SALES PROMOTION STRATEGIES IN PHARMACEUTICAL INDUSTRY
WITH SPECIAL REFERENCE TO INDIAN DRUGS AND PHARMACEUTICAL Ltd. (IDPL)

DISSERTATION
Submitted in partial fulfilment of the requirements for the award of the degree of
MASTER OF BUSINESS ADMINISTRATION

BY
SABIR ALI

Under the Supervision of
Professor MAJM-UL-HASAN
CHAIRMAN

DEPARTMENT OF BUSINESS ADMINISTRATION
ALIGARH MUSLIM UNIVERSITY
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PREFACE

In Pharmaceutical Industry, as a result of the sharp rise in the production costs, Government controls and the intensification of the competitive selling in recent years, the need to supplement or even to break away from "accepted" marketing techniques has become increasingly evident. In their efforts to promote sales, overcome competitors and to serve the medical profession more efficiently and economically, pharmaceutical houses are keeping more and more emphasis on the tools of 'Sales Promotion'.

As a student of Master of Business Administration, I thought valuable to have first hand reaction of field force like medical representatives of different concerns particularly of IDPL, regarding the sales promotion tools for which I met to the marketing executives, sales manager of IDPL in Delhi, Marketing Research Manager and the executives in the Sales Promotion Department and many doctors and retailers. Through this, an attempt has been made to arrive at some useful and realistic analysis of the situation. The analysis results reveal that detailing is considered as one of the best technique for promoting the sales in the Pharmaceutical Industry.
ACKNOWLEDGEMENTS

In completing this task I have been benefitted from the suggestions and criticisms of many of my well-wishers and friends who extended all possible help and guidance to me and devoted their valuable time. At the outset, I express my deep sense of gratitude to my learned teacher Prof. N. Hasan, Chairman, Department of Business Administration, Aligarh Muslim University, Aligarh, under whose erudite guidance and supervision this study was undertaken and given final shape. I can not forget the most that inspite of his being pre-occupied Prof. N. Hasan provided me all possible help by means of suggestions and discussions whenever I encroached up on his valuable time. It is he who has been a constant source of inspiration to me since I came in contact with him. On account of his able guidance I have been able to learn alot to think through the problem scientifically.

I place on record my gratitude and many thanks to Mr. Jitendre Singh - Sales Manager and Mr. Bhalla, Deputy Sales Manager in Delhi sales office of I.D.P.L. I am also equally indebted to Mr. Prem Kumar Sweety, Marketing Research Manager and Mr. S.D. Singh, Medical Representative in I.D.P.L. at Aligarh and Mr. S.K. Sarna, Medical Representative of M.A.C. in Ghaziabad. I am thankful for their co-operation and courtesy extended to me and for providing all possible help in making on in-depth study of almost every aspect of the problem.
I am also thankful to my father, Dr. Mohd. Shakir. Dr. Mohabbat Ali, Dr. S.K. Gupta, Dr. Ishwar Singh who met their best efforts and spared me their valuable time for discussions for completing this task in a very planned way.

Sincere thanks are also due to many of my friends especially to Mr. Iqbal Ali Khan, Mr. M.A. Rizvi, Mr. S.H. Abidi, Mr. A.K. Singh, Mr. K. Alam and my brothers Mr. Sajid Ali Khan, Mr. Abdul Rauf Khan who helped me a lot during the course of studying the problem.

In the end, I am highly obliged to my parents for their continuous financial and moral support throughout my work.

(SABIR ALI)
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INTRODUCTION

Pharmacy: Pharmacy is the science and art concerned with the collection, preparation and standardization of drugs. Its scope includes the cultivation of plants that are used as drugs, the synthesis of chemical compounds of medicinal value, and the analysis and standardization of medicinal agents. The science that embraces all available knowledge of drugs with special reference to the mechanism of their action in the treatment of disease is pharmacology. Obviously this broad science has many subdivisions, such as toxicology (the study of poisons) and therapeutics (the use of drugs in the treatment of disease).

The beginnings of pharmacy are ancient. When early man expressed a juice from a succulent leaf to apply to a wound, he was practicing this art, delegated to Hygiea the duty of compounding his remedies. In ancient Greece the art of healing recognised a separation between the duties of the physician and those of the Pharmacists.

Pharmaceuticals: The World Health Organisation (WHO) defines a drug or pharmaceutical preparation as "any substance or mixture of substance manufactured, sold, offered for sale, or represented for use in... the diagnosis, treatment, mitigation, or prevention of disease, abnormal physical state or the symptoms thereof in man or animal, (and for use in)... restoring, correcting or modifying organic functions in man or animal".

The same organisation defines a pharmaceutical speciality as "a simple or compound drug ready for use and placed on the
The modern pharmaceutical industry began in the 19th century with the discovery of highly active medicinal compounds that could most efficiently be manufactured on a large scale. As these compounds replaced herbal medicines of earlier times, the occurrence and severity of such diseases as pernicious anemia, rheumatic fever, syphilis and tuberculosis were greatly reduced. Pharmaceutical industry research has greatly aided medical progress of the 66 most valuable drugs introduced since aspirin in 1899, 57 were discovered and then produced in industrial laboratories.

Classification of pharmaceutical products: Drugs may be classified in one of the three ways: by chemical group (e.g. alkaloid i.e. narcotine, morphine, emetine, strychnine, colchicine, quinine, nicotine, atropine, cocaine etc.); pharmacologically (i.e. by the way they work in the body); and according to their use therapeutically. Pharmacological and therapeutic classifications show considerable divergence, as drugs that act upon the body in different ways may bring about the same desired therapeutic results. Furthermore, classification by therapeutic usage is complicated by the fact that drug may be used to combat more than one ailments e.g. the antimalarial compound primaquine may also be employed to relieve arthritis. Some familiar drugs classified by therapeutic use include aspirin, an analgesic, or pain killer; benzocaine, a local anesthetic magnesium carbonate, an antacid; charcoal, an antiflatulent; penicillin, used against syphilis and major others as germicides, chemotherapeutic drugs, hormone, tranquillizer and vitamins etc.
Operations of multinational corporations (MNCs) in the less developed countries have been a matter of intense debate during the recent past. There are protagonists of MNCs who feel that MNCs are a new vehicle of international cooperation. They argue that MNCs, with their ability to innovate technologies, to operate on a large scale and to exploit advantages of the international division of labour, alone are capable of utilizing the global resources most efficiently. Antagonists of MNCs, on the other hand, believe that MNCs interalia perpetuate the dependence of less developed countries on the developed countries; hinder the development of local technological capabilities of the host LDCs, deprive the people of their occupation by bringing in appropriate technologies and extract the LDCs resources for their profiterring.

Many LDCs including India welcomed foreign capital in the belief that it would help ease constraints on their savings and supplement their local investments, technology and foreign exchange and enable them to import capital goods and raw materials necessary for accelerated economic development.

The Indian drugs and pharmaceutical industry is one of such factors where MNCs are most dominant. A government appointed committee, popularly known as the Hathi Committee which submitted its report in April, 1975 studied the reasons for the hold of MNCs over this industry. The committee observed that at the time of independence, MNCs were supplying their products manufactured
abroad to the Indian market either through local agents or through their own branches. After independence, enhanced degree of import restriction and tariff protection, induced MNCs to import bulk drugs and to get them processed into formulations on a job work, basis by the Indian concerns, without direct investment in factories or employment of technical personnel.

Between 1952 and 1965, the MNCs in the drug industry received a big impetus to boost their turnover as 'permission letters' to produce 36 formulations and four bulk drugs were granted to 15 leading foreign units. These formulations included even household remedies like tonics, health salts, cough mixtures, eye drops, gripe waters and so on, which could have been easily manufactured by the Indian sectors. Apart from these 12 foreign and 5 Indian companies could get 'Carrying on business' (COB) licences for 215 formulations and 20 bulk drugs, and thereby regularise the excess capacities created as a result of the liberalisation of licensing policy, which followed the devaluation in the Indian rupee in 1966.

The above policies in the view of the Haathi Committee were mainly responsible for the foreign hold over the Indian drugs and pharmaceutical industry. This resulted in an outflow of foreign exchange amounting to about 260 million towards payments of dividends, royalties and technical fees during the period 1969 to 1973 alone.

The Haathi Committee also highlighted the fact that the
MNCs in the drug industry 'usually discourages' their research and development staff from developing technology of their own. These practices made our industry permanently dependent on overseas expertise and technology.

In view of the above facts, the Hathi Committee pointed out that the.

"Continued presence.....of the highly profit motivated multinational sectors can but promote only the business interest of this sectors. Their presence in India as a part of their global effort to capitalize on human suffering in an organised manner, must therefore cease as early as possible".

The majority in the committee therefore 'strongly recommended that the multinational units in drugs and pharmaceuticals should be taken over by government and managed by the proposed National Drug Authority. All members, however, agreed, that the drug industry should not be eligible to preferential treatment as specified in the guidelines of Foreign Exchange Regulation Act, 1973 (FERA). The committee recommended that the foreign drug units should not only be directed to bring down their equity to 40% forthwith. The Hathi Committee consisted of 15 members included apart from its chairman Jai Sukh Lal Hathi, three other influential congress members of Parliament Yashpal Kapoor, Vasant Sathe and C.M.Stephen.

The drugs and pharmaceutical industry is considered one of the most multinational of modern manufacturing industry with
the leading firms exercising great oligopolistic power. In 1974 the top 30 multinational companies accounted for 52 percent of the total world market economy pharmaceutical sales.

The superior market performance of the drug MNCs is due as the Hathi Committee noted to "High pressure sales techniques coupled with distribution of medical samples on a liberal scale to the medical profession (which together with attractively got-up medical literature and international brand names of drugs appearing in advertisements in foreign medical journals with which top consultant in the medical profession were acquainted, played their part in popularising the drugs of foreign companies.

Foreign companies promote a culture of product differentiation under which the same basic drug is marketed under different brand names.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Formulation under different brand name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vit.B.complex</td>
<td>406</td>
</tr>
<tr>
<td>Multi-vitamin Tabs</td>
<td>308</td>
</tr>
<tr>
<td>Chlorumphenicol</td>
<td>155</td>
</tr>
<tr>
<td>Vit.B&lt;sub&gt;12&lt;/sub&gt;</td>
<td>126</td>
</tr>
<tr>
<td>Tetracycline</td>
<td>115</td>
</tr>
</tbody>
</table>


According to one estimate drug companies in India spend as much as 18 percent of turnover on an average on sales promotion, this product differentiation leads to socially
wasteful expenditure, cost on which are ultimately transferred to the consumer through high prices - some foreign companies spend even more e.g. Pfizer spent more than 20 percent of the total net sales on sales promotion in 1980-81.

The large bulk of these formulations are of little additional therapeutic value. Yet standard books of Pharmacology Goodman and Gilman categorically state that:

Many mixtures of Aspirin with Actamenophen or phenacetin and often with caffeine and other drugs are promoted with claims that they provide more analgesia. None of these claims withstand critical scrutiny. In most criticisms, relief of pain by an analgesia mixture has not been superior to that of aspirin.

<table>
<thead>
<tr>
<th>Formulations</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aspirin</td>
<td>.2 paisa</td>
</tr>
<tr>
<td>2. Anacin</td>
<td>8 paisa</td>
</tr>
<tr>
<td>3. Avedanplus</td>
<td>8 paisa</td>
</tr>
<tr>
<td>4. Aspro</td>
<td>10 paisa</td>
</tr>
<tr>
<td>5. Powerin</td>
<td>20 paisa</td>
</tr>
</tbody>
</table>


The Hathi Committee, in an effort to curb the social wastage incurred by the sales of such irrational and spurious formulations recommended the phased abolition of brand names.

In the New Drug Policy Statements only five drugs were notified whose single ingredient formulation could no longer
be sold under brand names.

1. Analgin
2. Aspirin
3. Chlorpromazine
4. Ferrous sulphate
5. Piperazine and its salts

The notification for the same was issued on Jan. 17, 1981, almost three years after the policy decision. Hoechst, the manufacturer of Novelgin and Pfizer the manufacturer of Piperazine went to court and the order has been stayed by the Delhi High Court.

Thus a policy enforcing the use of generic names that would save resources spent on marketing and would render standardisation of pharmaceutical products easier, has only been hesitantly implemented and that too, has been stayed by the judiciary. Moreover, on the issue that no newly introduced single ingredient formulation would be allowed to bear a brand name under the New Drug Policy, the representatives of the West Germany, Swiss, British and the American Pharmaceutical companies, have in a memorandum threatened the Indian Government with the dire consequences if this policy is not withdrawn.

Dumping of Banned Drugs:

It is a well known that a significant number of formulations which have been banned, severely restricted or discarded (as obsolescent) in Western markets are still being sold by the MNCs in India.
Antispasmodic combinations sold in India contain amidopyrin, a very toxic drug banned, the world over. Yet India imports amidopyrin. Another formulation for anti-diarrhoea Lomotil manufactured by G.D. Searle is still widely sold in India, although the British Medical Journal has published articles since 1976 warning that the drug is highly dangerous for young children. Similar is the case of Dimethisterone which is banned in Sweden, Finland, Belgium, U.K. and U.S.A., but is sold freely in India. The Bangladesh government has recently banned the manufacture, import and sale of drugs produced by Ciba-Geigy like Entro-vioform, Mexaform, Hoechst Novalgin, Baralgan and so on which are still being freely sold in India.
Indian drug industry consists of manufacture of pharmaceutical formulations and bulk drug.

Since Independence, the industry has made commandable progress in manufacture of pharmaceuticals towards making the self-sufficient. During last decade, the manufacture of bulk drugs, specially by the wholly Indian sector has made vital contribution due to efforts of the technocrat entrepreneurs. The research and development programmes taken by these units have made tremendous impact on the national scene.

Industry Position

Today, there are more than 400 units engaged in the manufacture of pharmaceuticals in the country, out of which, 130 units are in the organised sectors, 26 units are in foreign sector and the rest are in the small scale sector.

A birds eye view of the progress of the Indian industry can be seen from the following statistics:

Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Bulk drugs (₹.crore)</th>
<th>Formulations (₹.crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>1965-66</td>
<td>18</td>
<td>150</td>
</tr>
<tr>
<td>1975-76</td>
<td>130</td>
<td>540</td>
</tr>
<tr>
<td>1979-80</td>
<td>220</td>
<td>1150</td>
</tr>
<tr>
<td>1981-82</td>
<td>275</td>
<td>1300</td>
</tr>
</tbody>
</table>

Source: Drugs & Pharmaceuticals No.8, August,1982.
The contribution of the wholly Indian sector (including public sectors) at present is 78% of bulk drug and 64 percent of formulation.

**Capital Investment:**

Total capital investment in the industry today is around ₹500 crores.

**Employment:**

The industry today gives direct employment to about 1.5 lakh persons and about 5 lakh persons are engaged in retail and wholesale trade in the industry. About 2 lakh persons are employed in the pharmaceutical ancillary industries.

**Capabilities:**

The following facts speak for the capabilities of the National Sector of the industry which have produced following bulk drugs without any undue pressure from the government.

1. **Anti-biotics:**
   - Pencillin
   - Streptomycin
   - Tetracycline
   - Oxytetracyclin
   - Ampicillin
   - Amoxicillin

2. **Analgesic**
   - Aspirin
   - Paracetamol
   - Analgin
   - Oxyphenbutazone
   - Phenylbutazone
12.

3. **Anthelmentics**
   - Metronidazole
   - Mebendazole
   - Tinidazole
   - Bephenium
   - Hydroxynophthoate

4. **Anti Tuberculosis**
   - INH, PAS
   - Ethambutol

5. **Anti-Diabetics**
   - Glibenclamide

6. **Sulphonamides**
   - Sulphaguanidine
   - Sulphamethoxazole
   - Phthyl-sulphathiazole

7. **Vitamins**
   - Vit.B₁
   - Vit.B₁₂
   - Vit.C
   - Vit.K

8. **Anti-Asthematics**
   - Salbutamol
   - Theophylline derivatives

9. **Anti-Cancer**
   - Cyclophosphamide

10. **Anti-Bacterial**
   - Trimethoprim

11. **Anti-Hypertensive**
   - Propranolol
   - Methyleclopa
   - Reserpine

Disease pattern in India is different from what is observed in western countries. Like other tropical countries,
India has its own problem in the field of medicines and accordingly, requirements of drugs is also different from those of U.S.A. and Europe.

The disease frequently observed in India are:
Tuberculosis
Malaria
Amoebiasis
Leprosy
Bronchitis
Asthma
Gastro-enteritis
Jaundice
Diarrhoea, etc.

Scope of Research

There is a scope of research in the following fields:
- Development of newer anti-tubercular drugs etc.
- Development of vaccines against tropical diseases e.g. viral infections, leprosy etc.
- Isolation of therapeutic agents from herbal remedies
- Exploration of sea-flora

It is necessary to give attention to develop newer anti cancer drugs such as alkylating agents, anti-metabolites, harmones etc.

In western countries, certain important drugs are available for the treatment of cardiac disorders. They are specific Beta-blockers e.g. Methoprolol, calcium, antagonists e.g.
Nefidipine etc.

Many life saving drugs anti-microbial are also available in other market countries. This include anti-viral e.g. Acylovir, Immunoglobulin e.g. Oxatomide etc.

Proper attention should be given to develop such important medicines in the country itself.

**New Drug Policy:**

In the statement of New Drug Policy (NDP) the following main objectives were underlined:

1. To develop self-sufficiency in drug technology.
2. To offer special incentives to firms which are engaged in Research and Development.
3. To foster and encourage the growth of the Indian sector.
4. To provide other parameters to control, regulate and rejuvenate this industry as a whole, with particular reference to containing and channelising the activity of foreign companies in accordance with national objectives and priorities.
Indian Drugs and Pharmaceutical Ltd.

1. **History**

   Indian Drugs and Pharmaceuticals Ltd., the largest pharmaceutical complex operating under the full patronage of the Government of India enjoys a proud position today in the field of drugs and pharmaceuticals to the Indian as well as overseas millions.

   IDPL complexes comprises of 10 plants in India employing over 12,720 people. It is the largest and the most sophisticated pharmaceutical complex in Asia, Africa, Latin America and the Middle East.

   Besides its Rishikesh plant for antibiotics, Hyderabad plant for synthetic drugs and fine chemicals, Gurgaon plant for pharmaceutical specialistics, Madras plant for formulation as well as for surgical instruments and Muzaffarpur plant for the drugs and chemical intermediaries, IDPL has four subsidiaries in the joint sector at Lucknow in U.P., Sangrur in Punjab, Jaipur in Rajasthan and Bhubneshwar in Orissa.

   IDPL began with imported know-how for just 20 drugs. In a decade, IDPL's Research and Development has developed 30 more, improved technology of many including Vit. B<sub>1</sub>, B<sub>2</sub> and folic acid, made by only six other countries in the world.

   IDPL is the single largest producer of 13 antibiotics and 45 synthetics drugs in bulk on a mass scale. The range of pharmaceutical specialities goes beyond 150 in various dosage forms.
IDPL has a massive formulations capacity of 6650 million tablets, 1100 million capsules and injectibles, 1000 kilo-litres of oral liquids, 30 tones of ointments and 450 tones of powder packs to provide a larger therapeutic range in various dosage forms to the medical profession.

IDPL drugs meet world standards in quality, in specific case even higher than pharmacopeia of some of the most developed countries, according to a report of the Indian Medical Association (I.M.A). Even the well known International and National Pharmaceuticals firms in India rely on IDPL bulk drugs to formulate their own medicines.

IDPL is the single largest supplier of medicines to hospitals and public dispensaries in India. It is also meeting no less than one third of the medicinal requirements of our defence services in its range.

IDPL also offers technology and consultancy to the developing countries for drugs, pharmaceuticals and chemical plants from project consultancy to turn key operations.

IDPL has thus given India its own sound base for the developments of drug industry. Its own manufacturing capability to attain national self-sufficiency in drugs.

II. **Functioning**

M/s IDPL started supplying medicines primarily to Govt. Institutions instead of going all out for trade. Market, which hitherto have never been done by any company. Such was the impact of IDPL on these government institutions for the purchase
of drugs. This preferential treatment was not resorted that IDPL started getting preferential treatment.

There are about 5000 big and small pharmaceutical companies in the country. Most of them prior to the inception of IDPL were concentrating on trade sales. But with more and more funds with government institutions due to the expansion of the health programmes, few of these companies started their activities in the institutional selling, with the result IDPL started facing competition from these companies mainly in the small sector and few multinationals.

IDPL in the first 2 to 3 years only had captured a major share of the total institutional market, but the other companies also started their activities and growth rate of IDPL in institutional selling started declining. The reason was that these companies could offer cuts to the purchasing authorities and indulge in many other corrupt activities like raising the bills, without supplying medicines. Taking supplies back from the institution and selling it in the market, supplying of sub-standard drugs not only the common ones but even the life saving drugs.

**IDPL Achieves record Production:**

The Indian Drugs and Pharmaceuticals Ltd. (IDPL), the public sector undertaking has recorded the highest ever production of Rs.121.45 crores and the sales of Rs.108.41 crores during the year 1983-84.
The year saw according the company report an overall improvement mainly by absorbing the unavoidable increase in the costs of inputs arising from withdrawal of certain concession on excise and custom duty on drug intermediates, normal increase in expenditure on salaries and other inputs due to escalation in prices of raw materials.

Despite this, the company was able to reduce its losses to ₹21 crore against ₹24 crores of the last year.

The company, has also attained a major break through in its own research and development efforts by commencing production of Vitamin-6.

SALES PROMOTION

The simplest and perhaps most dynamic definition of sale promotion is made up of only two words 'Promoting sales'. In other words, any method utilized to tell customers about the three elements of marketing mix:

Product - Products distinctive want satisfying characteristics
Place - Its availability
Price - How much

In Pharmaceutical industry, there are basically two kinds of sales promotion viz.
(a) Commercial sales promotion through dealers.
(b) Direct consumer stimulation (Scientific promotion)

The basic essential elements of drug promotion in a very special are dedicated to inform and to educate the masses. The aim of drug promotion is communication between the ethical drug houses and the doctors.

In pharmaceutical industry almost every leading firm is having a separate sales promotion department under the marketing division. It is thought to be regarded as one of the most important department for constructive efforts and creative selling. The variety of task delegated to it and its need for that it is to be clothed with ample authority and responsibility. Who is to train the selling force and plan their creative selling programmes? Who is to work with the distributors and dealers and help them in organisational operation? Who is to help them in
window displays?

Another important area to be covered by the sales promotion department is the stimulation of consumers/prescribers. Beyond the scope of personal selling and regular advertising is the employment of premiums, contests, samples, literature, mailing etc. This department also plays an important role in educating consumer in the proper use of drugs.

Furthermore, selling and advertising must be coordinated. Advertising portfolio must be prepared, but they are worthless unless the medical representatives are taught how to use them.

Comprehensive marketing programme today call for the employment of every possible techniques for moving drugs very fast to the consumer. How to communicate effectively depends upon the creative promotional strategy adopted by different pharmaceutical houses such as setting up store displays, holding trade shows and exhibitions, using samples as premiums, packing of the product, price of the product, brand names etc.

**Promotional Strategy:**

This is the most vital area of marketing in pharmaceutical products and a company can afford to neglect it only at grave risks to the survival of its business. The heaviest burden for promotion falls on personal selling, aided by sales promotion and sales incentives techniques. The role of advertising is mostly in the nature of public relations while publicity has some importance regarding research oriented products.
Sales Promotion in Pharmaceuticals:

Sales promotion is the nucleus of any pharmaceutical industry, on which the whole industry is based. Many companies have separate sales promotion department or product manager to look after the sales promotion. The sales promotion done for pharmaceutical depends upon the nature of the product. It differs from product to product and from company to company.

There are various techniques by which this function is operated. Since Pharmaceuticals have two types of product:
1. Ethical products
2. Non-ethical products

Sales promotion of non-ethical products are those for which the prescriptions of the doctor is not required and these products are generally advertised freely. The techniques of sales promotion is done at various levels i.e. at the retailer or at the stockist level. These products are generally promoted through advertising.

(a) By Press Advertising
(b) Advertising on Radio or T.V.
(c) Window display at chemists shop
(d) Hoarding at busy and common spot.

Their sales promotion is very similar to consumer goods.

Sales Promotion of Ethical Products:

Ethical products are said to be those for which a doctor's prescription is required without the recommendation of the
doctor, they cannot be purchased. These include antihypersensitive, antidiabetic etc.

The sales promotion of these products is done by various methods:

1. **Direct Mailing Literature to the Doctors:**
   
   This is generally done when a new product is launched or some important improvement or development or change in price occurs on the product available.

2. **Advertising in Professional Journals:**
   
   This advertising is done with the medical journals published from different places and souvenir published different medical associations.

3. **Visits of Medical Detailmen or Representatives to the Doctor**
   
   In every month or quarter a year the company's medical representative visits the doctors with literatures and some samples of the drug. There, the Medical Representative reminds to the doctors about the products of his company.

4. **Arranging Medical Film Show and Exhibition:**
   
   Generally to launch a research product developed by the company or to overcome the competition when company is loosing share of its products in the market.

5. **Publishing of information of Medical Journals by the Pharmaceutical Companies:**
   
   Presently many of the pharmaceutical companies have started publishing their own monthly magazines which gives the
information and the latest report. It also gives the information about the company's existing.

6. Presenting Novelties:

Like desk calander, prescription pads and compliments which serve as a reminder to the customer/doctor.

This is the most important tool of pharmaceutical industry on which presently it is based.

Job of Medical Representative

A Medical Representative in real sense is supposed to be a source of information and is the one, who informs doctors/customers fully about his products and discusses new trial and uses of his company's products. He undergoes intensive training by specialized product training manager, which enables him to present his product more confidently to the doctor/customer. He is supposed to answer the quarries raised by the doctors.

He is a trained professional man, who tackles chemists and is responsible for all the activities and sales in his territory. He has a particular area of coverage in his territory. He visits the doctors of the area and presents the known facts about his products, whether chemical, pharmaco-physiological or clinical.

Since he represents his company at the doctor's clinic, he is an immediate and direct source of information to the doctor. If sometime the quarry is of such complexity which he
is unable to answer the doctor, it is the duty of the Medical Representative to refer to his company's medical adviser for proper answer.

**Promotion Tools Provided to a Medical Representative:**

A Medical Representative is provided with a lot of information and many other tools to enable him to answer the quarries, as well as to present his product effectively. These tools are listed below:

**Literature/Visual Aid:**

These literatures of the company provide full information about the product including pharmacological and clinical. The literature also explains the dosage details, indications, contraindications, precautions etc.

**Samples:**

Samples of a product contains the original product but in small quantities or packing. These samples are provided to a medical representative for the doctors so that they can try them on the patients. But due to the increasing competitions and entry of new firms, sometimes samples are misused or mishandled.

**Novelties Items:**

This has become very common in this industry. Every second company now-a-days has adopted the policy of providing some complimentaries/gifts to the doctors. These gifts are generally pen, calanders, thermometer, diary, prescribing pad, pen stand etc.
Upto Date Information/Data:

These days companies provide the medical representative with the latest published reports in India and abroad regarding his products and competitive products.

Detailing:

The representatives presentation of his products is normally referred to as 'Detailing' there has been a noticeable shift in the pattern of detailing in recent years. Previously, detailing mostly tried to emphasise the technical superiority of the product. Today, very few products can claim exclusive advantage over the competitive products available. Therefore, the emphasis is now shifting to detail products related to the benefits a patient would get with the use of a brand.

SALES PROMOTION TOOLS

Now the question to be studied in the techniques adopted by the industry for sales promotion of the drugs produced. Sales promotion is vital in its importance and is international in character in each and every industry and, therefore, the pharmaceutical industry alone cannot be accepted as an exception. The competition has been causing a great inconvenience for the manufacturers to promote their sales. To face the trial of ability each pharmaceutical company is engaged in using sales promotion techniques of various types to sell more and more to get ahead of the other.

The various sales promotion techniques adopted by the industry are:
A. **Consumer/Prescriber Promotion:**
   1. Persuasive detailing through Medical Representatives.
   2. Product sampling.
   3. Direct mail.
   4. Literature/handouts.
   5. Advertising in medical journals
   6. Scientific films
   7. Miscellaneous:
      (a) Clinical trials at hospital level
      (b) Participation in medical exhibition
      (c) Follow-up letters/pictures, post cards
      (d) Free gifts
      (e) Audio-visuals

B. **Sales Force Promotion:**
   1. Field Staff commission
   2. Sales force contest
   3. Sales meeting
   4. Scientific seminars

C. **Trade Promotion**
   1. Bonus scheme
   2. Discounts
   3. Dealers listed promotion (quality rebate schemes, price reduction).
Product Characteristics:

Pharmaceutical products are meant for consumption of sick and weak human beings and therefore, they need to have a very high degree of reliability and safety. Poor quality products can play havoc with the life of patients and can subject the manufacturer to prosecution. It is therefore, essential to assess the facilities for quality control before the selection of a particular product. It is particularly important for injectible preparation.

It is not enough that the product should have active ingredients in sufficient quantities. But the product must be acceptable to patients. In the case of liquid preparation, taste and flavour plays a very important role.

Pricing Pharmaceutical Products:

Final retail prices of pharmaceutical products are governed by drugs (price control) Order 1970. Under this order, a manufacturer puts up an application to government for prices approval. He provides details of his costs which are scrutinized by the Drug Committee of Ministry of Petroleum and Chemicals. After satisfying themselves with the details a manufacturer is given a mark-up of 45%, 50% or 100% over his costs to cover his marketing costs and profits and a maximum retail price is fixed. Different mark ups are given for different categories of products.

In case the raw-material costs goes up, a manufacturer cannot increase the price of his product without obtaining prior
approval from the government.

Drug prices control order had greatly reduced the profits of the drug companies. This order coupled with high cost of production had substantially increased the break-even volume of new introduction. Today, introducing a new pharmaceutical product calls for a high degree of marketing effort and creativity.

Distribution of Pharmaceutical Products:

Though pharmaceutical products are ultimately consumed by the patients, the real consumer from marketing point of view is the doctor. He is the decision maker. The patient gets his medicine from the hospitals, doctors or from retailer chemists on a prescription. He has no direct influence over the medicines he buys. Yet he exercises his influence by giving his reaction to the doctor to various drugs. A drug which is not favoured by most of the patients is not likely to be prescribed much by the doctor.

Pharmaceutical products are sold by manufacturers directly to hospitals, registered doctors or to licenced dealers.

The following channels alone or in combination are adopted to suit a particular marketing situation.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Wholesaler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sóle selling agents</td>
<td></td>
</tr>
<tr>
<td>Hospitals</td>
<td></td>
</tr>
<tr>
<td>Doctors</td>
<td></td>
</tr>
<tr>
<td>Doctors - Retailer - Doctors</td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td></td>
</tr>
</tbody>
</table>
DEMAND SUPPLY MODEL

People

↓

Health Needs

↓

Sickness

Preventive

Doctors

↓

Hospital

Chemist

Distributor

Drug Manufacturer

↓

Advertising OTC Products

People
Selling Directly to Hospitals

Sales to hospitals constitute an important sector of business for most pharmaceutical houses. Hospitals purchases are made mostly on the basis of the sealed tenders. Therefore, there is a tendency on the part of most manufacturers to quote directly for hospitals tenders. In this way margins that are paid to the company can offer competitive prices. Sometimes, a manufacturer would prefer to route his hospital business also through his sole selling agents. This is done in order to save the botheration of collection of payments which is always a troublesome job with government institutions.

Selling Directly to Doctors:

Selling directly to doctors offer many advantages:

1. It introduces new product to the doctors.
2. It ensures continued brand loyalty for existing products.
3. It constitutes a certain sales as product purchased by a doctor are bound to be used by him.

Because of the above advantages, a company may offer concessional price for the doctors. Part of the difference in price is compensated by the saving on margins to the intermediaries.
Promotion Budgets in Pharmaceuticals in India

A survey report published by the Organization of Pharmaceuticals Producers of India (O.P.P.I.) shows that on an average 12.4% of the total turnover of a pharmaceutical company is spent on the sales promotion. The break-up as report published by the O.P.P.I. is as under:

<table>
<thead>
<tr>
<th>Percentage of total turnover</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Medical Representative</td>
<td>5.93</td>
</tr>
<tr>
<td>2. Direct mailing shots</td>
<td>1.36</td>
</tr>
<tr>
<td>3. Advertisement in Journals</td>
<td>0.82</td>
</tr>
<tr>
<td>4. Free sampling</td>
<td>2.46</td>
</tr>
<tr>
<td>5. Promotional activities like exhibitions and films</td>
<td>1.82</td>
</tr>
<tr>
<td></td>
<td>12.40</td>
</tr>
</tbody>
</table>

Source: O.P.P.I. Report

It is, however, understood by many people, even in the governmental circles that the pharmaceutical companies are spending millions of rupees on sales promotion activities, by way of keeping medical representatives, distribution of free samples, mailing of expensive literature etc. They feel that these activities of the pharmaceutical companies do nothing but brain washing of the doctor to persuade them to use their products by brand name and making the consumer to pay heavier prices.
BRANDING

Brand:
A brand name is a name, term, sign, symbol or design or a combination of them which is intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of the competitors.

As a corollary to the above definition a brand name may be defined as that part of a brand which may be vocalised or utterable. A brand mark is that part of a brand which can be recognised but is not utterable, such as a symbol, design or distinctive colouring or lettering.

Need for Branding:
Although branding involves a cost to the manufacturer, but still each manufacturer goes in for branding mainly because of the following reasons:

1. A brand mark is used for identification purposes.
2. A brand name may be used as a legal trade mark, to protect the unique features of this product from imitation.
3. A brand name may be used to connote a certain quality, so as to promote repeated buying the brand recognition.
4. Branding may be used as a basis for price differentiation.

Criteria of a good brand name:
A brand name should form an integral part of product development and designing. It should not be a casual after
though of product manufacturer. The desirable qualities of a brand name are:

1. It should suggest something about the characteristics of the product e.g.
   
   (a) The product Epileptin suggest that it can be used in cases of Epilepsy.

   (b) Similarly, Threocyclin suggest that it is a tetracyclin which can be administered three times a day (a unique feature of the product).

   (c) Sukcee suggests that it is a something which is meant to be sucked and it also pertains to taste. It is defined as the medicine with a taste.

   As an appendage to the above point, we can say that a product name should not be suggestive of a wrong characteristics e.g. the product Vitabiotic manufactured by IDPL was named so, keeping in a view that it is a vital antibiotic. But actually this name is more suggestive of a compound which is a combination of a vitamin and an antibiotic. Such wrong suggestions should be avoided in product branding.

   Similarly, IDPL has named dexamethazone as Idizone. The product sounds as if it is a compound of phenylwodazone which is not really so.

   Such misleading names should be avoided because they connote something different and may lead to faulty prescription of times.
2. A brand name should be easy to pronounce, spell and remember. It should be short and simple, so that it is not only registered in the mind of the prospect but is also easy to recall both verbally and in writing i.e. to say that a product name should be distinctive, e.g. Calmod was named by IDPL in accordance with the existing competitive product Calmpose. As a result Calmod could not establish its individuality in the market. In fact, the introduction of this product by IDPL gave a boost to the sales of Calmose because of the similarity of names. The campaign for Calmod could not establish the product as intended.

3. In pharmaceuticals, the name should be phonetically anglicised.

Allopathic pharmaceutical preparations carrying indigenous names failed to capture the market. Inappropriate branding was a major factor in the failure of these products.

(a) Calmod - Calmod is a musical ragn, which it believed infers peace and tranquility on the singer and the audience.

(b) Sardilan - A preparation meant to combat colds, failed to establish itself because of its indigenous christening.

(c) Avedan - A medicine meant to relieve pains (i.e. Avedan) was also not accepted by the market.
All these products are being manufactured by IDPL.

On the contrary Ayurvedic preparations manufactured by the Himalayan Drug Co., principally from herbs and carrying anglicised names have captured a large market and are in fact very popular with the medical profession. Examples of these drugs are:

(i) Liv.52
(ii) Cistone
(iii) Tentex Forte
(iv) Speman Forte tablets for increasing the rate of spermatogenesis.

4. In pharmaceuticals, the brand name of the drug should not connote the disease for which it is meant, particularly diseases like tuberculosis, leprosy and venereal diseases which carry a social stigma and cancer which carries a fatal appropriation. Moreover, if products are named highlighting the disease, it is also bad for the patients because they are perpetually reminded that they are victims of a particular disease i.e. they are apart from the normal people. This may have psychological implications. Doctors, also do not like to recommend such names: e.g.

(a) **Tibafen** - manufactured by Suhrid Geigy and recommended for tuberculosis failed to come up in the market because of the implication enlisted above.

(b) Similarly **Epileptin** manufactured by IDPL and recommended for epilepsy cannot be considered a sound brand name.
5. A brand name should not have any other meaning in another language e.g. Apidin.

**Basis for Selecting a Good Brand Name**

A brand name may be selected based on any three of the following ways:

I. A brand name may be selected, so as to highlight the salient features of the product i.e. its mode of action, dosage, advantages over existing and also over competitors products etc., e.g.

   (i) **Deacos** - It is a cough syrup which causes decongestion and clears the throat. The name highlights this very fact.

   (ii) **Ingestion** - This product helps in cases of indigestion.

   (iii) **Sulphabid** - This name is suggestive of a drug which is a sulph a and can be administered twice a day.

In this way, the characteristics of the product may be put to use, in selecting a good brand name. A rightly selected brand name will thus become self-explanatory and will also prove to be plus point in promotion with doctors.

II. The name can highlights the contents of the products i.e. it can take into consideration the various components of the drug, e.g.

   **Cebexin** - B.complex + Vitamin C.
Apidin - A.P.C. + Codine
Hexavit - A compound of six vitamins
Cemizol - Vitamin C + Metamizole
Thromycin - Erythromycin

All these products are being manufactured by IDPL and the rationale for these names lies in their components.

III. The name of the company may also be highlighted with that of the drug. This can form another basis for branding a product, e.g.

Idifulvin - IDPL + Griseofulvin
Idicin - Indomethocin of IDPL
Iditol - IDPL + Ethambutol
Glaxene - Senna of Glaxo
Crotox HC - Hydrocortisone + Crotamitope of Suhrid-Geigy

In this manner, we can name any product pharmaceuticals or otherwise.

Inspite of the various advantages of branding, in price sensitive markets, it is better to sell pharmaceuticals under a generic name. Moreover, the government also charges an extra excise duty of 7-10 percent on branded pharmaceutical preparation e.g. in hospitals, IDPL is generally selling its product under a generic name, because it is a price sensitive market and a difference of 1-2 percent may also turn the tables. IDPL is marketing Tetracyclin, Analgin, Sulphaguanidine under its generic name.
Legal Rules for Branding:

1. The name should not be a proper noun e.g. (Usha Sewing Machine).

2. It should not be a dictionary word since no one can exercise monopoly over a dictionary word (e.g. Sir, Shirts).

3. The name should not be descriptive of the nature of the product.

4. The name should not give any idea regarding the contents of the product e.g. Analgin.

5. The name should not be similar or even bear phonetical or visual similarity to its generic name or any existing product e.g. Ptylin. For this drug we cannot win a name Tylin because it bears both a phonetical and visual similarity to its generic name.

The manager, then has to decide on an appropriate name keeping in view the conflicting outline of legal regulations and the demand made by an enterprising business.

Process of Registration of Names:

Branding in itself is a separate entity for any product. It is a long process and a manufacturer has to coin a name with a lot of caution. Moreover, to attain the sole rights for the use of a name, the company has to get it registered with the register of trade marks. The registration of a brand name
involves the following steps:

1. **Coining of brand name**: The first step in this process of registration involves the coining of a brand name. A brand name may be coined in accordance with any of the features enlisted in the preceding page. To brand a product (particularly pharmaceutical), the person must know:

   (a) Composition of the product
   (b) Its usage
   (c) Therapeutic classification i.e. antibiotic or synthetic drug.
   (d) Any advantage over the competitive product
   (e) Any other distinct features.
   (f) List of similar products already registered.

A good brand name may be coined keeping in view the above list i.e. by highlighting any one of the features given above. It is important that a large number of names should be coined and not just a single name since the chances of rejection during the subsequent phases are much more because of the increasing competition.

2. **Search and Feasibility Report**: After the name has been coined, it is generally sent for search and feasibility. However, it is not obligatory for a company or an individual to send the name for search and feasibility. All the same, it is helpful to get this report through the register, to make sure that the name is not similar to already registered names and also to make sure
that the name is registerable i.e. whether it conforms to legal rules or not. A number of names are sent for search and feasibility, so that a number of alternatives are available with the company and also if one name is rejected, other possibilities should be available. It takes about three months to finalise this report.

**Case:** The name Okasulf was coined by IDPL for a scheduled drug which is in the form of drops. The search report revealed that the Okasa Company is manufacturing Okasules which are in the form of granules.

However, this objection was over-ruled by the patent attorney on the ground that since the nature of the goods is different and they are to be sold only on the prescription of a medical practitioner, the chances of deception in trade are very few. Therefore, IDPL was advised to go ahead with the adoption of this name.

3. **Examination Report:** After the search and feasibility report has been received and the product is found fit for registration, an application is filed with the registrar for obtaining the final registration of the brand name. The registrar will critically examine the suggested name and will tell us whether it is similar or distinct. He will also tell us as regards the registerability of the name. Here also, it is better to send more number of names since the chances of rejection are quite high.
Case: M/s IDPL coined a neme Epileptin for a drug to be used for epilepsy. The search report for this name was absolutely showing no conflict. But in the examination report sent by the Registrar an objection has been raised. The registrar stated that the name Epileptin bears a phonetical similarity to the name of the disease epilepsy and also the name describes the disease for which it is to be used. Hence registration was denied to the proposed name.

But the company is still fighting the case and is trying to convince the registrar on the registerability of the name. The company has also proposed to use the name Epilepton. This has been done to protect the name from competitors. The case is however, still at an inconclusive stage.

Advertisement:

After the registrar has given his consent as to the registerability of the name, the opinion of the product is sought on the issue. An advertisement is issued in the brand name and trade mark journal. An objection can be raised by the interested parties within three months of publication of this advertisement. The objections are filed by the concerned parties and the counter statements are also sent to the registrar office by the party. A day of hearing is fixed for both the parties and the case is resolved. The company may have to withdraw the case under certain circumstances. If no objection is raised the name proposed is cleared and proceedings are undertaken for final registration.
Case: IDPL proposed the name Bronchopet for a preparation recommended for respiratory troubles. The search report for this product should give the name Bronchodil. But since the name Bronchopet was not in conflict with the findings of the search, it was sent for examination. The examination report was absolutely clear the registrar then advertised this name in the brand name and trade marks journal. When this name was advertised, M/s Jules & Co, the manufacturer of a preparation Bronchodrex, intervened and gave the full points against the registration of Bronchopet. They claimed phonetic and visual similarity and said that since both the products were meant for the same purpose, there are chances of infringement of trade.

IDPL replied to the above accusation saying:

(i) That the name Bronchopet carried no implications of phonetical or visual similarity.

(ii) It was also declared that a lot of brand names are carrying the prefix "Broncho" and as such Bronchopet will not infringe upon the sales of Bronchodrex as claimed by M/s Jules & Co.

Final Registration: After the name has been cleared by the registrar and also no objection is raised to the use of the name by the public, the name is sent for final registration. A fixed amount of fee is deposited with the registrar and the registration is finally obtained.
Certificate of Registration: After a fixed amount of fee is deposited with the registrar for final registration, the registrar then issues a certificate to that effect. The sole rights for the use of the brand name are then reserved with the company and no other person is entitled to imitate the salient features of the product.

However, it has been seen that registration is not a fool proof device for the protection of a brand name. There are many cases, where objections have been raised to the use of a particular name even after the certificate of registration has been obtained. This complicates the process of branding even more.

Case: (Protection of brand name)

Hexavit vs Bexavit: IDPL uses the name Hexavit for its multivitamin preparations. It had also obtained the registration for this name which is valid to date. This product is very popular and also selling well in the market. It was observed that Sarabhai had come up with a product Bexavit, a multivitamin preparations. IDPL, at this stage filed a case against Sarabhai stating phonetical and visual similarity of names.

Initially, Sarabhai tried to fight the case denying any phonetical or visual similarity. IDPL suggested that they should change their name to Bexivit and restrict its manufacture only to tablets to avoid infringement of trade. A mutual understanding was arrived at and Sarabhai agreed to conform to the terms and conditions laid out by IDPL. This settled the case and the
DOSAGE FORMS AND THEIR STRENGTH

Dosage forms are a very important target of sales promotion in pharmaceuticals. It is important that the drug to be administered should reach the site of action in the desired quality at the desired time and remain in the body for a desired duration. Not only that, the form of the drug should be such that it is convenient to administer and also that minimum possible efforts are put into get the desired action. Also, it is important that a wide variety of dosage forms and strengths is at the disposal of the doctor, so that he can give prescriptions according to the needs of the individual patients.

Thus it is necessary that the persons concerned with sales promotion are fully familiar regarding the general details and the forms in which a drug can be given. The drugs can be administered by the following results:

A. **Orally**
B. **Parenterally**
C. **Anally**
D. **Topically**
E. **Nasally**
F. **Vaginally**

A. **Oral Administration**: Oral administration of drugs is resorted to in cases where:

(a) the drug is required in the gastrointestinal tract for its local action, e.g. in cases of antidiarrheal, antacid preparations or digestive enzyme preparations.
When the action of the drug is required in the extra-intestinal site through its absorption from the gastro-intestinal tract in the blood e.g. antibiotics, tetracycline is administered by the oral route irrespective of the site of infection.

A drug preparation to be administered should satisfy the following criteria:

(i) The drug should not get destroyed by the secretions of the gastro-intestinal tract.

(ii) By taking a certain quantity of the drug conveniently, the desired quantity of the drug should get absorbed so as to accomplish its purpose successfully.

(iii) A drug administered orally, takes sometime to reach the site of action and therefore it is more convenient for diseases where life is not in danger and the loss in time can be tolerated.

(iv) The drug should not irritate the gastro-intestinal tract very much.

Orally, a drug can be given in various forms:

(a) Powders
(b) Granules
(c) Tablets
(d) Capsules
(e) Liquids
(a) **Powders** : In solid form, one of the ways of giving a drug is in powder form. Usually the drugs are not marketed in powder form now, but where a bulk of the material is required to be taken, it is better to give it in powder form because a large number of tablets may not be convenient. However, medical practitioners do give drugs in powder form, mainly to distort the identity of the manufactured product.

The disadvantages of giving drugs in the powdered form are:

(i) It is difficult to measure the quantity to be taken.

(ii) The powder sticks to the buccal cavity thereby giving its taste and even leaving it after swallowing. Therefore, it is not preferred in the modern age as compared to better dosage forms.

(b) **Granules** : Drugs in the form of granules are certain quantities of powder bound together. It is usually given where drugs are required in bulk and it becomes impracticable to take tablets. Granules are manufactured to:

(i) mask the taste of the powder through sugar coating or plastic coating.

(ii)* To protect the drug from the action of gastrointestinal juices, so that they remain in tact in the stomach and are absorbed only in the intestine.

(iii) Tableting adds to the cost of the drug and its use may be discontinued even though the drug is required for a longer period of time, e.g. IDPL is
manufacturing Na Pas granules, a drug meant for tuberculosis and also required for a longer duration. Its low price is a plus point in adding to its popularity. Moreover, these granules have been given or enteric coating for protection against the action of gastro-intestinal juices and therefore allows absorption only in the intestines.

(c) **Tablets:** When a certain quantity of powder or granules are bound together in solid form of a specific shape, a tablet is formed. Tablets may be manufactured of different shapes, colours and sizes. But these special features have to be imparted with a lot of caution, keeping in view the purposes, they meant to achieve. The colour of the tablets, many a times helps in adding to the saleability of the drug, for instance:

(i) A tablet meant for increasing the quantum of blood manufactured in the body should invariably be red in colour to provide a sanguine effect.

(ii) Vitamin tablets meant to give vitality to the body should not be black coloured. It should look lively also to impact the desired eminosity e.g. Hexavit tablets are in red colour.

(iii) The tablets meant to be taken for a longer duration should be light coloured so that the patient does not get the impression of taking potent things.

Usually, the tablets are round in shape, but sometimes a
shape other than round such as triangular or capsular form can be made to make the product distincts from similar products.

Tablets in capsule form show that it is a more potent drug e.g. Cebexine tablets. The formation of tablets requires a certain amount of pressing, so as to bind the powder or granules. Accordingly the tablets may be:

(a) Hard pressed
(b) Soft pressed

A hard pressed tablet stands well and has a low dispersion power.

A soft pressed tablet will disintegrate soon after ingestion and has a remarkable power of in a solution. The manufacturer falls back on this feature to highlight the past action of the drug.

Another important characteristic of tablets is its coating. Tablets may therefore be:

(a) Coated
(b) Uncoated

A coating is given to the tablets for the following reasons:

(i) To mask the bad taste of the drug.
(ii) To ensure that the tablet does not get dissolved in the mouth, thereby giving a bad taste.
(iii) To give protection to the drug against the action of the juices being secreted in the stomach.
(iv) To prevent destruction of the drug during storage.
(v) Coating may also be given to make the drug easily swallowable.

Types of Coating:

(a) **Sugar Coating**: It is primarily given to mask the bad taste of the drug and also to make it easily swallowable. It does not provide any protection to the drug otherwise. However, it is a very popular form of coating given to various drugs e.g. Hexavit, Ingestin and Melubrin of Ranbaxy.

(b) **Film Coating**:

(i) It is made up of some synthetic material. A drug under this synthetic mask will not only be protected during storage and from the action of juices once inside the stomach, but will also be rid of bad taste, experienced while swallowing. Film coating is considered to be an advanced over sugar coating and any product giving this sort of a coat will be considered to be more sophisticated and therefore more saleable.

(ii) Film coating has no sugar taste and therefore it psychologically helps diabetic patients or people who otherwise want to avoid sugar, although the amount of sugar in a coating is almost negligible.

(iii) Another advantage of film coating is that sugar may sometimes react with the ingredients of the tablet in the presence of a little atmospheric moisture.

(iv) A thick film covering may sometimes be given to the tablet, so that the ingredients of the drug do not get destroyed
in the stomach and it takes time to dissolve e.g. Thromycin-S.

(c) **Press Coating**: This is another variation in coating. If there are two or three ingredients in a tablet and one of them is highly sensitive and the other material is relatively insensitive and tasteless also, a thin coating of sugar or film may prove to be ineffective in protecting the sensitive material. In such cases, the tablet is like any other ordinary tablet in appearance, but the sensitive material forms the core of the tablet and the insensitive forms the outer covering. Thus the sensitive ingredient is thoroughly protected by putting a tablet within a tablet e.g. Cemizole tablets.

**Retard Tablets**: These tablets are manufactured with the idea of saving the patient the inconvenience of taking tablets time and again. To remember the timings of various doses may be tiresome and the consequences of missing a dose may be worse. These tablets are also designed that their fractions are dissolved and absorbed at different times after ingestion. In this fashion the dose of the whole day may be administered at one or two goes. Because of the retarded action spread over a span of time, they have been labelled retard tablets e.g. Belanidal retard of 'Sandoz'. It is a tricoloured tablets and the same substance has been given in three different solubilities. The total contents of the tablets have been divided physically into three parts and each gets dissolved at different times.

Coating may proved to be undesirable in many cases since
it may inhibit the absorption of the drug. To away with such
disadvantages, uncoated tablets are manufactured. The
advantages of uncoated tablets are:

(i) Coating of a tablet may at times delay or inhibit
the absorption of the drug. Therefore, uncoated tablets are
preferred over coated tablets e.g. Compeba tablets of IDPL is
a bitter tablet in taste but are uncoated because any coating
inhibits the absorption of this drug.

(ii) In certain cases, only a part of the drug is required
to be taken and so the tablets are required to be scored. Coated
tablets cannot be scored e.g. Celenix tablets of IDPL, which
are required for increasing the output of water in the form of
urine (i.e. diuretic in nature). The quantity of the drug to be
administered depends upon patient to patient.

(d) Capsules: It is a drug enclosed in a small, soluble
container of gelatine. The container may be composed of soft
gelatine or hard gelatine.

Needs for Capsules:
1. It may not be possible to convert a drug in the form of a
tablet of a desired concentration and the size may become
quite unwieldly.
2. The process of disintegration of a tablet takes a longer
time, whereas the dissolution of gelatine is a quicker
process and easier absorption since the drug within the
gelatine is in a disintegrated form only.
3. The gelatine coating gives a lot of protection to the ingredients within.

4. A capsule adds to the psychological potency of the drug and some people may prefer to take capsule over tablets.

Types of Capsules:

Capsules are mainly of four types:

1. **Hard Gelatine Capsules**: They have an outer covering of a hard gelatinous substance and is made up of two portions. In these capsules, a powder is filled. The two parts of the capsule may be interlocking by themselves or different coloured band may be put to ensure that the capsules are sealed fairly well, e.g. Tetracyclin capsule, Threocycline capsule.

2. **Soft Gelatine Capsules**: These have a sort outer covering. A paste form of the drug is put into it. These are hermetically sealed capsules. Mostly, haematonic preparations containing liver extracts are put in these capsules. They claim that their capsules are hermetically sealed and therefore, completely stable, e.g. Theragram of TCF.

3. **Pearls**: These are rounded capsules which are generally filled with an oily substance. They have a coating of soft gelatinous material e.g. Garlic pearls manufactured by Ranbaxy. Garlina pearls of PCI. And usually vitamin A and Vitamin D preparations are given in this form, e.g. Adoxilin of Glaxo.
4. **Spansules**: These are a distinct category of capsules in themselves. It has a hard outer covering of gelatine. Small pillets are put in it. These pillets are let out in the body upon dissolution of the outer covering. These pillets then disintegrate at various times after the capsule has been taken in. They are particularly for sustained action of the drug. Such preparations dispense off the need for taking doses twice and again taking one capsule a day is much more convenient as compared to taking three or four after a certain lapse of time during the day.

(e) **Liquids**: Liquid preparation form a major portion of the oral administration. Liquid preparations are mainly given because of the following reasons:

1. Liquids are prepared for convenience of administration especially for children and those fastidious patients who do not like to take the drug in a solid form.

2. Certain patients who have problems in swallowing tablets and capsules are given liquid preparations.

3. Certain drugs prove to be more fruitful in their action when given in the form of liquids than otherwise.

4. In those preparations where the ingredients are in the form of a liquid.

Liquid preparations in pharmaceuticals are mainly of the following types:
(i) **Mixture**: A combination of a fluid with another fluid or a fluid with a solid will lead to the formation of a mixture. Preparations of mixtures are generally given by the doctor.

(ii) **Suspension**: A suspension is a finely divided solid substance, which does not dissolve in the liquid but remains suspended in it e.g. Almgel having a solution of Aluminium hydroxide and consisting the suspension of magnesium hydroxide. It is used to nullify the acidity of stomach.

(iii) **Elixir**: An elixir is a clear, sweet and alcoholic liquid.

(iv) **Emulsion**: An emulsion is a compound of two such liquids which are immiscible.

(v) **Syrup**: It is a concentrated solution of a sugar with other ingredients. The syrup manufactured by IDPL are ingestion, Deacos and Cebecin.

Syrup can be readymade or it may have to be made in those cases where a drug cannot be kept in a liquid form for a long period, the company may provide drug in the powdered form and sweeting agent, such preparations are called dry syrup, e.g. Thromycin-S of IDPL, Ciplin-DS of Cipla.

(vi) **Drops**: They are clear solution of low viscosity which fall from a small opening e.g. Sukcee and Spasmigol being manufactured by IDPL, Solubin-C and Mycidex of other companies.

**Physical Features of Oral Preparation**:

1. **Taste**: The taste of the drug also goes a long way in
adding to its saleability. It is very important that the taste of an oral preparation should not be an obstruction in the administration of the drug.

In solid form such as tablets, the coated tablets always have an advantage over uncoated tablets because of the taste factor. Moreover certain tablets and liquid drugs gain popularity just because of their taste e.g.

(i) **Sukcee** manufactured by IDPL is a very popular vitamin-C preparation just because of its good taste.

(ii) **Vicks** The very popular throat logenges sell well because of the wide variety of taste.

(iii) The same is the case with **Strepsils**.

In case of liquid preparations, taste is a very important factor. Particularly preparations like health tonic etc. are sought after mainly because of their good taste. However, different flavours have a different saleability according to the likes and dislikes of people. A good taste of any preparation is generally banked upon as a sales promotion tactics, e.g. **Phosphomin** vitamin tonic of Sarabhai.

2. **Smell**: Taste and smell of pharmaceutical preparation should go hand in hand. A good odour as good taste will achieve the same purpose doubly well. Usually, the solid forms do not have any smell. If certain unpleasant odours are found in them, care should be taken to mask such odours. Here, a word of caution needs to be added i.e. addition of flavours should not however inhibit the basic purpose of the drug. In case of certain
capsules, especially soft gelatine capsules containing liver extracts have a very bad smell. Any manufacturer gaining the ability to mask such an odour will definitely have a plus point there. It is also important that flavours should be added keeping in view the purpose of the drug e.g. Molizyme a preparation to combat indigestion is rightly flavoured with Heeng and Zeera etc. because these natural substances have a lot to do with digestion.

3. **Consistency**: In cases of liquids, it is desirable that the liquids should be of low viscosity. Highly viscous or oily liquids tend to stick within the buccal cavity and leave an after taste in the mouth. Such liquids may therefore not prove to be very popular among doctors and patients, e.g. Sharkoferrol of Alembic, Sharbat Paulad of Hamdard Laboratories.

B. **Parenterally**: Injectable drugs also form a major category of dosage forms. Injectables are preferred over oral administration because of the following reasons:

1. The drug in the form of tablets gets destroyed in the gastro-intestinal tract before it is absorbed in the blood.
2. The drug may prove to be very irritant to the lining of gastro-intestinal tract.
3. Proper quantity of the drug may not be given orally because a massive dose may be required for the same purpose. As such, it is preferred to inject the dose.
4. To ensure that the drug shows immediate action, it is injected in the body. This is to shorten the route via blood which is generally followed by oral administrations.

5. In cases, where a person is so handicapped that oral administration of the drug is not possible, the drug is then injected into the body.

A drug can be injected into the body by any one of the following methods:

(i) **Intramuscular injection**: In this method the drug is injected through a syringe and a needle in the muscles of the body. Usually the pelvic or pectoral muscles are used for intramuscular injection, e.g.

(a) Fortified Procaine Benzyl Penicillin of IDPL for aqueous injection I.P. 20 Lac units.
(b) Streptomycin sulphate I.P. 1.00 gm base of I.D.P.L.
(c) Dicrysticin-S injection I.P. of Sarabhai.

(ii) **Intravenous injection**: In this case, the drug is injected directly in the veins, so as to mix with the blood immediately, e.g.

(a) Trinergic injection of Alembic.
(b) Vitneurin of Glaxo
(c) Neurobion and Tri-radisole-H injection of other companies.

(iii) **Intra-arterial injection**: In this case the drug is injected directly in the arteries.
(iv) Subcutaneous Injection: Here the drug is injected just below the epidermal layer of the skin, in such a manner that it does not penetrate the muscles.

(v) Intratuccal: In this mode of injecting, the drug is administered in the spinal cord.

(vi) Intraperitoneal: Here the drug is injected in the peritoneum of the body.

(vii) In Bone Marrow: The drug is injected in the bone marrow.

(viii) At site: A drug is injected at the site of action in certain cases of emergency e.g. if a drug is required to act at the heart, it is injected directly at the heart itself e.g. injection of Adrenalin, and Dexona injection of Cadilla.

An injection is generally given in the form of a liquid, but pharmaceutical preparations may or may not seen the form of a liquid because many a times, it is not possible to give a readymade solution, since it may be get determined with time during storage. In such cases, the drug is made available in the form of a powder and the doctor has to convert it into a liquid before injecting by adding either distilled water or any other solution provided by the manufacturer. The examples of powder injections are penicillin and streptomycin preparation manufactured by FDPC.

A preparation available in the form of a ready to inject solution is preferred over dry injection. Injections are made available in the following forms:
1. **An Ampule**: An ampule usually of a glass contains the injectable solution. It contains one dose only. Generally all the intravenous injections are available in the form of an ampule, as it is most hygenic, contamination free, single dose.

2. **A Vial**: The injectables can be available in the form of a vial also. Generally, all non-liquid preparations are given in the form of a vial only, so that the liquid can be easily syringed into it. Also, many intramuscular, liquid injections are given in this form and where more than one dose is to be provided for this mode of packaging is usually resorted to. This also allows for economy.

3. **Infusion bottle**: Injectables like glucose and saline are generally provided in this form, since a continuous flow is required for hours together. They are used mostly for intravenous transfusions, e.g. Dextrose 5% solution.

4. **Hypospray**: Certain injections can be administered without using a syringe and a needle. This is known as the Hypospray injection. In this method, there is a small rubber pump, connected with a glass container which holds the liquid injectables. This glass container has a small jet and when pressure is applied with the upper pump, jet comes with a high velocity and that stream is so that pierces through the muscles. This method is applied for mass vaccination programmes, where a fixed amount is to be given to a large number of people. This method is time saving, economical and not at all fear provoking as other injectables.
Intramuscular injection is given in the following cases:

1. Where the drug is not observed orally or the drug gets destroyed in the gastrointestinal tract or the patient is unable to take the drug by mouth for one reason or the other.

2. When quicker action is required, which is not possible by oral route.

3. When there is no other injectable route possible because of the nature of the drug.

Intramuscular injections thereby permit the parenteral administration of finally divided in soluble substances in suspension. The onset of action is slow and its duration prolonged. A depot of the drug is formed (in case of oily solutions) in the muscle and slow absorption occurs.

In case of injections, emphasis on any one of the following points may offer the door to better sales promotion.

1. The pain freeness of an injection is really a plus point in this regard. Particularly for intramuscular and subcutaneous form of injections must manufacture and adequate amount of precaution should take them less painful.

2. The syringeability of the injections is related to the viscosity of the liquid. The low viscosity of the injectables plays an important role in that, it can be injected into the body with greater ease, thereby nullifying the painful aspect of an injectables.
In case of non-liquid injections, the powder should be made up of fine particles, so that the suspension obtained after mixing in the liquid, can pass through the thinnest needle, since a pointed needle gives much less pain. Also, if the powder can be made of such a nature that is easily soluble in water without much shaping, it is going to provide a selling point there above the other competitors seems.

On the basis of these three factors, a product offers a plus point over other similar products.

C. **Anal**: This system of administration is very popular in many parts of the world but not particularly so in India, social institutions are the major factors for the use of this method. In our country oral drugs have more appeal as compared to anal route drugs.

   Drugs are given by the anal route in the following cases:
1. When action is required only in the large intestine specially in the rectum and the colon e.g. drugs meant for piles.
2. Certain drugs which are used for purgation have to be given anally because of the nature and site of their action e.g. Anemas concurously used for purgation.

   For children, it is very difficult to give a tablet of a laxative and the preparation may not be available in the liquid form. It will be preferred to give the drug through the anal route.
3. Where the drug when taken orally either irritates the gastric mucosal of the stomach or the drug is destroyed by the gastric juices. The drug here is also given orally. For instance a drug known as *Endomethocine* is marketed all over the world. This drug is meant for pains in the joints and it has the property of irritating the mucosee and many patients cannot take the drug because it may cause unbearable pain. The drug is unavailable in India only for oral administration in the form of capsules. While in other countries, the drug is available for oral administration. A company which introduced the drug for oral administration failed miserably.

4. Many drugs because their awful taste and smell cannot be given orally. Through the anal route, the drug is given in the form of a solid or liquid. In solid state, these drugs are known - *Supposition* i.e. cone shaped solid mass or mass of solids and liquids. The drug in the form of suppositories is a selling plus point. But usually administration of suppositories is not liked by the patients. In liquid form also, the drug can be given through the anal route.

   It is also important that any drug which is meant for anal route should be easily introduceable, otherwise the drug may not be able to achieve its purpose. As a rule the rectal dose of most of the drugs is about the double of oral dose. The rectal absorption of drugs is more erratic than their absorption when
administered orally. Sometimes hypnotic drugs are also given rectally.

D. **Topically:** The drugs meant for topical use can be in the form of a solution, an ointment, a cream or a powder. These drugs are meant for mainly, the ear, the eye, the skin and the gums etc.

Any topical drug having the following characteristics will enjoy a better position in the market:

1. These drugs should not cause any irritation at the site of action.
2. Topical drugs meant for the use at throat and gums should have a good taste.
3. The drugs should be non-greasy for skin applications.
4. Also, topical drugs should be non-staining for skin applications and garments should be washable e.g. if a drug manufacturer can produce a clear solution of **Gentian-Violet**, he will capture the entire existing market.

Examples of creams for topical application and powders:

(a) Betnovate-N, C&H of Glaxo
(b) Soframycin cream of Ethnor
(c) Neosporin-S of Glaxo
(d) Crotorax-H.C. and Plain of Suhrid Geigy, etc.

E. **Nasally:** These drugs are usually volatile substances which when administered forms vapours which diffuse in the blood.

Nasal preparations are of two types:
1. **Local Use**: These are in the form of nasal drops which are not volatile. Action is required in the upper respiratory tract.

2. **Internal Use**: That is, rubbing the drug to the system through the nose e.g. Chloroform, Ether. Nasal administration should bear the following characteristics to enhance its sales i.e., promotion.

   (a) No staining to the nasal route.
   (b) No irritation to the nasal tract.
   (c) The solution should have a watery consistency because a watery solution is preferred over an oily solution.

F. **Vaginal**: The drug can also be given through the vaginal route. These drugs are given for the local infections of the vagina. They are also in the form of tablets of definite shape and size. These dosage forms are known as Suppositories or Pessaries.

**Appropriateness of the Dosage Form:**

The drug to be administered should be given in the form which is most convenient and also in keeping with the targeted market:

1. Drugs meant for adults should preferably be in the form of tablets or capsules and not as liquids or drops so that there is ease in taking a dose.

2. A tonic should generally be as a liquid. Generally, the
consumers cannot accept a tonic as a tablet. It generally connotes something in liquid form meant to give energy.

3. Drugs meant for infants should be in the form of drops since it is difficult for infants to swallow in tablets and liquids.

4. Similarly, it is preferable to give doses to children in the form of a liquid only. Children hate in taking the tablets because of their size and also their awful taste.

**Spectrum of Dosage Forms:**

In many cases, the drug may be used only in one form and it also has certain rare uses at times. Therefore, it becomes necessary to provide the drug in all possible dosage forms, e.g.

(i) The product Erythromycin is generally sold in the form of tablets. The syrup is also manufactured for paediatric uses although it is not very popular. IDPL markets this drug under the name of Thromycin. Another company also markets this drug under the name of Erythromycin and it provides it both in the form of tablets and also as liquid. It may be noted that it is easier for the doctor to remember a single name and recommend the same for adults as well as for children. It would be tiresome for him to remember a separate name for adult doses and that for children doses. Thus this is the rationale for a number of dosage forms.

**Strength of Dosage Forms:**
Quantity of active drug in a single unit of a dosage form
i.e. one tablet, one capsule, 1 TSF/1 TbSP, 1-2 C.C. of intramuscular injection should be such that it makes the therapeutic dose enough to give the desired results in most of the cases, e.g. usually, the oral dose of ampicillin is 500 mgs of it, 4 times a day. In milder cases of infection, at times 250 mgs, 4 times a day is prescribed. In short most times a prescription states 500 mgs, 4 times a day. Obviously, a company giving 250 mgs capsules alone, will not be able to sell the product better as compared to a company both 500 mgs and 250 mgs capsules. IDPL manufacture both 500 and 250 mgs capsules.

**Multiplicity of Strength**

When a drug specially in the form of tablet has different doses for different patients and types of diseases, it is appreciable to give the drug in the same dosage form but of various strengths. At times, it is also necessary to give the drug in various forms also depends upon the type of disease and type of patients, e.g. Metroldazol is a drug used for various protozoal infections. The dosage varies 200 mgs 4 times a day to 400 mgs 3 times a day depending upon the nature and severity of the disease. Here, a company providing dosage strength of 200 and 400 mgs will score more over the other company providing either 200 or 400 mgs tablets. IDPL provides this drug under the name of Compeba in 200 mgs tablets. But its competitors have captured a larger share of the market since their sales promotion is more effective by the fact that they provide a wider range of dosage form, e.g. Trag 300, Zil 200 & 400 of Sarabhai, Flagyl and Metrozyl, etc.
PACK AND PACKAGING

Packaging, under which a drug appears in the market, it is extremely important aspect of sales promotion, particularly so in pharmaceuticals. Here the customer cannot see the product or judge its quality by feeling it. As such, the customers verdict is based on the impeachable and meticulous packing. If the pack of a product is unsightly, he is bound to carry a bad opinion of the company and its product. As there is a famous saying of Urdu i.e. "the content of the letter can be judged by seeing the envelop or cover of the letter". So a good pack and packaging appeals more to the customers.

There are two basic principles of packaging.

1. **Stability**: The packaging of the drug should be such that the stability of the drug should be retained and there should be no interaction between the ingredients and the atmosphere or the ingredients and the packing material i.e. complete protection of the drug should be ensured.

2. **Elegance**: The packaging of the product should be such so as to infer a distinctiveness on it. The packaging projects the product in a certain manner. Here the saying that "face is the index of the mind" holds true. Packing here represents the intrinsic quality of the product, since actually, it is very difficult for a doctor to differentiate the quality of one product over another of similar composition. The elegance offered by the packaging therefore also determines the saleability of the product over similar products.
Packing of Oral Dosage Forms:

1. **Tablets**: A tablet can be packaged in a number of ways: (i) Bottles (ii) Strips.

   (i) **Bottles**: Packaging of tablets and capsules loose in bottles has both its merits and demerits.

   The merits of packing in bottles include mainly the economy provided in packaging. The cost of the packaging per unit comes down considerably by putting tablets and capsules in bottles. Also, this is preferred by the dispensing doctors since they do not want that the patient should know what he is selling and at what price. Loose packaging may thus prove to be a selling point with doctors and hospitals e.g. Tetracycline.

   However, a number of disadvantages are attached with this mode of packing, which outweight the advantages. The disadvantages are:

1. There is no protection to the individual tablets.
2. If a bottle is broken, many tablets will be spoiled and as such, their maintenance proves to be troublesome.
3. When we open the cap of a bottle and the tablets will be exposed to the moisture.
4. An unscrupulous chemist may fill sub-standard products in the same bottles to sell loose and thus may cause harm to the company's name.

   Small quantities of tablets and capsules required for a days thereby may be put in vials. This is a very expensive
mode of packaging and therefore it becomes an inhibiting factor. However, in case of high priced products, it is always good to give a few in small bottles or vials, e.g. Vivocycline. IDPL is marketing this drug in vials of two capsules each of which forms a day's therapy. Since it is an expensive product, packaging it in vials adds to its distinctiveness.

(ii) Strips: Tablets may be packaged in strips also. The strips may be of aluminium or of paper, e.g. Aspro is provided in paper strips. Enterocquinol is also provided in paper strips. IDPL provides Analgin, Emizole etc. in paper strips. There are numerous advantages of packing tablets in the form of strips:

1. Each tablet is provided in small power, giving total protection to each.
2. There are no chances of breakage or damage which may be caused otherwise.
3. It will inhibit the chemist's unscrupulous practices and will help in promoting the right drug.
4. There is an ease of identification and it makes 'sure that the chemist does not use the wrong drug.
5. Strip packaging prevents the unnecessary exposure of tablets to the moisture, which may take place otherwise.

Aluminium foils are much more costlier as compared to paper foils. Even then, aluminium foils are preferred for use, since paper foils at times may not prove to be moisture proof.
Pack Size:

The size of a particular pack is also a potent tool in sales promotion. Pack size refers to the quantity of the drug in a particular pack. While packing a drug, it is important to see that an adequate amount of it is allocated for each unit and also that the packaging may not contribute to a high price unnecessarily:

1. With regard to price, we consider two major factors. By giving a small pack, the medicine should not become costly per unit and by going a large pack, the price per pack should not go very high. It is therefore important to strike a fine balance between the two, e.g. IDPL is giving Idisglobin capsules in packs of 30 caps and 100 caps both. In a pack of 30 caps, the retailer's price is Rs.11.64 and price per capsule is 37 paise. In a pack of 100 caps, the retailer's price per pack is Rs.28.33, so the price per capsule is 28.33 paise. A patient may require a pack of 100 but may not have the ability to buy it. He may be instrumental in persuading the chemist to indulge in loose telling. This may automatically will raise the price per cap. To avoid inconvenience to the patient but to provide economy, it would have been better to give only a pack of 30 caps. This will also limit the fradulence committed by the chemists.

2. When a manufacturer decides to make a smaller pack, the dose should be given primary importance. Suppose the
daily dose of a drug is 4 tablets, it will be more appropriate to give the drug in a vial or in strips of 4. This will prove its worth with the patients also, since they will not forget to take the dose, and it will be economical also, e.g.

(i) The dose for Metacalfin and Melaxine (used for malaria) is two tablets. The entire treatment requires two tablets and of metacalfin or of 6 tablets of melaxine. Here, it is not advantageous to give strips of ten, since the chemist will have to cut out the strips before selling. At times certain patients fail to understand that the entire treatment can be finished in two tablets. They may indulge in over doses also. The doctors like to recommend such names and it helps in sales promotion also.

(ii) Threocycline: The dose for this drug i.e. tetracycline is one capsule 3 times a day (1 TDS). This drug is available in vials of 6 or strips of 6. The patient is required to take this treatment for 4 days. Such an arrangement helps him to take the medicine in 2 lots depending upon his convenience.

3. The time required for a particular treatment is also an important determinant of the pack size. The pack size should contain the quantity which would be required during the time for that treatment to avoid the inconvenience of repeat buying and also to provide the economy of bulk buying to the patients.
Packaging of Liquid:

Liquid preparations are packed generally in bottles. The injectibles will, however, appear as ampules or an vials. In case of these preparations, the size of the bottles, its shape and colour play a very important role.

The size of the bottle should be a convenient one. Its contents should provide for the entire treatment or a part thereof. The pack size should be such that it does not have a prohibitive price per unit and also it should not make an attempt to introduce economy through unwieldy pack sizes. Appropriate sizes are very important in drugs which have a specified dosage and time of treatment. However in case of non-specific, high priced preparation such as tonics and other vitamins, which are generally consumed by the lite class, companies should try to achieve larger sales volumes by introducing bigger pack sizes, since the duration of intake is not prescribed and the therapy contains till the preparation lasts. Here, it is advantageous to introduce larger sizes, because a customer has the inclination of buying a smaller size available and when the bottle is consumed, he has the satisfaction of having adhered to the doctors prescription. If only a larger pack is introduced, he will buy that and continue the therapy for a longer period.

A classic example of this is the tonics Sentivini and B.G. Phos introduced by Sandoz and Merck Sharp and Dohme respectively. B.G. Phos has been provided in sizes of 456 ml,
228 ml and 114 ml keeping in view the customers convenience. On the other hand Sentivini is available only in the form of 360 ml pack. It has been found that B.G.Phos is more popular with the doctors i.e. it is prescribed more often than Sentivini. The sales prescription usually materialises either in the 114 ml and 228 ml pack. While each prescription of Sentivini results in the sale of 360 ml pack. Here, although the quantity and number of bottles sales of B.G.Phos are more, but the rupee sales of Sentivini are higher. At present, B.G. Phos can really secure a major chunk of the market by merely altering their pack sizes.

Shape:

Shape of the package (though not a very important aspect in pharmaceuticals) does exercise influence in case of non-specific drugs i.e. tonics etc. However, it is necessary that the shape should impart elegance to the pack on the whole, since elegance here has to convey a lot of its prospective customers. It is important that the shape should impart stability to the bottle, i.e. it should not be shaky such that it tilts easily leading to the damage. Also, the cap of the bottle should be such that it should break open without undue efforts i.e. it should not require the use of a knife etc.

A bottle with or without a carton has difference in its selling. A carton has two main advantages:
1. A carton is instrumental in cutting off the light.
2. A carton provides extra protection apart from providing
The impact of the importance of shape in tonic preparations can be seen in the example of Sentivini and Vitahext of Sandoz and Hoechst pharmaceuticals Ltd. Both of these tonics introduced by companies of repute simultaneously. The bottles of the two have a unique shape. However, the packing of Sentivini is more appealing leading to instant acceptance in the market. While on the other hand, Vitahext failed by virtue of its unappealing shape.

This really provides an insight into the human psyche. The tendency of accepting all glittering things without really knowing whether it is gold or not; this is where, sales promotion has to hit, the human psychology and to adapt it in such a way, so as to further its products.

Colour: The colour of the bottle in which the product is packed, is also very important factor in furthering the sales of liquid preparations. Colour plays an important role in the following cases.

1. For those drugs, where the colour is not very appealing and cannot be made so, a clear glass bottle will only prove to be a disadvantage, since the patient will get an aversion to it, by the very look of it. Generally, amber coloured glass is used to mask the bad colour of the drug, e.g. Santevini of Sandoz and Digeplex of TCP.

2. In case of drugs where the colour is very attractive and
its stability remains unaffected by light, it is good to have a clear glass bottle, to take advantage of the appealing colour. Masking the colour might prove to be a disadvantage, e.g. Phosphomin of Sarabhai and Haliborange of Glaxo.

3. If a drug is affected by light (which may lead to its break down) then irrespective of its colour, the drug will have to be given in a dark bottle.

These basic guidelines are of very much advantage for an effective sales promotion.

Packing of Injectibles:

Injectible solution are usually provided in the form of ampules or vials. In injectibles, purity is a point which has to be exaggerated. The doctor has to be convinced that not only the drug has been manufactured scientifically, but that the packing also carries scientific elements. He should be ensured that the drug is absolutely stable and has high class packing. In case of injectibles, it is important that -

1. There should be no interaction between the drug and the glass which holds it.

2. The glass should be such that, it should be even from inside, since there is a tendency of the drugs to interact much more at those sites which are uneven. They form active sockets which may destroy the drug.

3. For highly active substances, it is important to give a
coating of some inert substances like Silicin on the inner surface of the glass, to prevent such reactions.

4. In case of solutions affected by light use of coloured glass is the best remedy. To prevent action of light, usually amber coloured glass ampules or vials are used or a paper jacket on the ampules or vials are used to serve the same purpose.

All the above points, if highlighted can prove to be very effective for sales promotion.

Pack Size:

When an injection is given in a vial for making more than one dose for the same patient or for administration in different patients, the quantity of the liquid should be such that it can be consumed in a day or two. It may prove to be unhygienic for the drug to be partially consumed for more than a certain time limit, e.g. IDPL provides multidose vials of Otcin. They should be consumed within two days of its first use.

Secondary Packing:

Usually, an injection should be given in an individual carton to provide extra protection both in cases of ampules and vials. For the purpose of economy, a set of ampules may be given in a single carton. However, this may prove to be disadvantageous, since any damaging effect may result in the breakage of all ampules or splitting over of one ampule may result in the spoilage of all others. Thus, a compromise for economy should
be made with greater caution, e.g. Vitneurin of Glaxo, Trinergic of unichem, Neurobion and Triradisol-H.

In general, for packing of the drug, a good quality of material whether paper, aluminium glass or board should be used. The workmanship should reflect the precision of work. The printing of labels etc. should be very neat and attractive with proper colour schemes etc.
Pricing

Pricing is a very important aspect of sales promotion, particularly so in price sensitive markets. Prices have a lot of impact in the consumer markets and they are capable of guiding decisions of the prospective customers. The impact of pricing is not substantial in the pharmaceuticals market. The prices for this industry are fixed by statutory provision under the Drug Price Control Order. This law ensures that undue fluctuations in prices are avoided and all customers get their commodity at a fair price. Since the prices are fixed, the manufacturer cannot bank upon it much to push their product, this thereby culminating in a battle for quality products. This law therefore relieves the customers of economic stress and ensures that the competitive manufacturers get nominal profits.

Under the Drug Price Control Order:

1. The prices of the raw-material used for the manufacture of drugs is fixed. Raw material may be here indigenous or imported.

2. The conversion cost of the drug is also fixed i.e. the conversion of raw materials to intermediates and finally tablets, capsules, liquids etc. carries a stipulated cost.

3. The cost of the packing of the product before sending it to the market is also given to each manufacturer.

If a company can offer a standard product at a lower
price as compared to another standard competitive product by
either bearing a reduction in its profits or through improved
efficiency of production, the lowered price product will be
preferred, giving a selling point to the manufacturer.

Similarly, if a standard company raises the price of
its product and it can convince the customer that the high
price is justified, either because of a superior manufactur-
ing technique, a new component added to the drug or because
of improved packing, he will definitely accept the product. A
higher price here does not offer any hinderance to the sale of
drug.

For certain life saving drugs, which are required in
smaller quantities mainly for serious ailment, lowering the
price does not help in selling the product. In fact a lower
price may actually prove to be a disadvantage to the manufacturer,
because most of times quality is attached with price. A lower
price may depict a poor quality and thus the strategy of a price
reduction may back fire, leaving the manufacturer nowhere. Here
a product having a higher price may gain advantage.

The same would be true even for sophisticated products
meant for the higher income strata group. This includes tonics
and high concentration Vitamin preparations having semi-medical
values. A high price in these cases plays to the advantage of
the manufacturer. However, he has to hit the target by pointing
out something unique about the product which justifies its high
price.
Cases where low prices effects:

1. When the drugs are required to be sold to hospitals or dispensing doctors, price plays a major role. In case of hospitals, the goods are taken on the basis of lower tender offered by the manufacturers. In case of dispensing doctors, a lower price not compromising quality will definitely click, since the doctor can have the advantage of higher profits. However, in these cases also, a company gets some allowance for its high quality.

2. When the drug is required to be taken for a very long period of time and the disease is prevalent in the lower income group, price will play a very important role, e.g. Anti-tuberculosis drug should necessarily carry a low price because it has to be dispersed for months together and also the consuming class for this drug is the lower income group. So would be the case in the drug for leprosy.

3. How price also plays an important role in sales promotion, when the drug is required to be sold directly by the retail chemists to the patients without the prescription of a doctor or on the prescription of a doctor, not specifying any brand name, e.g. Tetracycline capsules may be recommended. A customer not really aware of the numerous brands will just go and ask for the tetracycline capsules. The chemists will give him a cheap brand which is priced
lower and offers a higher profit margin.

4. A low priced product may always speak of bad quality. Therefore, whenever a standard product is being given a low price, an explanation must be available for the difference in price as compared with other competitive products. If such an explanation is not given, the product may be labelled as cheap and this may affect the product, otherwise we should claim our product to be economical and give a reasonable explanation for it. Even for high priced products we should point out that the product provides us certain unique features which the existing brands do not provide and this makes our product economical, e.g. Cebexin syrup manufactured by IDPL carries a high price.
BONUS OFFERS

Another strategy of sales promotion is the bonus offers. A bonus offers is given in order to couple the efforts of the company with that of the external agencies responsible for selling. The stockists have to be motivated, so that they push a particular companies product better as compared to its competitors. Better terms and conditions have to be offered to secure this deal and moreover this has to be done without really making the chemist or doctor feel that he is patronizing the company. The retailer is thereby induced to put in greater effort through the allurement of bonus offers.

Companies periodically give bonus offers in the form of cash discount or in kind. The actual price of the product, however, remains unchanged for the final consumer. The bonus offer may be made in any of the following ways:

1. For the purchase of a certain fixed quantity of a particular drug, a certain quantity of that drug is given free of cost.

2. For the purchase of a certain quantity of a drug, a fixed amount of another drug is given free of cost.

3. For the purchase of a certain quantity of a drug, a cash discount is allowed.

In this way, we are not actually decreasing the price of the product but per unit cost of the retailer does come down and he stands to gain. This influences him to sell more by his
own efforts. Moreover, when these offers are in operation, a chemist tends to stock more than he usually does, so as to accrue the benefit of the deal over a longer period. This will help in putting the competitor's product in the shadows and the company will gain through the improved efforts. Bonus offers is resorted to under the following circumstances:

1. To induce the chemist to stock a product, before its demand is created i.e. when the product is in the introductory stage and the establishment of the product is uncertain. At this stage a high margin on the product is offered as a bonus.

2. To popularize the product in a shorter time, bonus is often given.

3. When the inventory of the product is very high and the company wants to dispose off its stocks in a short period.

4. When the company is in a financial crisis and wants to sell its product as early as possible so as to convert the material possession into cash.

5. When the product is nearing expiry and its early disposal and use is of utmost importance, in order to avoid losses.

6. When a competitive product has reduced the overall price by offering a bonus, in this situation a similar offer will have to be resorted to in order to ensure the market share.
7. When a company is planning to discontinue a product, it offers bonus to ensure that all stocks of the product are depleted.

8. When the company wants to present the same product in a different packing, it has to make sure that the previous stocks are exhausted in order to give an entirely new projections of the product.

Under these circumstances, the company offers higher gains temporarily to its customers. But actually, it serves its own purpose i.e. of overcoming outward situation. The cost of such offers though prohibitive still leaves the company with nominal profits.

Bonus is of particular importance in the pharmaceutical industry, more so, when a product is introduced in the medical profession. In this situation, the chemist do not want to stock new products for fear of non-acceptance by the customers which may result in blocked investment. The industry, however, wants to ensure that no prescription goes unhorned at a retail counter so that people establish their confidence with the company. This is important because if a patient goes to the doctor repeatedly for prescription because of the non-availability of the product, the doctor may not recommend the drug again. Therefore to give the impetus to the sellers, allurement of additional profit is provided through introductory discounts or cash bonus offers.
Another advantage of giving a periodic bonus is that you can gain the loyalty of the chemists because they are sure of nominal profits. They i.e. druggist therefore place a lot of confidence in them. Such strategic moves on the part of the company therefore substantiate its sales promotion efforts.

**Bonus Scheme for B-Complex Syrup**

To boost the sales of B-complex syrup and to liquidate short expiry stocks a bonus offer of one bottle of 110 ml free for the purchase of every ten bottles of 110 ml. was proposed. And also one bottle of 450 ml free for the purchase of every 10 bottles of 450 ml for a period of 3 months was proposed.

A considerable rise in the total sales was achieved as a result of this bonus offer. In order to give maximum rise to the sales promotion efforts and to achieve maximum sales in order to liquidate short expiry stocks, the bonus offer was extended for another month. This led IDPL to gain a lot in terms of cash sales which would have been lost and coupled with the burden of expired stocks.
INCENTIVE SCHEMES

The Sales Promotion Department is also entrusted with the job of providing adequate compensation to the employed field personnel. Personal selling being an important tool on the promotional front, it is imperative that steps be taken to enhance the working of the sales force. Employee’s compensation can be used for two basic purposes:

1. To attract and retain qualified personnel in the organisation.
2. To motivate these personnel to higher levels of performance. The proper establishment of base pay for the job is directed towards the first purpose. Monetary and non-monetary compensation over and above the base pay may be used to achieve the second purpose. However, monetary compensation is the most commonly administered.

In this chapter an insight has been provided into the highlights of the incentive scheme for field personnel. This scheme is changed from time to time to make it more comprehensive. The incentive scheme for 1983-84 also proves to be one such comprehensive venture. The main feature of the scheme are listed below:

1. This scheme is largely concerned with motivating the field personnel. It provides an opportunity to each individual to supplement his income during the year, the additional income being linked to the performance.
2. It provides for a quarterly system of evaluation and subsequent control. Since the medical representative has to fulfil the quarterly target and also the yearly target to be eligible for incentive, it keeps him on his toes throughout the year and thus ensures efficient working. The target selling is also done on a quarterly basis. Limits have been placed on the total amount of incentive a medical representative can earn.

3. The incentive scheme, being a rolling plant provides flexibility in promotions depending on the sales plan of the quarter, availability of producer's inventory, seasonal variations and competitor's activities.

4. The concept of annual base target has been introduced in this scheme for individuals, as the qualifying level for incentive eligibility. This base target is proposed to be 10 percent more than the individuals representative performance in the previous year for the same territory. This ensures an annual growth rate of 10 percent for the organisation.

5. The incentive also stipulates that the trade sales will be credited only when the money is realised within 45 days of raising the invoice. This time period is 60 days for institutional sales. This clause provides a proper check on efficient realisation of sales and also provides an insight into the credibility of the customer.

6. The incentive scheme provides for an earning of ₹.500/- on
the achievement of 80 percent of the assigned target. This acts as a motivating factor for the slow worker also in that it pushes up his morale and gives him the satisfaction of having achieved something. It is very likely that he will work with gusto to achieve his next target.

7. The incentive scheme is uniform for both trade and institutional sales. This then provides the representative with mixed territories, opportunities to do equal justices to both the categories of jobs.
PRODUCT PROFILE

The purpose of all marketing is to satisfy the needs and desires of the customer. It is this ability of the seller to design a product which best satisfies these needs and desires, which ultimately determines market success or failure. In each purchase, he makes, he also seeks the fulfillment of an obscure need. This is related more with psychological utility of the product. Customer in his purchase, in buying a selection of benefits rather than a collection of product feature. Physical features of the product remains constant, the utilities enjoyed by him will depend upon how the manufacturer projects the product. This projection of the product in a particular fashion is known as the 'product profile'.

There are two aspects of product profile:

1. **Technical Profile:**

   Technical profile gives the total and true story of the product. It highlights all the plus and the negative points about the product. It also tells us how our product fulfills the needs of the customer both spurious and latent in relation to the competitive product. A detailed study would help us to know what other needs of the people can be exploited, what other needs a product can be made to fulfill. A detailed study of the product is therefore necessary before the product is promoted. A marketer has to bank upon the product characteristics for its promotion.
2. **Market Profile**

The second aspect of the product profile is the market profile. Market's today have been defined as 'People'. People form the hub of all the activities of a marketer. All the activities are oriented to the customer. To do this, he projects his product in a particular fashion which appeals to the customer and is in harmony with his needs and it caters the demand of the market.

The marketer uses this tool to confer the individuality on his product. He wants his product to be recognized in a particular manner which will be different from that of competitors and psychologically satisfying a different set of needs.
MARKET PROFILE

In a competitive market, the manufacturer strives continuously to establish his share of the market. To do this, he gives an individuality to his product by projecting it in a manner which appeals to the target market. To infer a profile on the product, he will need to identify those product attributes to which his target segment is most sensitive and develops and promote them. The manufacturer has to see what the competitors are stressing and has to find areas of counter-actions in developing the market profile of a product. To achieve this aim the manufacturers are increasingly using design themes, visual symbols and slogans to establish optimum customer perceptions of where they wish their product to stand in relation to the market as a whole. So a marketing manager has a host of strategic and tactical decisions to make in relation to his product.

The market profile of a product should fulfil two basic requirements:

1. The market profile should suggest something, which the prospect is looking for, or it should appear to fulfil the needs of the prospect or a dominant desire. This is called the 'Hot-Button'. If the hot-button is not identified properly, sales promotion will not be able to achieve the required results. Market profile is not the presentation of a fictitious pictures or deception of
prospects. In fact it is the projection of positive facts which are helpful in selling the product.

2. The market profile should be capable of impinging upon the minds of the people and it should be established there. It should have such an impact that they should know about the product and the prospect should be able to associate the profile with that particular product. People should have sufficient proof to believe that the profile is really an attach of the product. People should register that particular profile in their minds and should be able to recall the name of the product when an effort is made in that direction. People should also be apply what they have registered and their buying motives should be in accordance.

Depending upon whether the market profile satisfies the above check list or not it may accordingly be:

(a) Appropriate
(b) Inappropriate

(a) Appropriate: A market profile may be appropriate but not established, people may not feel convinced about the idea propounded by the manufacturer. He will have to put in more efforts in his promotional campaign to ensure the prospects that such features are actually associated with his product. It should be appropriate in relation to the segment it caters to. A product unable to give any advantage will not sell since repeat buying will reveal to the customer that the product betrays
its popularized profile. It is for selling a good product that good sales promotion is required.

(b) Inappropriate: A good product given a wrong projection will also fail to sell i.e. the market profile of the product is inappropriate. A bad product trying to prove itself through a wrongly coined profile will also be unable to sell, because the product will not authentify what the profile intends. Thus the profile will prove to be inappropriate. It is very common in pharmaceuticals, to coin a slogan highlighting the products. The slogan may be coined keeping in view the priority needs of the prospect. This slogan is usually entitled the Unique Selling Proposition (USP). The market profile may contain the more than one aspect of the product. For instance, the market profile may be a composition of: (i) Safety, (ii) Efficiency, and (iii) Economy. However, all the three may not be important for the intended market. Here we shall coin the USP, keeping in view the most important need of the prospect, so as to gain the maximum attention from the customer. To attract attention, the cause or effect of the drug is visualised. That is what the prospect registers and he associates the drug immediately with the visual, e.g. Cemizol. This drug is a popular pain reliever and it also contains vitamin-C. The market profile of this product is:

(a) Quick onset of action.
(b) High magnitude of action
(c) Contains vitamin-C
Here the first two points are very important for any customer. But the competitors have banked upon these features to promote the product and a projection of Cemizol based on these two points would have been another repetition without any distinctness. Therefore to make the USP distinct IDPL also accounted for the third feature and the USP coined was "Fast and Potent Analgesic with a built in Advantage". This really clicked in favour of IDPL. Thus USP is the hub around which the sales promotion of any product is centred and sales promotion conducted without a USP is unscientific.

PROFILE OF SUCCEE

It was observed through market research that vitamin-C was becoming exceedingly popular in the medical profession. Many reports from international markets stated the importance of vitamin-C. Doctors also started recommending this drug even for common colds. It was a common belief that the vitamin-C requirements of the patient increase during diseased condition, therefore, it was recommended for ailing and normal patients both. But the bad taste of vitamin-C became an inhibition towards its frequent intake. Under this circumstances, it became necessary to mask the taste of vitamin-C. It was established that a good taste and flavour would play an important role towards its selling. This fact was further substantiated by the introduction of "Chewcee" by "Lederle". This was the first introduction of a vitamin-C with a pleasant taste.
IDPL, worked on the development of a sweet and sour taste for vitamin-C. They became successful in producing such a taste for this very popularised drug. Since the main stake of the brand was taste and flavour, this was taken care off since the very beginning. The following points will elucidate how IDPL was successful in projecting the profile of this brand as "Medicine with a taste".

1. At the first hand, the name of the drug itself attracts enough attention as being something related with good taste. The name "Chewcee" was thought to be a misnomer, since a tablet is expected to be sucked and not chewed to have the maximum advantage of its taste and flavour. Therefore, the very name "Sukcee" connotes good taste and as such is very intimately related to its profile.

2. The packing of the product is in strips and drops as well. One strip is of 10 tablets and pediatric drops are in a bottle of 15 ml with graduated droper. The strips are coloured green and lemon. This definitely goes towards expressing a sweet and sour taste since these two colours are connected with the citrus family.

3. The colour of tablet i.e. lemon coloured with speck of orange is surely an allurement to the palate. The size of the tablet is such that it cannot be swallowed easily and it has to be sucked in the mouth before it can be taken in.
4. The first literature of the product projected a small girl taking vitamin-C drops as carrying an expression as though she was thoroughly enjoying taking this Sukcee.

5. When the product was introduced, the doctors and chemists were made to taste the drug to ensure the good taste. Not only that, at each subsequent visit of sales representative, the doctor was made to taste the tablet with the contention that the taste was seen further improved. This really established taste as a factor in the mind of the doctor and he was then inclined to prescribe Sukcee whenever a vitamin-C was required.

All these efforts were very helpful in projecting the medicine with a taste. In fact all these promotional efforts over confused the product at a particular stage. Because of its good taste, it was regarded as a sophisticated product and therefore the doctors limited his prescription to a certain class of people. At this stage then, price was emphasized along with taste. The doctors were convinced that the product is selling at a very reasonable price and that actually it is a product for the masses. It was here that it was popularised as a product for the masses in order to protect the market share. Later to provide fill-up to this very idea, the product was also introduced in the forms of drops, so that it could be administered with ease to both adults and children.
Sukcee is a brand leader in Vitamin-C presently. It has established itself very firmly and is in fact taking away the market of Redaxon being manufactured by "Roche" and "Celin" being manufactured by Glaxo.

Sukcee has been successful in attaining the status of a leader by virtue of its appropriate projection i.e. good taste. IDPL has really given the proper profile to its product through identification of the "hot button". The efforts made in projecting this profile has been equally diligent.

This case vividly reveals the importance of an appropriate profile and the efforts involved in projecting that profile.

PROFILE OF THROMYCIN FAMILY

IDPL manufacture three items as a brand name of Thromycin:

1. Thromycin tablets containing Erythromycin Estolate.
2. Thromycin-S tablets with Erythromycin Stearate.
3. Thromycin oral suspension. Its composition is of Erythromycin Ethyl Succinate USP.

A unique feature about profile projection is that their profile has been interlinked and in enhancing one product, the other product is also promoted.

Technical Profile of Thromycin:

The drug erythromycin estolate is not destroyed in the
gastrointestinal tract by the action of acids. The absorption of this drug in the small intestine is better than any of the other salt and the drug is available in the body for a longer period of time and that too in high concentration. Signs of liver damage, indicative of cholestatic hepatitis and jaundice have been reported in patients receiving erythromycin estolate for 10 days or immediately on starting a second course. These hepatotoxic effects appear limited to adults.

Thromycin (erythromycin estolate) is one of the macrolide antibiotic effective against a large number of organisms.

Technical Profile of Thromycin-S:

The drug erythromycin sterase is destroyed in the gastrointestinal tract and it is therefore enteric coated. The coating does provide sufficient protection from destruction, but it cannot be an absolute protection.

The absorption of the drug in the small intestine is inadequate partly due to the enteric coating and partly due to the nature of the product. The absorption as such is not complete and certain and the administration of this drug does not cause cholestatic hepatitis and jaundice.

Technical Profile of Thromycin Suspension:

Thromycin oral suspension i.e. erythromycin ethyl succinate USP is specially formulated for use in children. It is easily reconstituted into a pleasantly flavoured palatable suspension. This is well absorbed following oral administration particularly
when the stomach is empty. Peak blood levels can be achieved within 1-2 hours. It is well tolerated.

From the above, it is clear that both these products have conflicting profiles. The positive attributes of one are not present in the other and vice-versa. The potency of thromycin is reflected in the USP, "the Erythromycin that still the key antibiotic for certain infections". And thromycin-S as the safe erythromycin.

It is generally propounded that thromycin should be recommended for severe infections and thromycin-S for milder infection and thromycin oral suspension for pediatric purpose. But IDPL people project these products in an entirely different manner. They tell the doctors that in either case (i.e. severe or mild) thromycin should be administered in the beginning, so that most of the pathogens are destroyed. And, since thromycin is available in the body for a longer period of time and that too in high concentration, it is best to supplement thromycin with thromycin-S in the subsequent stages, so as to prevent Cholestatic hepatitis and jaundice which may arise otherwise. So, here Estolate is the potent actor and Stearate is the soother. The linked profile takes the products in their totality and combines the merits of one with that of other to provide a total treatment for the patient.

A doctor would highly appreciate this sort of a projection and would readily recommend the use of these products. It is like hitting the two targets with a common arrow.
STILL THE KEY ANTIBIOTIC FOR CERTAIN INFECTIONS

ERYTHROMYCIN

THROMYCIN®

TABLETS—PAEDIATRIC SUSPENSION
ERYTHROMYCIN

THROMYCIN

TABLETS—PAEDIATRIC SUSPENSION

STILL THE KEY ANTIBIOTIC FOR CERTAIN INFECTIONS

ATYPICAL PNEUMONIA

Erythromycin is usually most effective in the treatment of atypical pneumonia caused by M. pneumoniae as this organism is very highly susceptible to erythromycin. It reduces the length of illness and duration of fever. In addition, the rate of clearing as noted in the chest X-ray is accelerated.

STREPTOCOCCAL INFECTIONS

Most streptococci are highly sensitive to erythromycin. Hence, in streptococcal tonsillitis, pharyngitis, laryngitis, scarlet fever, and erysipelas, erythromycin provides excellent response. Pneumococcal pneumonia also responds promptly to erythromycin.

STAPHYLOCOCCAL INFECTIONS

Erythromycin is useful for the treatment of relatively minor infections caused by penicillin-sensitive or penicillin-resistant Staph. aureus.

DIPHTHERIA

Erythromycin is very effective in eradicating both the acute and chronic diphtheria bacillus carrier state and is recommended as the drug of choice for eliminating C. diphtheriae from carriers.

WHOOPING COUGH

Erythromycin can prevent whooping cough in susceptible individuals who are exposed to the disease; and, if administered early in the course of whooping cough before the paroxysmal stage is reached, erythromycin may shorten the duration of illness.

LEGIONNAIRES’ DISEASE

Clinical experience and the results of laboratory studies indicate that erythromycin is the most active antimicrobial agent available against Legionella pneumophila. Erythromycin is, therefore, the drug of choice for treating pneumonia due to the Legionnaires’ Disease bacterium.

TETANUS

Erythromycin is valuable for eradicating Clostridium tetani in patients with tetanus who are allergic to penicillin.

SYPHILIS & GONORRHOEA

Erythromycin can be employed successfully in the treatment of early syphilis, and syphilis during pregnancy, in patients who are allergic to penicillin. Erythromycin may also be useful for disseminated gonococcal disease in pregnant patients who are allergic to penicillin.

HOW SUPPLIED: Tablets, each containing Erythromycin estolate equivalent to 250 mg Erythromycin, in strips of 10 s; Paediatric Suspension, each 5 ml of the reconstituted suspension containing 100 mg Erythromycin (as Erythromycin ethylsuccinate), in bottles containing powder to make 40 ml suspension.

INDIAN DRUGS & PHARMACEUTICALS LTD.

(A Govt. of India Undertaking)
P. O. Box 3816, New Delhi-110049
STILL THE KEY ANTIBIOTIC FOR CERTAIN INFECTIONS

ERYTHROMYCIN

THROMYCN

TABLETS—PAEDIATRIC SUSPENSION

ERYTHROMYCIN TABLETS—PAEDIATRIC SUSPENSION

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INDIAN DRUGS & PHARMACEUTICALS LTD.
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IDIGLOBIN®
Capsules and Liquid

THE
BALANCED
HEMATINIC
IDIGLOBIN®
Capsules and Liquid

THE BALANCED HEMATINIC

Most patients complaining of symptoms like general weakness, vertigo, headache, something in the visual field, fatigue, dryness of mouth, irritability, amenorrhoea, low grade fever etc. etc. may be simply suffering from anaemia. All the above symptoms could be the presenting features. In all these cases anaemia could be due to:

- Excessive blood loss
- Dietary deficiency of Hemopoietic factors
- Sequelae of chronic infections like malaria, and tuberculosis

Be it due to iron deficiency, dietary deficiency, pregnancy and lactation, the deficiency encountered during early childhood and adolescence. In all these conditions, IDIGLOBIN plays a definite role because it has all the Hemopoietic factors in an easily absorbable and well tolerated form.

Following IDIGLOBIN therapy the hematocrit values begin to change right from the first week of use.

IDIGLOBIN thus offers a rational approach for the treatment of anaemias of multiple etiology.

- Intestinal Helminthiasis.
- Prolonged periodic bleeding in women with Endometrial Pathology.
- Bleeding from Peptic ulcer and Haemorrhoids.
- Bleeding gums.
- Chronic Renal diseases.
- Post operative conditions.
- Malabsorption syndromes.
- Chronic debilitating infections.
- Pregnancy and lactation.
- Following child birth.

IDIGLOBIN is well tolerated.

Available in capsule and palatable syrup forms. IDIGLOBIN is presented as:

**CAPSULES**

<table>
<thead>
<tr>
<th>Composition</th>
<th>Each capsule contains:</th>
</tr>
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<tbody>
<tr>
<td>Ferrous Fumarate</td>
<td>300mg</td>
</tr>
<tr>
<td>Cyanocobalamin</td>
<td>10mcg</td>
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<tr>
<td>Thiamine Mononitrate</td>
<td>5mg</td>
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<tr>
<td>Riboflavin</td>
<td>5mg</td>
</tr>
<tr>
<td>Nicotinamide</td>
<td>50mg</td>
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<tr>
<td>Folic Acid</td>
<td>1.5mg</td>
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<tr>
<td>Ascorbic Acid</td>
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**LIQUID**

<table>
<thead>
<tr>
<th>Composition</th>
<th>Each 5ml contains:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferric Ammonium Citrate</td>
<td>225mg</td>
</tr>
<tr>
<td>Cyanocobalamin</td>
<td>5mcg</td>
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<tr>
<td>Thiamine Mononitrate</td>
<td>5mg</td>
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<tr>
<td>Riboflavin Phosphate (Sodium Salt)</td>
<td>6.85mg</td>
</tr>
<tr>
<td>Nicotinamide</td>
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<tr>
<td>Folic Acid</td>
<td>1mg</td>
</tr>
<tr>
<td>Alcohol</td>
<td>10% V/V</td>
</tr>
</tbody>
</table>

**PRESENTATION:** Hard gelatin capsules in bottles of 30’s and 100’s. Liquid in bottles of 110ml.

**DOSEAGE:** Usually 1 capsule a day after meals or as directed by the physician.

**Liquid:** Usually 1 teaspoonful a day after meals or as directed by the physician.

**REFERENCES:**


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P.O. Box 3816, New Delhi-110049
EFFECTIVE CONTROL OF B.P. IS ESSENTIAL BUT NOT THE ONLY CRITERION OF AN IDEAL ANTIHYPERTENSIVE

Emdopa®
Methyldopa Tablets
Satisfies most criteria of an ideal antihypertensive
Emdopa

Methyldopa Tablet

SATISFIES MOST CRITERIA OF AN IDEAL ANTIHYPERTENSIVE

EFFECTIVELY CONTROLS BLOOD PRESSURE

Methyldopa (EMDOPA) is highly effective in all grades of hypertension — mild, moderate, and severe. After a single therapeutic dose, the maximal hypotensive effect is achieved between 4 to 6 hours, and continues with diminishing intensity for as long as 24 hours. Methyldopa (EMDOPA) effectively reduces blood pressure when the patient is recumbent as well as in an erect position. The drug satisfactorily controls arterial blood pressure during exercise. Therapy with methyldopa (EMDOPA) effectively controls blood pressure over periods of 10 years or more, with only moderate increase in the average dose needed.

FAVOURABLY AFFECTS THE VITAL FUNCTIONS

During treatment with methyldopa (EMDOPA) the vital functions of brain, heart and kidney are not only not compromised with, but may be favourably affected. There is no risk of cerebral haemodynamic insufficiency and, on the contrary, cerebral blood flow may increase. Methyldopa (EMDOPA) decreases peripheral vascular resistance without affecting cardiac output, thereby reducing workload of heart. The drug also increases myocardial blood flow with significant decrease in coronary vascular resistance. Methyldopa (EMDOPA) maintains or increases glomerular filtration rate and renal blood flow in hypertensive patients with normal or impaired renal functions.

DOES NOT PRODUCE SIGNIFICANT ADVERSE EFFECTS

Methyldopa (EMDOPA) is well tolerated by the majority of patients. Significant adverse effects have been infrequent and do not pose a serious problem. Clinical orthostatic hypotension, and post-exercise hypotension with methyldopa (EMDOPA) are uncommon. Drowsiness, lethargy and dryness of mouth are the most commonly reported side effects of methyldopa (EMDOPA), but these subside on continuation of therapy. It is after 6 — 12 months of therapy with methyldopa (EMDOPA) that some patients may develop direct positive Coomb's test, but haemolytic anaemia is rare. Drug-induced hepatitis and drug fever are infrequently reported with methyldopa (EMDOPA) therapy. Methyldopa (EMDOPA) is relatively safe when used during pregnancy as it does not give rise to unusual adverse effects.

CONTRAINDICATED IN VERY FEW CONDITIONS

Unlike beta-blockers methyldopa (EMDOPA) is not contra-indicated in hypertension complicated with cardiac impairment, A.V. Conducting defects, Raynaud's phenomenon, asthma, or diabetes. Active hepatic disease, such as acute hepatitis and active cirrhosis, is a contraindication for use of methyldopa (EMDOPA). The drug is not recommended for patients with phaeochromocytoma.

HOW SUPPLIED: Tablets, each containing 250 mg methyldopa, in strips of 10's.
The ideal antacid

EFFECTIVE ACID-NEUTRALIZING CAPACITY

DIRECT ANTIFLATULANT ACTION

NO LOCAL OR SYSTEMIC SIDE EFFECTS

GOOD ACCEPTABILITY

ALMAGEL TABLETS SUSPENSION

HYPER ACIDITY
For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory.

ALMAGEL TABLETS

The ideal antacid

EFFECTIVE ACID-NEUTRALIZING CAPACITY
ALMAGEL contains two gastric antacids—Aluminium hydroxide and Magnesium hydroxide. Aluminium hydroxide provides persistent acid neutralizing action with demulcent and adsorbent properties. Magnesium hydroxide provides rapid, prolonged and high acid neutralizing capacity. The combination thus provides prompt, potent and persistent antacid action. Further, the fact that products differ with respect to antacid efficacy, according to the process of manufacture and to age of ingredients, is also fully taken care of in case of ALMAGEL. ALMAGEL, thus, has effective acid-neutralizing capacity.

DIRECT ANTIFLATULANT ACTION
ALMAGEL also contains Methyl Polysiloxane, a powerful defoaming agent which reduces the surface tension of gas bubbles and causes them to coalesce. ALMAGEL, thus, prevents the formation of gas pockets in the G.I. tract thereby providing direct antiflatulant action.

NO LOCAL OR SYSTEMIC SIDE EFFECTS
Both Aluminium hydroxide and Magnesium hydroxide are non-systemic gastric antacids and thus ALMAGEL is free from systemic toxicity. Further, in combination, constipating effect of Aluminium hydroxide and cathartic effect of Magnesium hydroxide are neutralized by each other. ALMAGEL, therefore, does not cause either constipation or purgation even on continued use.

GOOD ACCEPTABILITY
Both ALMAGEL tablets and suspension have been so formulated that the effect of the inherent ‘chalky’ taste of the antacid ingredients has been diluted by using properly processed ingredients, and appropriate flavouring. ALMAGEL is, therefore, readily accepted by the patient.

DOSAGE: The usual dosage is one or two tablets/teaspoonfuls four times daily, to be taken after meals and at bedtime. The tablets should be chewed.

COMPOSITION: Tablets, each contains Dried Aluminium hydroxide Gel 250 mg, Magnesium hydroxide 250 mg, Methyl Polysiloxane 10 mg; Suspension, each 10 ml contains Aluminium hydroxide Gel 250 mg, Magnesium hydroxide 250 mg, Methyl Polysiloxane 50 mg.

HOW SUPPLIED: Tablets in strips of 10’s and Suspension in bottles of 175 ml.

INDIAN DRUGS & PHARMACEUTICALS LTD.
(A Govt. of India Undertaking)
P.O. Box 3816, New Delhi-110049
CHLOROQUINE-IDPL TABLETS
Fights malaria successfully

Malaria has once again been on an increase in the country. From 50,000 positive cases reported in 1961, the figure has reached gigantic proportions—5,000,000 cases in 1975. It is expected that in 1976-77 incidences of malaria will be still higher. Malaria can be successfully controlled by CHLOROQUINE-IDPL tablets. CHLOROQUINE-IDPL is an effective agent against all forms of malaria, and the treatment of choice for all forms of malaria during the acute attack.

DOSAGE
A single dose of CHLOROQUINE-IDPL tablets is sufficient for the clinical cure of malaria.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Dose</th>
<th>Tablets</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 1 year</td>
<td>75 mg.</td>
<td>1/2</td>
</tr>
<tr>
<td>1 - 4 years</td>
<td>150 mg.</td>
<td>1</td>
</tr>
<tr>
<td>4 - 8 years</td>
<td>300 mg.</td>
<td>2</td>
</tr>
<tr>
<td>8 - 14 years</td>
<td>450 mg.</td>
<td>3</td>
</tr>
<tr>
<td>14 years and above</td>
<td>600 mg.</td>
<td>4</td>
</tr>
</tbody>
</table>

The drug should not be given on an empty stomach.

HOW SUPPLIED
CHLOROQUINE-IDPL tablets, each containing Chloroquine Phosphohate 250 mg., in boxes of 25 strips of 4 tablets each, and tins of 500 tablets.
We are hit again by rampant malaria in Mewat

The entire landscape is covered with sporozoites of malaria parasites. The disease is now spreading rapidly in the region.

All out war on malaria

Malaria is a disease caused by Plasmodium parasites. It is transmitted to humans by the bite of an infected female Anopheles mosquito. The highest number of cases is reported from Mewat district in the state of Haryana.

Malaria cases in the district have increased significantly in recent years. According to the district health authority, there were 7,533 cases reported in the district in the last year. The authorities are working hard to control the disease.

We need to mobilize the community to fight malaria. The government has launched an intensive awareness campaign to educate people about the disease and its prevention.

By Dr. Beulah R. Singh

The return of malaria

Malaria is a serious health problem in the world. The disease affects millions of people every year and is responsible for many deaths. The disease is caused by a parasite that is transmitted to humans by the bite of an infected mosquito.

We need to take immediate action to control the disease. The government is working on various initiatives to combat malaria. We need to increase awareness about the disease and its prevention.

By Dr. Beulah R. Singh
THE NEED THAT HARDLY MANIFESTS AS DEMAND. THE NEED FOR VITAMINS
Man can neither synthesise nor store to any significant degree, the water-soluble vitamins (B-Complex and C). Normally, these vitamins are replenished every day through diet. However, in certain situations as in conditions of stress, inadequate dietary intake, inadequate absorption and during increased metabolic need, the water soluble vitamins may be depleted, thus requiring additional supplementation.

Because of one or the other of the above mentioned reasons some amount of deficiency of the water soluble vitamins are usually present in conditions like:
- Malabsorption syndromes
- During antibiotic therapy
- Post-operative and burns
- Chronic alcoholism
- Pregnancy and lactation
- Convalescence
- Febrile illness

and require supplementation of the water soluble vitamins.

**CEBEXIN provides these in adequate quantities.**

<table>
<thead>
<tr>
<th>Vitamin</th>
<th>Male</th>
<th>Female</th>
<th>Lactation</th>
<th>Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vit. C (mg)</td>
<td>40</td>
<td>40</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>Nicotinamide (mg)</td>
<td>19</td>
<td>15</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Riboflavin (mg)</td>
<td>1.7</td>
<td>1.3</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Pyridoxine (mg)</td>
<td>2</td>
<td>2</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Thiamine (mg)</td>
<td>1.4</td>
<td>1.1</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Folic Acid (mg)</td>
<td>0.1</td>
<td>0.1</td>
<td>0.15</td>
<td>0.3</td>
</tr>
<tr>
<td>Cyanocobalamin (mcg)</td>
<td>1</td>
<td>1</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Cal. Pantothenate (mg)</td>
<td>1</td>
<td>1</td>
<td>5**</td>
<td>5</td>
</tr>
</tbody>
</table>

Drugs and Cosmetics Rules, Schedule V, Proprietary Range, Govt. of India (1979).

**CEBEXIN is also available in highly palatable syrup form.**

**DOSE:**
- TABLETS: One tablet daily or as directed by the physician.
- SYRUP: One teaspoonful daily or as directed by the physician.

**REFERENCES:**
AMPICILLIN

Paediatric Suspension

Injections

500mg Capsules

250mg Capsules

THE ONE NAME FOR FULL RANGE

BROACIL®
BROACIL
Capsules - Suspension - Injections

THE ONE NAME FOR FULL RANGE

Broacil is IDPL brand of Ampicillin available as capsules, suspension and parenteral dosage form.

Years of clinical experience of doctors all over, establishes the therapeutic credibility of Ampicillin. As a penicillin congener derived from the penicillin nucleus, Ampicillin has proved to have the outstanding property against a wide range of Gram-positive and Gram-negative microbes including H. influenzae, salmonella, shigella, non-penicillinase producing proteus, most strains of E. coli.

Broacil, is 4-8 times more active than that of commercially available penicillin preparations.

THERAPEUTIC INDICATIONS:
Broacil offers a bactericidal remedy against the above organisms often responsible for:
- Septicaemia due to Gram-negative bacilli (either alone or in combination with other suitable antibiotics).
- Wide range of respiratory tract infections including paediatric infections.
- E.N.T. infections.
- Others soft tissue infections caused by H. influenzae type b.
- Bacterial endocarditis (Johnson, D.G. et al. (1965), 'Subacute bacterial endocarditis caused by Streptococcus faecalis and successfully treated with ampicillin', Med. J. Aust., 100).

PHARMACOLOGICAL ASPECTS:
Broacil is acid resistant and hence well absorbed when administered orally. Broacil parenteral, however, is indicated in more severe cases. In case, however, the parenteral administration is difficult, administration of Broacil along with Probenecid is an alternative to parenteral administration. The peak concentration is achieved within two hours. Doubling the dose also doubles the serum concentration.

The drug is bound to protein to an extent of only about 20%, the lowest for any penicillin and semi-synthetic penicillin. The route of excretion is mainly renal but fairly high concentrations are also found in bile.

TOXICITY:
Often skin rashes, gastro intestinal disturbances, some degrees of hematological disorders are reported. Only with very large doses (intravenous), capable of giving rise to a serum level as high as 800mcg per ml may cause encephalopathy.

ADMINISTRATION AND DOSAGE:
For mild to moderate infections - 50 to 100mg per kg body weight per day given orally in four divided doses. The most common adult oral dose being 500mg 6 hourly and 250mg 6 hourly only for mild ambulatory cases with highly susceptible organisms.

Parenteral: For serious infections high doses are necessary. In children 25mg per kg per day is recommended. Broacil parenteral is given usually every 4-6 hours depending on the severity of the infections.

Newborn and premature infants: Dose is 25mg per kg per day administered in two divided doses for mild infections. For severe infections, however, 50mg per kg per day in two equal doses is recommended.

Broacil in renal failure: Broacil is relatively safe given in usual adult doses. In cases of anuria, however, the average plasma half life of Broacil is raised to 8.5 hours. In these patients half of the daily calculated dose may be given twice daily. There is however the risk of increased skin rashes in patients with severe renal failure treated by Broacil. Broacil can be safely added to peritoneal dialysis fluid in a dose of 50mg added to each litre.

HOW SUPPLIED: CAPSULES: each containing Ampicillin Trihydrate equivalent to 250mg/500mg of Ampicillin, in strips/vials of 4 s. SUSPENSION: each 5ml of the reconstituted suspension containing Ampicillin Trihydrate equivalent to 125mg of anhydrous Ampicillin, in 40ml bottles. INJECTIONS: Each vial contains Ampicillin Sodium equivalent to 500mg of anhydrous Ampicillin.

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory.
A complete range to successfully deal with local infections
NEPODEX
A complete range to successfully deal with local infections

DUSTING POWDER
NEPODEX dusting powder provides the combined antibacterial ‘cover’ of two valuable, mutually-suited topical antibiotics—Neomycin and Bacitracin, and Sulphacetamide. NEPODEX keeps the cuts, bruises, burns, wounds, etc., free from infections. NEPODEX dusting powder is indicated for both prophylactic & therapeutic use in infected wounds, ‘wet’ or ‘weeping’ lesions, burns; dermal ulcers, dermatoses, eczema, impetigo, furunculosis, folliculitis, acne necrotica miliaris (prickly heat-acne), seborrhic dermatitis and other pyodermic skin conditions.

COMPOSITION & PRESENTATION: Each gram of the powder containing Neomycin sulphate 5 mg, Bacitracin 250 units, Sulphacetamide 60 mg, in 10 g polyethylene sprinkler.

EYE/EAR DROPS
NEPODEX eye/ear drops combine the complementary antibacterial ‘cover’ of Neomycin and Polymyxin extending over gram +ve and gram —ve organisms including Pseudomonas aeruginosa, together with the pronounced antiinflammatory, antipruritic and antiallergic actions of dexamethasone. NEPODEX eye/ear drops are indicated for the prophylaxis & treatment of infections of eye/ear such as conjunctivitis, suppurative conjunctivitis, blepharitis, dacyrocystitis, corneal ulcers and various types of keratitis, chemical or thermal burns of the cornea, sympathetic ophthalmia; oitis externa, oitis media (for short-term) & wound cavities in the ears.

COMPOSITION & PRESENTATION: Neomycin sulphate 0.5% W/V, Polymyxin B sulphate 0.05% W/V, Dexamethasone sodium phosphate 0.1% W/V, Benzalkonium chloride 0.004% W/V, in 3 ml bottle with plastic dropper assembly.

EYE/SKIN OINTMENT
NEPODEX ointment provides the combined antibacterial ‘cover’ of Neomycin and Zinc bacitracin together with the pronounced antiinflammatory, antipruritic and antiallergic actions of dexamethasone. NEPODEX ointment is indicated for prophylaxis and treatment of external bacterial infections of the eye and skin, where inflammation and infection may coexist, as in styes, conjunctivitis, blepharitis, infected corneal ulcer, various types of keratitis; atopic dermatitis, dry and scaly infected eruptions, furunculosis and other bacterial infections involving eye/skin and outer ear.

COMPOSITION & PRESENTATION: Each gram containing Neomycin sulphate 5 mg, Zinc bacitracin 250 units, Dexamethasone sodium phosphate 1 mg, in collapsible tube of 5 g.

INDIAN DRUGS & PHARMACEUTICALS LTD.
(A Govt. of India Undertaking)
P. O. Box 3816, New Delhi-110049
NOT JUST A PAIN RELIEVER OR AN ANTICHOLINERGIC BUT...
A RATIONAL APPROACH TOWARDS MANAGEMENT OF PAINFUL SPASMODIC CONDITIONS

CARDIOSPASM
BILIARY COLIC
PYLORO SPASM
GASTROINTESTINAL COLIC
RENAL COLIC
URETERIC COLIC
SPASTIC DYSMENORRHOEA

SPASMIZOL®
TABLETS - DROPS
SPASMIZOL®
TABLETS - DROPS

3 way acting antispasmodic independent analgesic action

PARASYMPATHETIC POSTGANGLIONIC ANTICHOLINERGIC ACTION (Homatropine Mbr)

PARASYMPATHETIC GANGLIONIC BLOCKING ACTION (Homatropine Mbr)

PERIPHERAL ANTISPASMODIC ACTION (Analgin)

MECHANISM OF ACTION OF SPASMIZOL

It is the sum total of gentle action on three different areas concerning smooth muscles' activity that makes SPASMIZOL exert powerful antispasmodic action with least side effects. While this powerful antispasmodic action relaxes the smooth muscles, it is through independent potent analgesic action of SPASMIZOL that pain—the most disturbing manifestation of spasm—is simultaneously relieved. Because of its action on both SPASM & PAIN, prescribing SPASMIZOL becomes the rational approach towards management of all painful spasmodic conditions of visceral organs.

DOSAGE: For adults, 1-2 tablets three times a day. For infants and young children, 5-10 drops three to four times a day. For older children, 10-20 drops three times a day.

COMPOSITION: Tablets: Each contains: Homatropine methylbromide 2.5mg, Analgin 500mg, Phenobarbitone 10mg.
Drops: Each ml contains: Homatropine methylbromide 2.5mg, Analgin 100mg, Phenobarbitone 5mg.

HOW SUPPLIED: Tablets in strips of 10's; Drops in 10ml bottle with dropper.

INDIAN DRUGS & PHARMACEUTICALS LTD.
(A Govt. of India Undertaking)
P. O. Box 3816, New Delhi-110049
MEDIA PLANNING

In any promotional campaign it is important that the various elements be fixed judiciously, so that the efforts involved are not an exercise in futility. The various elements include: (i) Personal selling (ii) Advertisement (iii) Sales Promotion (iv) Publicity. The marketeer, has to make the proper awareness of his product and even convince them about its adequacy. In this context, we can say that the marketeer has to communicate with his prospects and also has to convey his message in such a manner that it is interpreted rightly by them. Media can therefore be defined as the link between the marketeer and the prospects through which the message about the product i.e. the market profile of the product is projected. The message aimed at the target can be communicated in any one of the following ways or a mixture of the two i.e. (a) - Personal, (b) Non-personal.

The various elements of the persuasive - communication mix model are depicted below:
From this, it follows that in pharmaceutical selling, we have to concentrate more on personal selling since it involves a very limited target. The other elements of the mix hold less importance relatively. Publicity here is undertaken on the corporate level and is not limited to individual products.

The following criteria has thus to be borne in mind before selecting the promotional mix:

1. The doctors do not appreciate that the patient should also be familiar about the details of any product, because otherwise, he may be questioned very easily and his reputation put at stake.

2. Anything which is advertised is not patronised by the doctor. Thus, those preparations which are required to be sold on the prescription of a medical practitioner should be exposed through those media only, the use of which is restricted to the medical profession.

3. For most of the drug, the law prohibits advertisement to the lay public. This is done to avoid wrong use of a drug. People do become over enthusiastic about certain advertisements, they see and may tend to put the product to certain unwanted users. These include products like antibiotics, sulphonamides and analgins used for heart patients.

Thus, only those drugs which can be sold without the prescription of a medical practitioner are advertised to the
lay public. The drugs are called the O.T.Cs (over the counter drugs). Examples of such drugs are found in Aspro, Anacin, Saridon, Paincut, Cinkara, Safi etc. Such drugs are then, not promoted in the circle of the medical profession.

A. **Personal**: The personal media includes the following modes of promotion:

(i) Personal contacts through sales representatives
(ii) Medical conferences
(iii) Seminars

(i) **Personal Contacts**: Personal contacts rank the top-most for promotion in a pharmaceutical concern. In pharmaceuticals, the targeted market is the doctor only and therefore, it is important that a drug be discussed with the doctor thoroughly, before he can recommend it for use. In this industry, it is also important to restrict the media to doctors only, lest the layette is also exposed to the drug. Since the target is very limited, it has been a convention to visit the doctors periodically, through the medical representatives, who are trained to discuss the product. To authentify his statements, the medical representatives carry the literature in printed forms. He discusses about the product, based on all the printed material and he leaves a hand-out for the doctor.

**Training of the Sales Force**:

IDPL also has a provision for training the sales force it recruits. They are given training regarding the essentials of creative selling. They are given them extensive knowledge
about the company's new products and the strategy of promotion being adopted for that product.

**Evaluation of the Sales Force:**

Evaluation of the sales force is mainly done by the sales they achieve for their regions. Every medical representative is assigned a target by the regional sales manager in keeping with the potential of his territory. Efficiency of the field force is represented in the fulfilment of their assigned targets. On fulfilling the assigned targets, the field force is entitled to an adequate incentive (generally a monetary renumeration).

**Pre-Planned Detailing (PPD):**

PPD means, a talk, planned and prepared well in advance to be used by a salesman in the course of an interview with the prospect, for the achievement of a specific sales objective.

A talk has two aspects i.e. "what" and "how" to speak. One essential component of PPD, therefore, is the subject matter, in the language and sequence, required to be followed as such by the detailer, whereas guidelines for correct gestures, modulations of the voice and proper synchronisation of the talk with the detailing aids literatures, samples etc. forms the other component of it. These components together with readymade answers to 'effectively handle the questions and objectives' which may arise during the interview makes a complete PPD. The draft of PPD is formulated according to basic principles of selling i.e. Approach, Demonstration and Close in a sequence.
In approach, the attention of the prospect is attracted by offering him the advantage he needs.

In demonstration, the doctor is convinced that our product is the best suited to give that advantage and to satisfy the needs.

In close the prospect is impelled to act i.e. specific commitments for prescription or an order is taken.

Advantage of PPD:

Pharmaceutical selling is a sort of indirect selling where one has to pre-sell the product before actual sales/consumption takes place. And the most effective tool to pre-sell the product is detailing to doctor. In other words the anchor of success of a pharmaceutical organisation lies in effective selling.

Since PPD is based on the ability, experience and information of various experts, it is reliable tool and should be given preference over the detailing made by individuals based on the broad guidelines.

(ii) Medical Conferences: Almost, in all the disciplines of the medical sciences there are All India Associations who arrange conferences as a means to exchange thoughts and to keep the doctors abreast of the latest developments in that field. All the invited doctors assemble to exchange views. These scientific deliberations are exaggerated by reading papers based on experiments, experience and research. In these conferences, the pharmaceutical companies put up their exhibitions, where the
products are displayed, informational literature is given and discussed with the doctors.

These conferences are used to develop a rapport with the doctors, by contributing to the expenses of these conferences by hosting lunches, dinners etc. This is also a means to woo a way the prospects.

(iii) Seminars: For certain special products, the company arranges seminars in co-ordination with the various medical associations. In the seminar, the entire research work on the product is projected by the pharmaceutical concern. These papers are read out by experienced doctors in the field or by those doctors who have conducted research on the product. Seminars are conducted mainly for research products or products with certain alterations but new to the product mix. Seminars are also conducted for those products which require special emphasis in the product mix i.e. for the core products of the total mix.

B. Non-Personal Media:
This media has the following components.

(i) Advertisements through periodicals, newspapers, hoardings, display charts, television, radio, mailing etc.

(ii) Promotional literature.

(iii) Film shows and exhibitions

(iv) Gifts

(v) Samples
Advertising: The function of advertising is to present, promote and sell ideas, goods and services. It is important that the advertising programme should be in consonance with the entire promotional mix.

In the pharmaceutical industry, advertisements are resorted to, mainly as a reminder of the product. The main media of advertisement used by most of the drug houses is medical journals. In India about 120 medical journals are published relating to different branches of medicinal practices. A good doctor likes to go through a couple of them regularly so as to keep abreast of the latest developments in the concerned fields. It therefore becomes a very good media for advertising the product. These advertisements supplements the efforts of the medical representative. They remind the doctor of the name and salient features of the product during the interval between one call and the other. It is also customary, to convey the profile through medical journals by getting the scientific paper on the product printed in the journal. An important point is that all those products which are promoted to doctors only are newer advertised in journals having public circulation.

The major journals in which the advertising is done are "Indian Medical Gazette", "Journal of Indian Medical Association", Journal of Applied Medicine, "The Practitioner", "Antiseptic", "Indian Journal of Surgery" etc. A budgetary allocation to 6 lacs has been put forward for advertisement. The company also allows the regional heads to give advertisements in certain brochures etc.
The regional offices also undertake to arrange film shows and exhibitions on behalf of the organisation. A separate budget is earmarked for promotions undertaken at the regional levels.

Mailing: Mailing is another media of advertisement used in the pharmaceutical industry. This has, however, become redundant mode presently. All the same it remains an effective media to communicate to the prospects about the products. Here, we mail the literature of the product as such or in short form or in the form of letter or in any such form to the doctor periodically. This also acts as a reminder to the doctor about the name of the product. This media is also very helpful in supplementing the efforts of the sales representatives. To ensure that the target is covered thoroughly by the mailing section, the company maintains a list of addresses of the various important doctors and retail chemists. The list of addresses is maintained as given below:

1. In the form of metallic plates, from where the addresses can be printed on the mail with the help of a machine known as the embossing machine.

2. Address pulls are taken out from the computer, where the addresses have already been fed from time to time. From these computers, we can print the addresses directly on the mail to be sent.

To provide ease in the functioning of the mailing department the post and telegraph department provides a franking machine.
which can print the postage stamps on each and every envelop.

Mailing can be (i) of the open type (ii) closed type.

An open mail goes without an envelop and the address is borne on the face of the literature itself. But a closed mail is carried in an envelop. The literature is put into envelop and is mailed to the respective doctors.

Open Mail (Advantages):
1. It is economical for printing and postage both. Since it goes without the envelop, it saves the cost of the envelop and also the efforts required to insert each literature in the envelop.
2. Once it goes in the hands of the doctors, he will give it a cursory glance, since he does not have to rip open an envelop to read the contents. In a way, the doctor is forced to go through that price of literature.

Disadvantages:
1. During transit, the cards may become crumpled and thus shabby. Sometimes the cards may be destroyed also.
2. The message is to be printed on a very limited space, therefore it can not be comprehensive.

Closed Mail (Advantages):
1. Literature reaches the prospect in proper forms. It does not get crumpled or dirty and thus retains its original impact.
2. A lot of information about the product can be sent in this form.
3. A closed mail provokes the doctor to open the envelop. He may be curious to find out, what has been sent in the envelop.

It has been found, that the cost involved in mailing does not warrant the use of this media. The effectiveness obtained from this method does not match with the costs incurred. Since it is not a productive method, the companies are trying to do away with it. IDPL had a very strong mailing department but now they have stopped using this media for promotion, since the cost of paper and printing have soared up to new heights in the recent past.

Instead, the companies are resorting to publish some scientific material concerning a drug and in this method they promote their drugs indirectly. This scientific material comes in the form of newspaper bulletin or certain medical booklets. In these publications the product is advertised and is sent to a limited number of doctors, particularly to those who can be more concerned with the use and recommendations of the drug.

Promotional Literature:

Promotional literature aims at explaining the product thoroughly to the prospect. The function of promotional literature is to highlight the main features of the product, its composition, its use, its dosage forms and so on. All this is done within the frame work of the market profile of the product. It is quite an expensive media of promotion. In fact preparing
a literature itself involves a tedious process.

Certain ideas are thought in accordance with the product profile and market profile and presented to the advertising agency. Certain designs are then sent by the advertising agency for approval. The best is selected and sent it to a committee for evaluation. They point out the facts which should be printed or omitted. The finalised literature is sent to a medical committee in order to authentify the facts stated in the literature. Their technical knowledge is also incorporated. This is then finally sent for printing. Generally tenders are invited from reputed parties for quotations to print these literatures.

A company keeps changing its literatures time and again. The frequency of change of literatures of a product depends mainly on its sales potential and also its relative importance in the total product mix. The major reasons for changing the literatures are enlisted below:

1. Since the medical representatives visit the doctors every month or quarter a year, they present their literatures at each visit. It is very likely that the doctors get tired of seeing the same literature again and again. A new presentation will arouse the doctors interest and he would like to see what the company is offering.

2. When the market profile of the product is changed i.e. its USP etc. is changed and the product is given an entirely new image, this naturally warrants a change of literature.
3. Initially when the product is introduced, the incorporates all its vital points i.e. its maximum use is highlighted. Later on, only a few features are put in the lime light. A more specific feature of the product is projected, since it is easier for the doctor to register, that the product has to be used for a particular disease.

4. Also, when a particular feature of the product is repeated very often, its effectiveness is diminished and therefore, it may have to be deleted.

The minimum periodicity of change of literature of IDPL is about 3-6 months. Certain organisations introduce new literature for a product even after a period of 2-3 months e.g. Glaxo, Pfizer etc.

Film Shows and Exhibitions:

Many pharmaceutical companies make certain scientific films, where the salient features of the product are projected. To convey the product in a particular manner, details of the product are shown and its important features compared with the existing products. Such films are shown at medical conferences, various meetings and also in medical colleges. Films are also made by the companies to project the house name though this is more of a publicity function.

Pharmaceutical companies also arrange exhibitions at many medical conferences. The products are displayed there and the informational handouts are distributed to the visiting doctors.
and their expert knowledge of the drug is obtained. Free discussions on certain products are promoted to know what is expected of the drug and what the prospects are actually getting. Exhibitions are also arranged at seminars or at international and national fairs, where the company wants to promote its products.

**Samples:**

It is customary in the pharmaceutical industry to give samples to doctors as a means of promotion. Samples mainly act as a reminder in this industry for the doctors. Initially the samples are given to create an awareness about the products. This is however a very expensive mode of promotion. In IDPL, samples have an existing budget approval of 15 per cent of the sales. Samples are allocated at the rate of 10 percent of the target for all new introductions. Later on, when the product stabilizes, the allocations tapers off to 4 percent of the target.

All pharmaceutical concerns provide samples to their prospects e.g. Glaxo, Ciba, Pfizer, Mac Sarabhai etc. and they have more than 15 percent of budget for distributing the samples to the prospects. Samples are given mainly because of the following reasons:

1. It provides an opportunity to the prospect to verify the claims made by the manufacturer in this literature.
2. The samples are a constant reminder of the name of the product.
3. Samples itself works as a visual.
4. It is customary to give samples, as now-a-days it is felt that if samples are not given, it hurts the feelings of the prospects.

Samples allocations are done keeping in view the potential of the market and the budgetary allocations advanced by the organisations.

**Gifts Articles:**

Gift articles are generally given to establish the goodwill of the company among its prospects. They may also be given to enhance a particular product. Gifts articles are an effective re-inforcer since they are generally retained by the doctors and not passed on to any other person. Gift articles generally carry the name of the product and its USP. It is preferable that the items should be such that they may remain in constant view e.g. table items etc. This is so because the items to which the prospect is exposed acts as a constant reminder for him. In this constant professional items like tongue depressor, thermometer, stethoscope, torch lights may be given. IDPL had also provided the torch lights as gift articles to all the retailers as a promotional programme. This has really increased the goodwill of the IDPL.
CONCLUSION

In the end it can be concluded that the medical representative being a most effective tool of 'Sales Promotion' should develop a new habit of planning for creative selling through social contacts with doctors, pharmacists, nurses and other connected medical personnel. The importance of sound personal relationship between the doctors and the medical representatives to encourage the prescription of the drugs is surely pregnant with fruitful results. The success of the firms Sales Promotion equally depends upon the services provided by the medical profession. Medical representatives supplemented with other sales promotion tools and the different members of a single medical community are the two eyes through which we can visualise the success of the Sales Promotion strategy.

Further, it can be concluded that while advertising can pre-sell a product, sales promotion is the real sales clincher. Modern sales promotion techniques are more varied and complex. The aim of every competitive firm is to sell more and more to get ahead of the others. If we want not only to maintain but to progress further in this highly competitive, ridden with government controls field of pharmaceuticals, we should use all of the tools of sales promotion more effectively and efficiently.

With the advancement of medical facilities and spread of
education with ever increasing population, more and more patients would need consultation and advices of the doctors, which would mean more potential prescription from the doctors to the chemists. One must, therefore take cognizance of the situation and derive maximum advantage of the prescription potential by meeting the needs of the consumers in a well planned way.

To sum up then, we can say that marketing is a battle half won through adequate promotional efforts. Sales Promotion being the crux of this industry.
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