of selling. It requires specialized efforts by the pharmaceutical companies to carve a niche for themselves in the marketplace with a great number of players in the market vying constantly and fiercely for better market share4.

1.2 THE STUDY: ITS NEED AND IMPORTANCE

The Researcher felt the need for this study because his first hand experience in handling marketing and sales promotion functions while working in three pharmaceutical companies namely PCI, Kopran Ltd and Cadila pharmaceutical.

In view of Researcher’s exposure to pharmaceutical marketing in various capacities such as, ‘Medical representative and field manager in Cadila pharmaceuticals, ‘Area manager for PCI’ and ‘District manager for Kopran Ltd’. Researcher has gained good insight and understanding of Pharmaceutical marketing and promotions. This has tempted him to consider this topic for his research.

Above all, the importance of this topic can be gauzed from the all-encompassing influence of Pharmaceutical companies in our healthcare set-up which cannot be ignored. It can also be said that those who had understood the operation of
pharmaceutical companies can understand the overall healthcare condition, importance given to human development index & healthcare industry. Pharmaceutical industry is the important part of the total healthcare and wellness sector.

1.3 PILOT STUDY

A pilot study conducted by the researcher reveals that one third of doctors mentioned that the visit of medical representative is nothing but waste of time as they do not contribute much to the knowledge of doctors. This is a very crucial issue to be studied.

The falling standards of medical representatives have led to development of external agencies to promote the products. The emergence of agency-led promotion, which is fairly common in the US, is becoming more and more popular in India with companies like Lupin and Pfizer making use of it.

The once highly unionized and militant representatives have now mellowed down. But it is very difficult to get good talent for medical representatives as the youth have many more options today. This has been further complicated by doctors who do not give adequate time to medical representatives. Hence it’s become a challenging task for the Pharmaceutical companies to attract talent and also to train medical representatives.

It is difficult for a medical representative to detail multiple products in about three to five minutes. Advertisements in pharmaceuticals journals continue to be the last option. Samples, which were once a promotional too, have declined in importance. These days, many doctors prefer gifts instead of samples and top doctors expect better gifts than mere key chains, pens and so on. However, “patient centric” activities are emerging as an important tool in promoting the product. Hence the role of Medical Representative has become more important.

Doctors are becoming more demanding and demarcation of ethical practice has diluted. High expectation of the doctors towards such demand has led many companies to adopt the corrupt practices which may lead downward trend for
marketing professional. This is quite disturbing. Hence the study will focus on the administrative pattern followed by the pharmaceutical companies in marketing and promotion activities on one hand and parameters which are essential for the effective performance of the Medical representative.

Since the pharmaceutical marketing is dependent on a triangle that is medical representatives, doctors and chemists. The marketing oriented companies are keeping their major focus on doctors and medical representatives and spending fairly good amount of resources on the development of their valuable human resource i.e Medical Representatives.

A pilot study of 30 respondents consisting of Doctors, Medical Representatives, chemist and Pharmaceutical executives revealed a mean of 4. This variable was measured using 5 point scale. (5= strongly agree, 4 = agree, 3 = neither agree nor disagree, 2 = disagree, 1 = strongly disagree). This pilot study result was translated into Null hypothesis and was tested using a larger sample size. The statistical technique used is one sample t test.

1.4 THE PROBLEMS

The literature scan and the researcher’s personal experience brought out in sharp focus on various problems which can be summarized as under:

1) The prescription behaviour of doctors has always remained an enigma to the pharmaceutical marketer.

2) So far all the earlier studies only explored doctors’ opinion. However all the four major players’ i.e. doctors, Medical Representatives, Chemists and Pharmaceutical executives need to be considered while interpreting pharma marketing more specifically the promotion aspect.

3) Even today many pharmaceutical companies are still guided by tradition and past experience while budgeting allocations for marketing spend totally neglecting the change in the doctors’ prescription habits which is influenced by many factors. The doctors’ prescription habits may depend on number of variables. Pharmaceutical marketers have diagonally diverse opinions on these variables which influence doctors
prescribing behaviour. There is therefore a need to explore these variables role in enhancing the prescription rate specifically in the context of the role of Medical Representatives.

1.5 THE KNOWLEDGE GAP

The researcher after reviewing available studies in the subject has identified the knowledge gap which can be summarized as under:

1. There was lack of studies available about various factors which influence doctors’ prescription habits. As a result of which the prescription generation as a major factor in product promotion in pharma marketing remained unexplored.

2. No knowledge was generated on integrated view of all the four major players’ i.e. Doctors, Medical representatives, Chemist & Pharma executives in pharma marketing. The knowledge of all above pooled together would pave the way for better and effective strategies for the pharma companies. This seems to be highly essential.

1.6 OBJECTIVES OF THE STUDY

The following objectives of the study were set forth:

1. To study Marketing and promotional activities organised in pharmaceutical industry in general with the help of review of literature and with special reference to select companies.

2. To ascertain with the help of primary research, the factors leading to ‘prescription generation’ in select pharmaceutical companies.

3. To study the Personal competencies & professional skills of the Medical Representatives and its impact on the prescription generation.

4. To study the factors that motivates ‘prescription from physicians’. To suggest measures for improvement in the administration of marketing function in select pharma companies.

1.7 SCOPE OF THE STUDY

- The opinions and forward looking statements of diverse stake holders of the pharmaceutical industry would be captured in this study.
• The research is based on both secondary as well as primary survey research conducted by Researcher having extensive exposure to the pharmaceutical marketing and promotion.
• The research would cover data and analysis on various Pharmaceutical Promotional activities, and the effectiveness of Medical Representatives in generating prescriptions.
• Key topics that would be covered are Promotion, Prescription generation, Prescription behavior, and Personal competencies and professional skills of the Medical representatives.
• In the report doctors and other stakeholders identify what need to be done to maintain their business and the key actions being taken by industry players to overcome the leading business threats.
• The report would provide qualitative analysis of the key parameters with respect to Pharmaceutical marketing and promotion.
• The report would provide suggestions based on the findings which will be of great use to the Pharmaceutical industry in decided their resource utilization with respect to Pharmaceutical marketing and promotion.

1.8 HYPOTHESES OF THE STUDY

On the basis of the pilot study the researcher has identified following hypothesis for the study:

1) **Hypothesis I**: The pharmaceutical branding activities influence the prescription by the doctors.

2) **Hypothesis II**: The pharmaceutical Promotional activities such as sampling, CME, use of internet, cause marketing, patient centric marketing, Public relation initiatives and partnering with advocacy group influences the prescription generation.

3) **Hypothesis III**: Doctors while prescribing give importance to product attributes such as price, efficacy, dosage convenience, patient like-dislike, safety and relationship with the patient.

4) **Hypothesis IV**: While prescribing medicines, doctors take into consideration the reputation and the corporate image of the company.
5) **Hypothesis V**: Personal competencies and professional skills of the Medical representatives play major role in generating prescriptions from doctors.

6) **Hypothesis VI**: Training imparted to the Medical representatives’ influence their ability to generate prescriptions from doctors.

7) **Hypothesis VII**: Regular visits to Doctors and Chemists by the Medical Representatives influence prescriptions generation.

1.9 **RESEARCH METHODOLOGY**

The research is empirical in character, based on Data, collected through various sources. The researcher has used primary as well as secondary data for this study. The primary data is obtained by administering a questionnaire to the respondents which consist of doctors, Medical representatives, Chemist and Pharma executives. The research instrument in the form of “Structured questionnaire” was prepared to collect primary data for testing hypotheses.

The **Secondary data** was collected from different Reports, research journals, books, magazines and data from internet. (Please see Bibliography for details).

1.10 **RESEARCH DESIGN**

A Case Study research method has been used for data collection and analysis. Case studies have been used to explore causation in order to find underlying principles.

Case studies also emphasize detailed contextual analysis of a few important variables affecting the pharma marketing like prescription generation, selection and training of Medical Representatives etc.

The researcher through case study method has examined Prescription habits of the doctors and the following companies are identified for in-depth study.
<table>
<thead>
<tr>
<th>Sr No</th>
<th>Name of the company</th>
<th>Product profile</th>
<th>Market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pfizer India</td>
<td>Pfizer sells at least 100 products across wide ranging therapeutic categories such as anti-infectives, cardiovascular, CNS, gastrointestinal, inflammation, multi-vitamin, urology, respiratory and nutraceuticals in India. Corex, a cough syrup, is one of its largest selling brands. Major Brands are: Chloromycetin, Terramycin, ISONEX, Amlogard, Minipress, Lopid, Gelusil, Dolonex, Becosules, Ferradol, Corex, and Viagra. Pfizer has 6 brands that feature in the top 100 pharmaceutical drug brands in the country, of which 2 brands viz. ‘Corex’ &amp; ‘Becosules’ continue to be ranked among the top 10 pharmaceutical drug brands in the Indian market. Corex and Becosules contribute close to 24% and 17% to the top line respectively.</td>
<td></td>
</tr>
</tbody>
</table>
| 2.    | Ranbaxy India Ltd   | **Top 10 Molecules (2011)**  
  - Valacyclovir  
  - Simvastatin  
  - Donepezil  
  - Atorvastatin & Combinations  
  - Co-amoxiclav & Combinations  
  - Ciprofloxacin & Combinations  
  - Ketorolac Tromethamine  
  - Imipenem+Cilastatin  
  - Ginseng+Vitamins  
  - Loratadine & Combinations  
Ranbaxy’s current market share is 4.9% |
| 3.    | AstraZeneca India   | Betaloc, Briconyl, Iteol, Lintus codeine, Meronem, Olways, Plendil, Primiprost, Ramace, Xylocain etc |
| 4.    | CIPLA               | Cipla also has a product range comprising antibiotics, antibacterials, anti-asthmatics, anthelmintics, anti-ulcerants, oncology, corticosteroids, nutritional supplements and cardiovascular drugs. In a September 2011 article, The New York Times discussed Cipla's efforts to radically lower costs of biotech drugs for |
|       |                     | Cipla’s current market share is 5.4%, |
cancer, diabetes and other noncommunicable diseases, and, referencing the leading role the company had played in getting low-cost AIDS drugs to developing world, the Times opined:

In retrospect, the battle 10 years ago over AIDS medicines was a small skirmish compared with the one likely to erupt over cancer, diabetes and heart medicines.

| 5. IPCA Laboratories | It focuses on multi-specialty areas like pain, cardiovascular, gastro-intestinal, anti-infective and cough. This division hosts many multi-crore brands and enjoys leadership in the pain segment. **Zerodol** is the first Acelofenac launched in India, and is among the fastest growing brands in the NSAID segment. **Solvin** (Phenylephrine + Bromhexine), **Azibac** (Azithromycin), **Vinicor** (Meto prolol) are some of the other leading brands. Promising brands in the portfolio include **Rx Plus**, a nutraceutical combination of natural extracts, minerals, vitamins and amino acids, and **Electrosip**, an enriched ORS. | Ipeca has a market share of 1.5% in the Indian Pharmaceutical market making it the 27th ranked company in India. |

Source: Respective websites of the Companies

### 1.11 SAMPLING METHOD

Purposive sampling targets a particular group of people. Since the desired population for the study is rare or very difficult to locate and recruit for a study, purposive sampling was the only option.

The power of purposive sampling lies in selecting information rich-cases for in-depth analysis related to the central issues being studied. Purposive sampling is used with both quantitative and qualitative studies.
Purposive sampling is particularly relevant here as we are concerned with exploring the universe and understanding the target groups. Hence researcher has used his common sense and the best judgment in choosing the appropriate specialization, and meeting the right number of competent people for the purpose of this study.

The researcher has attempted to obtain sample that appears to be representative of the population and tried to ensure that a range from one extreme to the other is included.

Sample Selected for Empirical Study

a. Doctors: 65  
b. Medical representatives: 100  
c. Chemist & Druggist: 50  
d. Executives of selected pharmaceutical companies: 5

Table 1.2 : Survey Instrument

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Survey Instrument</th>
<th>Proposed Response schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Physicians. self-administered questionnaire</td>
<td>65</td>
</tr>
<tr>
<td>2.</td>
<td>Medical Representatives self-administered questionnaire</td>
<td>100</td>
</tr>
<tr>
<td>3.</td>
<td>Chemist &amp; Druggist self-administered questionnaire</td>
<td>50</td>
</tr>
<tr>
<td>4.</td>
<td>Marketing Managers / Pharma executives self-administered questionnaire</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>265</strong></td>
</tr>
</tbody>
</table>

1.12 LIMITATION OF THE STUDY

1. The researcher has limited his focus mainly on four important players in the pharmaceutical industry, i.e. Pharmaceutical companies, Medical Representatives and doctor. However, there are many more players involved in this industry, such as patients, regulators, insurers, etc. The omission of many of these players from the analysis is not only a limitation of my dissertation, but also applies to the pharmaceutical marketing literature in general.

2. Other gaps include the lack of evidence from pharmaceutical companies. Since the figures are not available as its a trade secret, the
entire study is based on the opinion of the four major players mentioned above. Hence the quantitative tool used is Anova.

3. Inaccurate descriptions of previous studies are sometimes found in literature reviews at the beginning of articles, particularly inaccurate claims about the conclusions that can be drawn from these studies.

4. Because of the Pharmaceutical industry been highly regulated the information been very sensitive in nature many of the respondents hesitate in giving full information.

5. Sampling population is so widely dispersed that cluster sampling would not be efficient. Since sensitive information is required the researcher depends on those who were willing to cooperate with the research.

6. There are various specialties of the doctors such as General practitioners, general surgeon, General Physicians, ENT Surgeon, Gynecologist, Pediatrician, Orthopaedic Surgeon etc. Hence purpose sampling was used to select the sample.

How Limitations were Overcome

a. Using the work experience in Pharmaceutical companies, the researchers used his contacts and network in selecting the most appropriate samples.

b. Because of personal relationship with the doctors, medical Representatives, Chemist and Pharmaceutical Companies executives the problems associated with getting sensitive information was overcome.

c. The sample includes representation from various specialties’.

d. The Five companies selected as the case studies have a different product portfolio and varied approach towards marketing and promotion.

1.13 PRESENTATION OF DATA & ANALYSIS

For this purpose the investigation adopted will be historical as well as descriptive method of research and ignored experimental type of research as the scope
of the study was favourable for historical and descriptive method. Therefore as far as possible maximum information will be collected recorded, analyzed and interpreted logically, mathematically and graphically with their functional relationship.

1.14 CONCLUSION

Drug promotion strongly influences prescribing behaviour, but doctors underestimate this influence. Company funding of doctors, of educational events and of research are important elements in this influence. Research and policy questions to be addressed include the development of effective methods of educating doctors about drug promotion, the impact of guidelines on promotional gifts, and the development of effective guidelines for managing conflicts of interest in research. The effects of different regulatory frameworks also urgently need to be compared. Governments and other organizations that introduce policies to regulate promotional activities need good evidence of the advantages and drawbacks of different systems.

1.15 ORGANISATION OF THE STUDY

The study is divided into following eight chapters plus Appendices.

I. Chapter One: INTRODUCTION: In this chapter, the topic is introduced, the problem of study, Objectives of the study, Scope of the study, Research Methodology, Data Collection, Sample selection, Analysis and Interpretation of Data, Limitations of the study, Organisation of the study etc. Have been discussed.

II. Chapter Two: REVIEW OF LITRATURE: This chapter covers the following:
   i. Pharmaceutical marketing an overview
   ii. Understanding Consumer Behavior in Pharmaceutical Marketing

III. Chapter Three: PHARMACEUTICAL MARKETING AND PROMOTION IN INDIA. This chapter covers the following:
   i. Overview
   ii. Pharma market in India: Growth, challenges and opportunities
   iii. Government policies
   iv. Pharma marketing: advantage India
v. Conclusion

IV. Chapter Four: **THE ROLE OF MEDICAL REPRESENTATIVES IN PHARMACEUTICAL PROMOTION**. This chapter covers the following:

i. Introduction

ii. Techniques of pharma promotion

iii. Factors influencing prescription

iv. Medical representatives: position in sales force, training

v. Conclusion

V. Chapter Five: **CASE STUDIES OF THE SELECTED PHARMACEUTICAL COMPANIES**: This chapter will deal with the five case studies.

VI. Chapter Six: Empirical Analysis and hypotheses testing:

This chapter will deal with:

i. Introducing variables

ii. Methods

VII. Chapter Seven: **FINDINGS AND CONCLUSION**: In this chapter efforts will be made to draw the findings from the data interpretation and to make suggestions.

Bibliography: Books, journals, website

APPENDICES

A. Questionnaires used for study

B. Key words/ Terminology

C. Statistical tables: A, B, C, D

D. Statistical analysis of variables
References


3. S O’Rear and G Wessels, The life and death of your deal: the customer decision process demystified, TIGI.