Exploration of parameters for brand promotion for next generation Cephalosporins and its brand Cefadur CA for Cipla Protec (A Division of Cipla Pharmaceuticals Ltd)

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Abstract

Pharmaceutical Industry is one of the most intense knowledge driven industry, which is continuously in a state of dynamic transition. Indian pharmaceutical industry is climbing up the value chain from bringing a pure reverse engineering industry focus on domestic market. The industry is moving towards basic research driven expert oriented global presence and providing wide range of value added quality product and services.

The pharmacy formulation market varies radically from the consumer market in many ways. The rules governing the pharmacy market are different except a few over-the-counter (OTC) drugs. Pharma companies are not allowed to publicly market their products. Marketing has to be restricted to promotional campaigns, advertisement only in medicinal magazines, journals etc., through medical representatives. It is not a mean of mass communication, which is usually applicable to consumer products. In the process of pharmaceutical marketing, market segmentation, targeting and brand differentiation is considered to be challenging compared to the consumer marketing.

Unlike any other businesses, marketing mix and its operatives for Pharma industry are very peculiar. The pharmaceutical industry is one of the few which cater to unique situations. Here the decision maker is the prescriber i.e. doctor while actual user of the product is a patient. Patient purchases product only because of doctor's advice and hence product should satisfy the conditions of physician. Even if all other parameters are correct, the product might still fail because of improper promotion. Personal selling is the major promotional method in pharma marketing.

Product under Study: Cephalosporins: Cephalosporins are medicines that kill bacteria or prevent their growth. They are used to treat infections in different parts of the body, including the ears, nose, throat, lungs, sinuses, and skin. Physicians may prescribe these drugs to treat pneumonia, throat infections caused by streptococci, Staphylococcal infections, tonsillitis, bronchitis, and gonorrhea. These drugs will not work for colds, flu, and other infections caused by viruses.

These medicines are available only with a physician's prescription. They are sold in tablet, capsule, liquid, and injectable forms. The Cephalosporins are classified as per the generations and currently there will be fourth generation, which are popularly known as next generation Cephalosporins.

As product life cycle is considered it gets divided in to four stages viz Initiation, Growth, Maturity, & Decline. When product is in initiation stage, maximum promotional inputs are required; hence it is very much necessary to understand the promotional strategies for new product in existing market. Because its takes time to roll out a new product, sales growth tends to be slow at this stage. Profits are negative or less in the introduction stage. Promotional expenditures are at their highest ratio to sales because of the need to 1) Inform potential consumers 2) Induce product trial and 3) Secure distribution in retail outlets.

Problem definition: Despite being one of the leading pharmaceutical organizations in India, CIPLA has found that one of the newly launched products in antibiotics was not generating sales as per the expectations. Hence, basic problem was generation of sales and to understand parameters for brand promotion vis-à-vis competitors.

This research paper narrates the efforts undertaken for exploration of parameters of brand promotion for next generation Cephalosporins and its brand Cefadur CA for Cipla Protec (Division of Cipla Pharmaceutical Ltd.) in the city of Pune. The suggestions given after the study to CIPLA Protec were implemented by them.

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Introduction

Brand management, particularly promotion is a very difficult task in every Industry / Business. It is particularly difficult in those businesses where the competition is intense, market is crowded with variety of similar looking products and especially, when the end user cannot make choices of his/her own, but has to use the product on some expert's recommendations.

Pharmaceutical is such one of the most intense knowledge driven industry, which is continuously in a state of dynamic transition. Pharmacy can be defined as "Complex matrix of process, operations and organization, involved in the discovery development and manufacture of drug and medication."

The pharmaceutical industry is the lifeline industry, which plays a very important role in building strong human capital of country and very essential for economic growth and development. Indian pharmaceutical industry is climbing up the value chain from bringing a pure reverse engineering industry focus on domestic market. The industry is moving towards basic research driven expert oriented global presence and providing wide range of value added quality product and services.

As per a report published in 2004 currently pharma industry in India is a US$10 billion industry growing at rate of 8-9% annually. The out put of Indian pharmaceutical industry ranks 4th in terms of volume and internationally 13th in terms of value. Around 8% of World's drugs are manufactured in India. Today India has 300 pharma companies of large and moderate size and other 10,000 small and tiny industrial units. Pharmaceutical industry manufactures 400 bulk drugs and almost range of formulations, but out of this 70% is produced by top 100 large companies**.** As far as India is concerned, top ten major players actually run the industry.

The pharmacy formulation market varies radically from the consumer market in many ways. The rules governing the pharmacy market are different except a few over the counter (OTC) drugs. Pharma companies are not allowed to publicly market their products. Marketing has to be restricted to promotional campaigns, advertisement only in medicinal magazines, journals etc or through medical representatives. It is not a mean of mass communication, which is usually applicable to consumer products. In the process of market segmentation and targeting; pharmaceutical marketing is considered to be different from consumer marketing.

The various dimensions of pharmaceutical marketing are Demographic (age, sex, family, etc), Generic (as per generic equivalent present in them), Therapeutic group, Competitive (depending upon number of competitors present), and fifth dimension is the time. In pharmaceutical markets, major segments considered are:

a) Consumer or Prescription markets:
These consist of individuals who go to practicing doctors.

b) Institutional markets:
These contain large hospitals, Public and Private sectors along with government's hospital including medical colleges.

c) Industrial markets:
These consist of bulk drugs and their formulations.

d) Over the counter (OTC) markets**:**
Drugs, which are non-prescription medicines and can be sold directly to end-users.

Based on product category, the pharma industry can be divided into:

a) Bulk Drugs**:** (The active ingredient for making formulations.)

b) Formulations**:** (The final form, in which the drugs are sold i.e. Syrups, Injections, Tablets and Capsules)

In general, business in pharmaceutical market is conducted in two major ways, that is, either by institutional selling or through trade business.

Information about product of study

"Antibiotics are medicines that are lethal to bacteria that cause infections." Antibiotics have been used since the 1930s to treat or prevent a wide variety of infections. Different antibiotics kill bacteria in different ways. Some short-circuit the processes by which bacteria get energy, others disturb the structure of the bacterial cell wall, and still others interfere with the genetic and cellular mechanisms responsible for the production of essential proteins (e.g., enzymes). More than 150 antibiotics are available today. Major classes of antibiotics include Tetracyclines, Aminoglycosides, Penicillins, Cephalosporins, Fluoroquinolones, Streptogramins, Sulfonamides, and Erythromycins.

Antibiotics are classified as narrow-spectrum drugs when they work against only a few types of bacteria. Broad-spectrum antibiotics are effective against a wide range of bacteria. However, broad-spectrum antibiotics are more likely to promote antibiotic resistance. For that reason, narrow-spectrum antibiotics, which often cost less, are frequently prescribed whenever possible.

Cephalosporins: Cephalosporins are medicines that kill bacteria or prevent their growth. They are used to treat infections in different parts of the body, including the ears, nose, throat, lungs, sinuses, and skin. Physicians may prescribe these drugs to treat pneumonia, Streptococcal throat, Staphylococcal infections, tonsillitis, bronchitis, and gonorrhea. These drugs will not work for colds, flu, and other infections caused by viruses. Discovery of Cephalosporins is as fascinating as that of penicillin in 1945. Prof. G. Brotzu of Sardinia made culture on assumption that this might contain organisms antagonistic and he succeeded in isolating fungus named as Cephalosporium acremonium. Florey revised culture in 1948, in 1955, he described findings that fungus contains seven antibiotics and named as Cephalosporin.

These medicines are available only with a physician's prescription. They are sold in tablet, capsule, liquid, and injectable forms. The Cephalosporins are classified as per the generations and currently there is fourth generation, which is popularly known as next generation Cephalosporins. Some of the important next generation Cephalosporins are given as below

Next Generation Cephalosporins

Generations	**Oral Cephalosporins**	**Parental Cephalosporins**
1ST generation(1960)	Cephalexin	Cefazolin
	Cephradine	
	Cefadroxyl	
2nd generation(1970)	Cefaclor	Ceufroxime
	Cefuroxime axetil	
3rd generation(1980)	**Cefixime**	Cefotaxime
	Cefpodoxime proxiltil	Ceftizoxime
	Cefdinir	Ceftriaxone
	Ceftibuten	Ceftazidime
	Loracarbef	Cefoperazone
4th generation(1990)		Cefipime
		Cefpirome

There were various aspects of competitor's analysis, which would vary according to stages of the Products Life Cycle. When product is in introduction stage, maximum promotional inputs are required; hence it is very much necessary to understand the promotional strategies for new product in existing market.

Because its takes time to roll out a new product, sales growth tends to be slow at this stage. Profits may be negative or less in the introduction stage. Promotional expenditures are at their highest ratio to sales because of the need to 1) Inform potential consumers 2) Induce product trial and 3) Secure distribution in retail outlets.
Companies that plan to introduce a new product need decide when to enter the market. To be first can be rewarding, but risky and expensive. To come in later makes sense if the firm can bring superior technology, quality, or brand strength.
For this research **Cefadur CA** – the next generation antibiotics which was newly launched product by CIPLA Protec, a division of CIPLA Pharmaceuticals Ltd., was considered.

Objectives & research methodology

Problem definition: Cipla Protec a division of Cipla Pharmaceuticals Ltd. is
one of the leading pharmaceutical company in India. It has a large product line and antibiotics are one of the product categories out of it.
Despite being a one of the leading pharmaceutical organization in India, it
found that one of the newly launched products - **Cefadur CA** - was not generating sales as per the expectations. Hence, the basic problem was to understand the reasons for non-generation of sales and competition.
To identify the success factors connected to winning brands, best
Practices, survey was undertaken with retailers in Pune city to assess marketing activities and capabilities, and which of the brand promotion parameters differentiate it by capturing their perspectives on what can make a brand a hit.

Objectives

Primary objectives

To find out the more frequently prescribed Cephalosporins in market.
To study the prescription status of Cefuroxime axetil in market & to identify the fast moving brands containing Cefuroxime axetil in the market with their ranking as per sale.
To identify the specialties (doctors) prescribing Cefuroxime axetil, and the availability of the brand Cefadur CA in market.
To analyse the promotional inputs given by competitors and their effects in market.

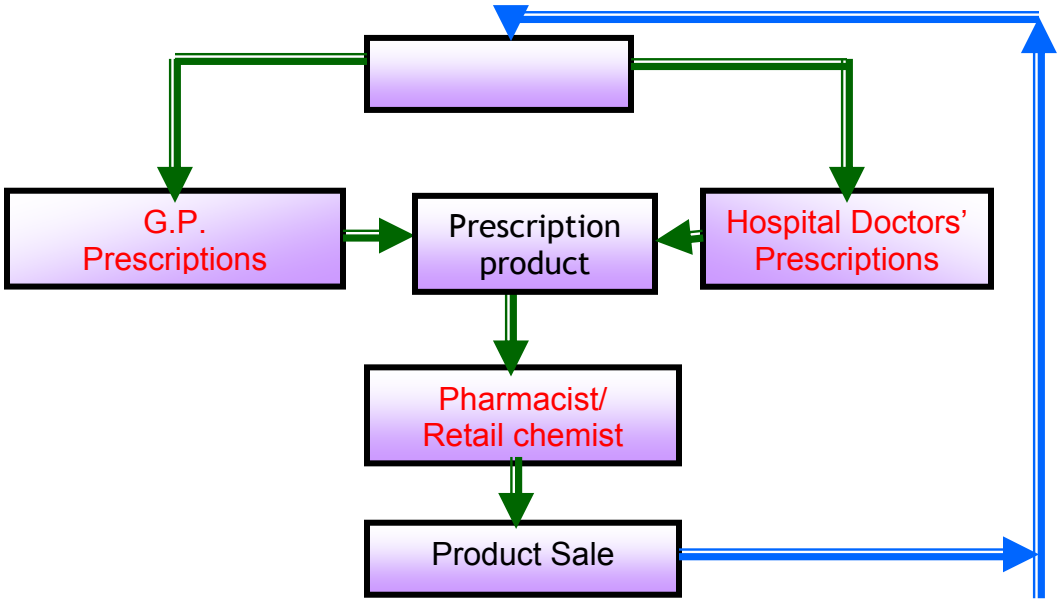
Secondary objectives

To identify currently available (next) generation Cephalosporines in market.
To identify the leading brands of (Cephalosporines as molecule) as per sales in each generation of Cephalosporines in survey area.

Hypothesis

Pharmaceutical marketing is quite different than marketing of any other goods. Within pharmaceutical products, marketing of prescription products is a way different from that of over-the-counter (OTC) drugs and actual behaviour of prescribed drug market may vary based upon various parameters. In case of prescribed drug market, typical sales process is as follows:

Drug requiring prescription



In this case, the patient – customer - do not have much or any say in purchase of the product, perhaps other than spending the money. The decision makers are the physicians or doctors treating the patient. They will prescribe drug of a particular brand if they are:

- aware of the product.
- convinced about the utility and usage of the product.
- reasonably certain that the prescribed drug can be made available by the drug retailer in required amount of time.

After following the above logic, the doctor prescribes the drug, but the drug retailer plays a major role in effecting actual sale and he may:

- not have the prescribed product in the ready stock.
- not consider that the prescribed product has sufficient demand to stock the product.
- suggest or just substitute product of the competitor company having similar composition, most of the times without even knowledge of the prescribing doctor.

All this will perhaps happen just because there is less brand awareness as a consequence of less promotional efforts by the product company. Hence the statements of hypothesis for this research can be written as:

There is less brand awareness for Cefadur-CA

There are less promotional inputs provided by the organization for promoting Cefadur CA.

Research design

The research carried out was "Applied" type of research. Additional information that is secondary data was collected from books, web sites, official gazettes, company literature's etc., while the Primary data was collected through market survey.

Research Instrument: The research instrument selected was "Structured questionnaire"

Sampling Plan: To select proper sampling plan is one of the crucial step. The sampling plan for this project was as follows:

A) Sample unit : Retail medical stores.

B) Sample size : 200 medical stores.

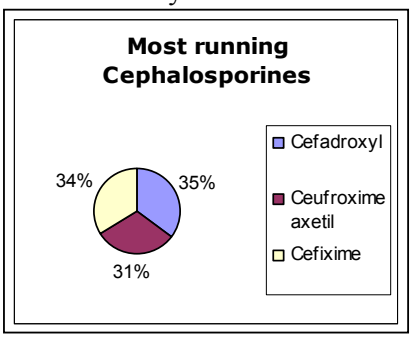
In the total selected area numbers of medical stores available are more than 2000, hence sample size was finalized as 200 which was 10% of population.

Basis of analysis

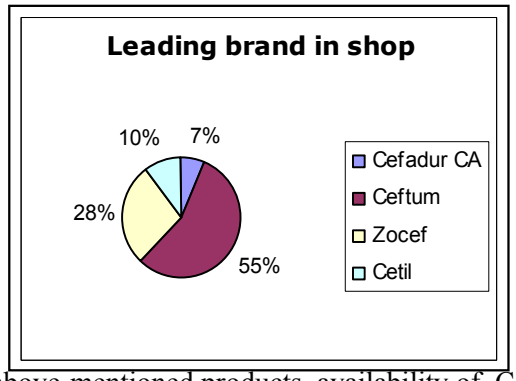
If the basis of data collection is survey, the research analysis involves estimating the values of unknown parameters of the population and testing of hypothesis for drawing interferences. Hence analysis is classified as Descriptive and Statistical analysis.
Descriptive and Statistical analysis were the methods used in this project.
As population composition was not homogenous and number of medical stores available were more than 2000.

Findings and observations

It was very much necessary to know the current market status of next generation Cephalosporines. There were 4 generations of Cephalosporins available in market. Out of this most running Cephalosporins were Cefadroxyl, Cefixime, and Ceufroxime axetil.

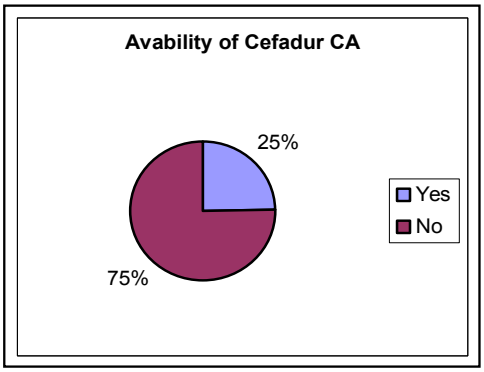


Competitive analysis: As 2nd generation antibiotics are considered ranking of brands containing Ceufroxime axetil is Ceftum, Zocef, Cetil, and Cefadur CA.



Brands	%
Cefadur CA	*7%*
Ceftum	55%
Zocef	28%
Cetil	10%

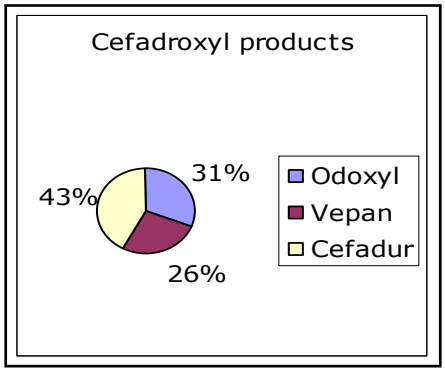
Out of the above-mentioned products, availability of Cefadur CA was only 25%

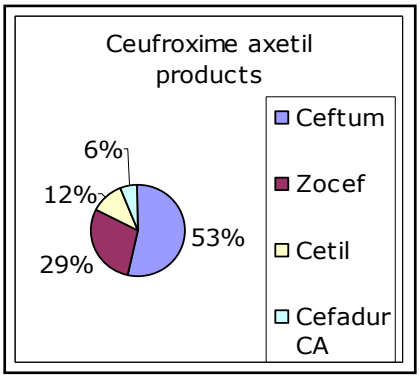


Parameters	%
Yes	25%
No	75%

Because of the complex sales process in pharmaceutical business any pharmaceutical product cannot succeed unless there are promotional inputs. This survey indicated that there was no pecific promotional inputs given to the retailers, however, regular visits to doctors were maintained. Normal frequency of visit for above brands was twice in a month.

Besides this product, competitive analysis of other antibiotics was also conducted as it helped in fulfilling the secondary objectives.

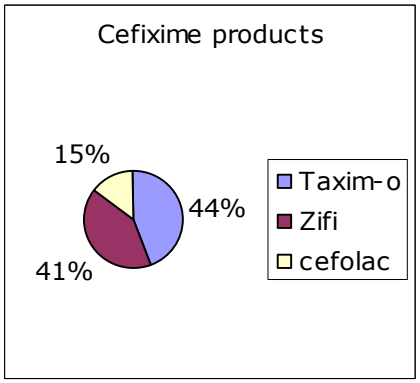




In Cefadroxyl Cefadur (43%) was the leading brand followed by Odoxyl (31%) and Vepan (26%)

In Ceufroxime axetil, Ceftum (53%), Zocef (29%), Cetil (12%) and CA (6%) like wise in Cifixime Taxim-O (44%), Zifi (41%) and Cefolac (15%) were the leading brands.

Above analysis indicates that there was less brand awareness for Cefadur CA. To prove the hypothesis statistical base was required.
Considering this hypothesis was proved as follows.



Cefixime		
Taxim-o	Zifi	Cefolac
44%	41%	14%

Hypothesis testing

To verify the first hypothetical statements following steps were taken. Creating brand awareness is an important factor in promotional inputs. Brand awareness depends upon various variables like, product information to doctors and chemists, Regular follow up, availability of stock etc.

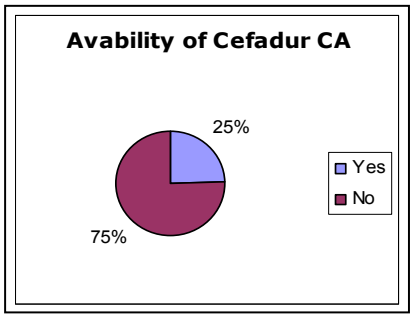
As mentioned earlier, hypothetical statements were:

H_1 = There is less brand awareness for Cefadur CA

H_2 = There are less promotional inputs provided by the organization for promoting Cefadur CA.

Using the data collected, Z value was calculated, which was found to be within the level of significance (5%), thus proving both of the hypotheses.

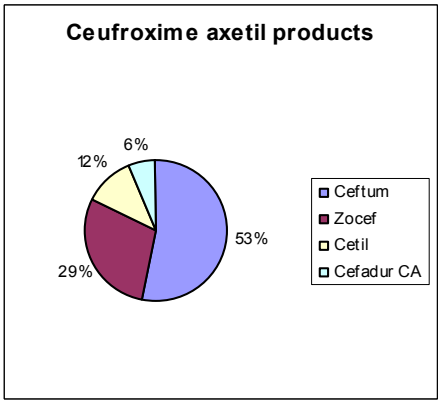
Along with this following graph gives a clear-cut idea about availability of Cefadur CA and efforts carried by organization for building awareness.



Parameters	%
Yes	25%
No	75%

From the graphs ones again hypothesis was proved positive.

To prove second hypothetical statement following analysis was done.
From the product analysis for Ceufroxime axetil in which product lies, it was found that market share for Cefadur CA is just 6%.



Ceufroxime axetil			
Ceftum	Zocef	Cetil	**Cefadur- CA**
53%	29%	12%	6%

Besides this, a question was asked regarding promotional inputs. In response the chemists told that there were no promotional inputs provided by organization, and no regular visits made by market representatives.

Hence, it was concluded that there were less promotional inputs provided by organization for promoting Cefadur CA.

SWOT analysis

Analysis from findings and observations:

From the first findings it was revealed that all the three generations of Cephalosporins are running in the market. Doctors prefer the various generations as per the severity of infection and the resistance to bacteria.

In Ceufroxime axetil, Ceftum, Zocef, are the leading brands, because there are regular visits from company representatives, which help in brand recalling, high dosage frequency, and better clinical results.

Bacterial infections are commonly spread in the community; children's are the ones who are most sensitive to this type of infections. Hence, G.P.s and Pediatricians prescribe this particular class of antibiotics.

The Company representatives from Cipla Protec were not able to reach at every place, hence there was no adequate brand awareness in the market for the Cefadur CA.

Based on above analysis S.W.O.T was done for Cefadur CA

S.W.O.T. Analysis for Cefadur CA

STRENGTHS	WEAKNESSES
1. High brand image for first generation antibiotic. 2. Large Clinical Data for the newly launch product is available. 3. Economic as compared to other brands.	1. No brand differentiation in 1st and 2nd generation antibiotic. 2. No brand awareness, as Representatives were not able to reach at root. 3. Less promotional inputs and hence less brand recall.
OPPORTUNITIES	**THREATS**
1. Focus on institutional selling. 2. No any other product present in market, which contains pure Ceufroxime axetil 3. Safe in pediatrics 4. Effective use of specialized field force to promote newly launched Product.	1. Large market share of competitors 2. Well established brands of competitors. 3. Rapid Market penetration is difficult as product is in initiation stage.

Limitations of the research

Limitations for sampling:

a) Sample size was advised by the organization.

b) Medical stores to be covered were not specified by the organization.

Limitations for data collection:

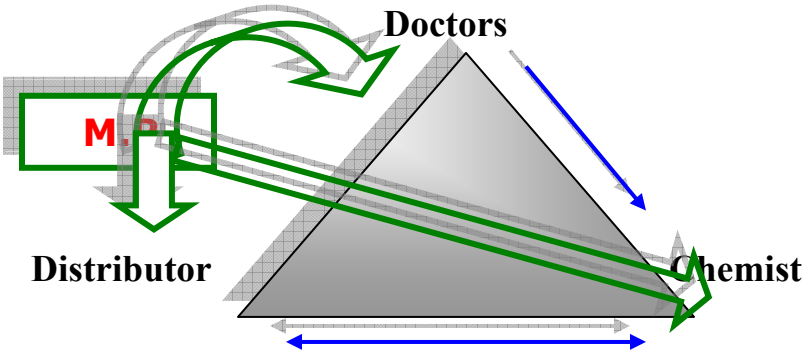
a) The total medical retail stores in Pune City and surrounding Area are more than 2000 in number. This was practically not possible to cover in stipulated time.

b) Out of 200 medical stores, 16 medical stores did not give responses hence actual data available for only 184 medical stores.

c) Visits to medical practitioners who form major element for brand awareness could not be conducted because of condition from the client organization.

Suggestions and recommendations

To build awareness in the market incentives can be given to field force, on the basis of sales. Triangular mapping of whole system is necessary. Triangular mapping is one of the simple methods in which doctor, near-by chemist, and distributors are the three points of triangle. Due to this, it becomes easy to control entire supply chain.



Possibility of diverting existing field force for promoting Cefadur CA can be explored; at least temporarily as all other products were fairly established.

The organization can increase their promotional efforts for this product by:

- Promotion based on scientific (Clinical) measures by identifying the market influencers.
- Arranging seminars and doctors' meet on regular basis.
- Promotional inputs including appropriate gifts and souvenirs for effective brand recall.
- Dedicated medical adviser for Cephalosporines in general and for Cefadur CA in particular need to be appointed.
- Focus on institutional selling and area wise promotion need to be increased.
- To Promote Cefadur CA as leading brand, there should be continuous area wise follow-up of retailers and doctors, which are already writing the prescription for Cefadur CA.
- Cefadur CA may be promoted as Cephalosporins containing Ceufroxime axetil safe for pediatrics, as pediatrics is one of the specialties prescribing Cefadur CA, and organization has clinical references for Cefadur CA in pediatrics.

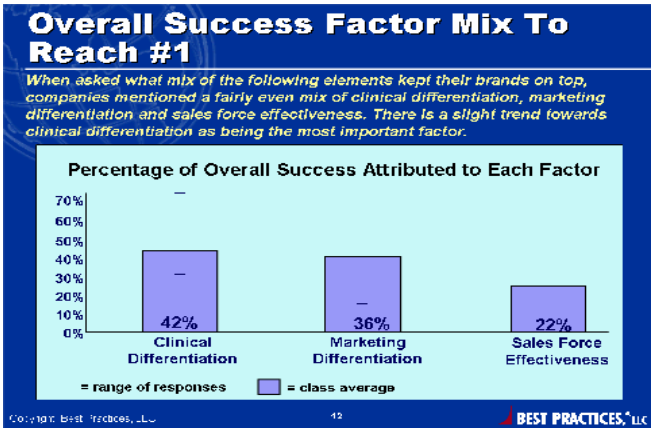
End note

Considering the complexities in marketing process in pharmaceutical business, while launching a new formulation in the existing markets or launching new formulations in the new markets, product differentiation is necessary for proper brand promotion. Since, for the prescription products, the end-customer, i.e. patient or his/her relatives are unable to take any decision and the product is necessarily recommended by the expert, i.e. physician or doctor, it is imperative that this brand promotion efforts to be aimed at primarily towards the physician or doctor and secondarily to the drug retailer as he plays an important role in dispensing the prescribed brand.

While launching the new formulation, there can be dilemma in the mind of the filed manager on diverting existing field force for the promotion of the field force, perhaps at the cost of old and established products. However, it is most necessary to do so as it can only help product differentiation, brand promotion and stabilization of the new product in the market.

Nevertheless, one question remains and that is whether, the research findings are universally true or they are geography specific. One can get the answer only when such studies are conducted at multiple places simultaneously. The results of such studies can be generalized to arrive at possible answer.

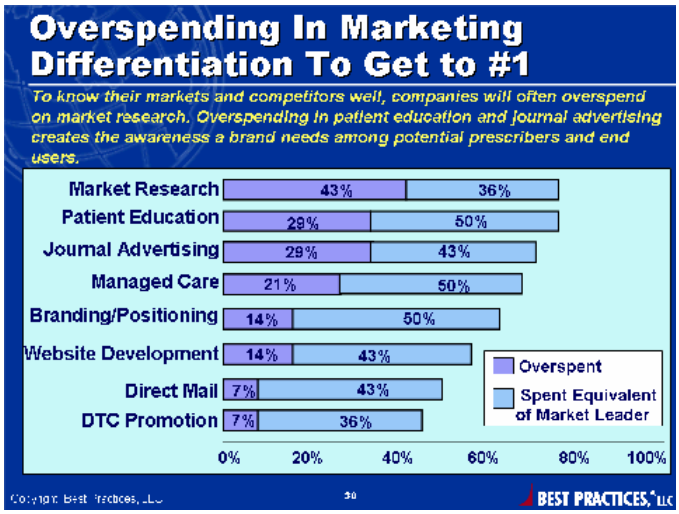
To make a pharmaceutical brand reach #1 market position, three components are crucial for success:



(Adopted from reference # 10 - Bibliography)

Clinical Differentiation,
Marketing Differentiation
Sales Force Effectiveness.

Companies realize it is often not enough to spend like your competitor. In fact, you have to outspend the competition, especially in areas such as market research and patient education, to make significant impact on your position in the market.



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Acknowledgement

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