CHAPTER VII
FINDINGS AND CONCLUSIONS

7.1 FINDINGS

Introduction

The study reveals that the efforts of pharmaceutical companies in persuading doctors to prescribe their branded medicines have successfully change the perception of doctors in their favour. But still there are gaps which need to be plugged. The crucial issue is the diverse views of the four major players, Doctors, Medical Representatives, Chemist and Pharma executives, in Administration of Pharmaceutical marketing and promotion.

Our data show that physician–industry relationships are common in pharma industry, as are relationships between professionals and industrial organizations in the health sciences. Furthermore, our data suggest that physicians' relationships with industry vary according to physicians' personal and professional characteristics and according to their practice setting.

With regard to peer influence in particular, our findings suggest that industry may focus marketing efforts on physicians who are perceived as influencing the prescribing behaviors of other physicians. Marketers believe that the prescription decision is a combination of rational and emotional processes. A physician objectively evaluates all the alternative therapies and matches his needs with the need satisfying capabilities of the medicinal products and makes his choice accordingly. While deciding the brand, he is swept away by product attributes and advertisement appeals that have no relevance with the need-satisfying capabilities of the product. Thus the physician's choice of a drug molecule for drug therapy is a rational decision, while his choice of a brand is an emotional decision.
The major findings are as under

I. **Marketing and Promotional Activities**

1. The variables on which all the four major players i.e. Doctors, Medical Representatives, Chemist and Pharma executives, strongly agree are:
   a. Use of drugs sample
   b. Continuous Medical education (CME)
   c. Engaging the medical profession besides routine promotion and detailing.
   d. Product promotion factor
   e. Use of Social Media or Social Networking websites and Blogs as tool of engaging doctors and patients
   f. Pharmaceutical funding of “Cause Marketing”, such as ‘Affordable Healthcare programs’, and Disease awareness
   g. Marketing with meaning
   h. Public Relations (PR) is a potent tool of communication used to reach patients and physicians.
   i. Patient-Centric Marketing
   j. An exclusive Promotion on Internet targeting medical fraternity
   k. Drug companies Partnering with Advocacy Groups helps in building brand equity
   l. Medicines in our country are costly as cost of promotion is a major factor contributing to the cost of the medicines
   m. EFFICACY of the drug
   n. Safety
   o. Price
   p. Dosage convenience
   q. Patient’s likes and dislikes is not important while writing prescriptions
   r. Relationship with patient

2. The variables on which there is difference of opinion between Doctors and Chemist who agree and, Medical Representatives, and Pharma executives, strongly agree are as follows:
   a. PRODUCT INFORMATION from the authentic sources
   b. The IMAGE of the product and the company
c. Doctors generally don’t get impressed by the corporate image of the company

3. The variables on which there is difference of opinion between Doctors and Medical Representatives who agree and, Chemist, and Pharma executives, strongly agree are as follows:
   a. Medical Representatives are the one of the major source of information
   b. A medical representative possessing adequate product knowledge and having effective communication skills is favoured by the Doctors with prescriptions
   c. Medical Representatives personal and professional attributes is one of the most important factors for doctors prescribing the drug
   d. The falling standard with respect to their product knowledge, negative attitude, and the image of the medical representative in the eyes of the doctors as an information provider is disturbing.

4. The variables on which there is difference of opinion between Doctors and Chemist who agree and, Medical Representatives, and Pharma executives, strongly agree are as follows:
   a. Training imparted to the Medical representatives and its influence on their ability to generate prescriptions.
   b. Trained Medical Representatives are able to develop healthy relationships with Doctors influencing their prescription habit.
   c. Training makes Medical Representatives developed a presentation styles suitable for the various specialties of Medical practitioners hence able to influence prescription.
   d. If a well trained Medical Representative regularly visits a Doctor, the Doctor is likely to oblige him with prescriptions.

5. The variables on which there is difference of opinion between Doctors and Chemist who agree and, Medical Representatives, and Pharma executives, strongly agree are as follows:
a. If Medical representative fails to show up for over a month, doctor suspects the availability of the products of that manufacturer and stop prescribing their drugs.

b. Regular visit by Medical Representative to chemist & druggist is essential to make the products available which are essential for prescription.

6. Pharmaceutical companies spend large sums of money on the promotion of their products. 57% of the doctors have accepted that Product promotion is one of the most important for prescribing the drug. 63% of all the respondents opine that Product promotions are important for generating prescription.

7. For pharmaceutical marketers, sampling is the single largest promotional investment, accounting for more than 50 percent of the total budget spent on promotion. 57% physicians claim that samples help them provide care for patients who couldn't otherwise afford the new fangled, expensive drugs, thus influence their prescription. 63% of the total respondents favour use of sampling to generate prescription.

8. CME are very popular with doctors. 89% of the doctors consider CME as very important source of information as well as help them in keeping them updated about various developments in their field. Continuing medical education (CME) refers to a specific form of continuing education (CE) that helps those in the medical field maintain competence and learn about new and developing areas of their field. These activities may take place as live events, written publications, online programs, audio, video, or other electronic media. 88% of the total respondents consider CME as one of the important tool of pharma promotion.

9. Relying exclusively on detailing through the medium of Medical Representatives no longer guarantee growth and Return on Investments. 69% of the doctors and 76% of the total respondents opined that the
Pharmaceutical companies need to do much more to engage with the medical profession besides routine promotion and detailing.

10. The stunning success of the pharmaceutical product in a crowded market depends on the way pharmaceutical company are able successfully give a distinct identity to their products. 71% of the doctors and 83% of the total respondents agree that branding should be integral part of the pharma Promotion.

11. Pharmaceutical marketing is highly regulated. Some pharma companies are doing good work in the Internet and social media space, finding ways to connect physicians via secure social networks to improve information sharing for example. Many Pharma companies are thinking beyond direct product promotion when using social tools. These companies have created an active social presence that utilizes a blog focused on stories of employees, wellness information, and corporate content. 71% of the doctors and 83% of all respondents believe that the Social Media or Social Networking websites and Blogs on the Internet are up-and-coming as a potent promotional tool for the Pharmaceutical companies.

12. A Pharmaceutical company’s commitment to causes that appeal to both doctors and patients can help them in increasing the prescription share. 75% of doctors and 80% of the total respondents prefer Pharmaceutical funding of “Cause Marketing”, such as ‘Affordable Healthcare programs’, and Disease awareness’ is emerging as effective promotional tools.

13. 68% of the doctors and 77% of all respondents consider that pharmaceutical companies should engage in those marketing initiatives which improve people’s lives. Marketing with meaning adds value to people’s lives independent of purchase. It’s marketing that is often more meaningful than the product it aims to sell.

14. Pharmaceutical companies are finding themselves in an era of seismic change. Power is shifting from the manufacturers and sellers to the
empowered consumer. In today's technologically integrated world all the stakeholders are not only better informed but are becoming more demanding. In such scenario it's imperative that pharmaceutical companies through its various Public relation initiatives not only should connect and engage them but also try to fulfill their expectations. 74% of the doctors and 78% of the total respondents consider Public Relations (PR) as a potent tool of communication used to reach patients and physicians.

15. With increased internet connectivity, and literacy rate patients are increasingly becoming inquisitive. Although doctors still remain the main source of information on diseases, patients are increasingly resorting to new avenues to find more detailed information, especially when the diseases are uncommon and serious. There has been an increase in patient demand for health information. All this clearly points out to the fact that patients are no longer solely depend on doctors; they are now educated enough to find answers for themselves and pharma companies are trying to leverage maximum mileage out of this trend by launching health based information sites that provide information on various diseases. Interestingly these websites are not intended for promotion of their products but contain information and research on diseases that create patient awareness. Disease awareness sites not only provide knowledge, but they provide emotional support also. Patients gain confidence by learning about the experiences of others who have the same ailment. This seems to be latest strategy adopted by pharma companies to earn patients' respect and trust by positioning themselves as a sound medical resource and a champion for patients of a particular disease. Gradually even doctors have started accepting this change. 51% of the doctors and 74% of all the respondents are in favour of Patient-Centric Marketing which can evolve into an alternative promotional tool.

16. Pharmaceutical companies are trying to identify more efficient ways to reach doctors via internet instead of just relying on detailing and samples. From a marketing perspective, Pharmaceutical companies have an
incredible opportunity to reach and impact physicians through the use of Internet media. In the future, pharma brands should re-focus and re-think marketing spend on reaching doctors through Internet. 62% of the doctors and 77% of the total respondents opine that an exclusive Promotion on Internet targeting medical fraternity is emerging as a potent tool to maximize the effectiveness of pharmaceutical Marketing.

17. The fact that patients regularly divert from medication plans, stop prescriptions early, take more or fewer pills than scheduled, or forget their medicines some days and costs the pharmaceutical industry millions in lost revenue every year. Education and support are the cornerstones to patient adherence. Thus its essential, to ensure patients understand why they’re starting a treatment, to manage their expectations once they’re in treatment, and to give them constant support. Patient advocacy groups can play a big part. One role patient advocacy groups can fulfill is to create better educational materials that clearly delineate the steps and goals of treatment and elucidate the nature of the disease. A second role patient advocacy groups can play, and perhaps their primary role, is to listen to patients and direct them to appropriate support. 69% of the doctors and 78% of the total respondents favoured Drug companies partnering with Advocacy Groups which will help in building brand equity as well as generating prescription.

II. Marketing Administration

18. In comparison to other countries, medicines are not very expensive because of the well developed Pharmaceutical industry. Only 25% of the doctor and 12% of the total respondents agree that Medicines in our country are costly as cost of promotion is a major factor contributing to the cost of the medicines.

19. No doctor will prescribe the medicine if its efficacy is not proven or communicated properly. 97% of the doctors and 94% of the total respondents opine that EFFICACY is the most important product attributes for prescribing the drugs.
20. 97% of the doctors and 91% of all the respondents opine that SAFETY is the most important product attributes for prescribing the drugs.

21. The PRICE of the drug is a factor that affects the prescribing behaviour of the doctors. 72% of the doctors and 83% of all the respondents agreed that price is very crucial for majority of the doctors.

22. 86% of the doctors and 81% of total respondents consider DOSAGE CONVENIENCE is one of the most important product attributes for prescribing the drugs.

23. Understanding the needs of the patient is the crucial for doctors before prescribing the drugs. But that does not mean that doctors compromise on the line of treatment. Majority of doctors will prescribe the medicine even if the particular drugs is not liked by the medicines if that particular medicine is of beneficial and important for the treatment therapy. Only 14% of doctors and 18% of the total respondents agree that Patients likes and dislikes is one of the most important factor for prescribing drugs.

III. Prescription Generation

24. Relationship with patient does not influence in selecting the drugs. Only 12% of the doctors and 4% of the total respondents believe that relationship with patients influence doctors selection of drugs.

25. Clearly doctors need to use drugs in order to deliver their services. Doctors mostly are looking for authentic sources of information. Many doctors are worried about their inability to identify inaccurate claims about medications. Doctors, who are getting more and busier with increasing patients, do not have time to keep themselves updated. They are more inclined towards obtaining relevant information while they are practicing. It is the time for pharmaceutical companies to build their marketing strategies around providing relevant and authentic information through Medical representatives as well as other medium. Website marketing, online marketing, blogs, social media, forums, chat rooms and any other such
media is an influential means to present the company's products information. 77% of the doctors and 79% of all the respondents accept that PRODUCT INFORMATION from the authentic sources positively affects the prescription behaviour of doctors.

26. Many pharmaceutical companies makes inappropriate product claims and don’t offer enough clarity. Many times drug promotion is misleading. False claim could affect doctors’ confidence in the company and he may acquire a negative image about the company. In fact not hiding even adverse information from the prescriber, about the drugs, lead to positive image about the company in the eyes of the doctors. 71% of the doctors and 75% of the total respondents opines that the IMAGE of the product and the company that a doctor forms is directly related to the degree of the honesty and professionalism exhibited by their Medical Representatives and Managers. Medical representative needs to be able to adjust his or her interactions to the available time, and these interactions must be engaging in style. A medical representative should also be a continuing source of unbiased product information, coupled with a varied message.

27. Pharmaceutical companies should continuously evolve and finds ways and means of impressing doctors rather then relying on their image alone. 66% of the doctors and 82% of all the respondents opines that doctors generally don’t get impressed by the corporate image of a company an MR represents.

28. A doctor would expect the ideal Medical Representative to be impressive. Make an impression, an impact, make a mark - and to make it again and again with every visit. Every pharmaceutical company employs and trains Medical Representatives to promote and sell drugs, using printed product literatures, drug samples and gifts. The most basic expectations by doctors from the Medical Representatives is the authentic information. 68% of the doctors and 71% of all the respondents agree that Medical Representatives are the one of the major source of information.
29. Some of the key value metrics shows that a modern Medical Representative needs to be able to adjust his or her interactions to the available time, and these interactions must be engaging in style. A Medical Representative should also be a continuing source of unbiased product information, coupled with a varied message. 69% of the doctors and 76% of the total respondents opines that a Medical Representative possessing adequate product knowledge and having effective communication skills is favoured by the Doctors with prescriptions.

30. India, it is estimated that Medical Representatives account for 5-10 per cent of total sales budget. Therefore, knowing and improving/optimising the effectiveness of MR will enable the company to march ahead. Medical Representatives are the key links for improving sales and this has been consistently confirmed. 73% of the doctors and 85% of the total respondents agree that Medical Representatives personal and professional attributes is one of the most important factors for doctors prescribing the drug.

31. In the survey, doctors reported various parameters leading the deterioration in the quality of Medical Representatives. Doctors claimed that Medical Representatives are lack product knowledge. Some of them said that Medical Representatives are unable to sometimes answer even simple things like side-effects and dosage recommendations of the product they are promoting. Doctors mentioned that sometimes representatives don’t visit for months. While in case of consultants, the reason they gave was very high frequency; every week or sometimes more which irritates them. 77% of the doctors and 67% of the total respondents concurred that the falling standard with respect to their product knowledge, negative attitude, and the image of the Medical Representative in the eyes of the doctors as an information provider is disturbing.

32. In this era of cut throat competition Medical Representatives are facing several problems when they are in the field for sales call. These problems are either associated with their Doctors or themselves. Problems associated
with Doctors are such variables (their busy schedule, own belief and their different personalities) which are beyond the control of Medical Representative. But what they can sort out their own problems like their poor communication skills, inadequate product and market knowledge and other technical skills which make a lot of difference inside the clinic of the doctor. All these skills require regular training to be perfect. When a fresher starts working in the field even after training she/he bears number of inhibitions which prevent them from making an effective sales call. Some of these inhibitions can be overcome by regular. 80 % of the doctors and 83 % of all the respondents agree that Medical Representatives should be exposed to professional training atleast once every six months to horn their personal and professional attributes helpful in generating prescriptions.

33. Medical Representatives now face a myriad of challenges which their forerunners never even imagined. Moreover, they have to adapt and respond quickly to the changes and the hurdles of the industry. Investment in sales and marketing which includes Medical Representative cost, promotion and marketing cost would escalate in the years to come, thereby making it crucial to manage these expenses effectively. The plight has been well documented: an unreceptive physician audience, tougher guidelines on physician interaction, a plethora of me-too products, and competition from hordes of Medical Representatives, scientific officers, medico-marketing executives representing different companies with competing products. Above all, Medical Representatives face a daunting task of trying to obtain quality time with physicians. 74 % of the doctors 82 % of the total respondents concurs that Trained Medical Representatives are able to develop healthy relationships with Doctors influencing their prescription habit.

34. Earlier when competition was less, getting a few minutes of quality selling time with each physician was a lot easier. But today Medical Representatives get as little as one minute of detail time in which they strive to make a mark. It becomes imperative to differentiate one self not
only in the crowded pharma market but also in the doctor's mind so as to make a long-lasting impact, attain the mind-share and thereby prescription share of doctors. Reaching out and communicating better with end-users or patients may also become a popular marketing technique in the future. A training programme organised by the Pharma Company he works for will help him get oriented to the product and its benefits and also how to market it in that perfect way. 65 % of the doctors and 74 % of the total respondents agree that Training makes Medical Representatives developed a presentation styles suitable for the various specialities of Medical practioners hence able to influence prescription generation.

35. Doctors mentioned that sometimes Medical Representatives don’t visit for months. Regular visit to doctors create positive perception about the company. 60 % of the doctors and 69 % of the total respondents concurs that if a well trained Medical Representative regularly visits a Doctor, the Doctor is likely to oblige him with prescriptions.

36. For doctors availability of the product is of prime importance. Regular visit by the Medical Representatives at least assure them that the products of the company are available. If doctors have any doubt about the availability of the particular company products they will not prescribe those products. 63 % of the doctors and 76 % of the total respondents agreed that if Medical Representative fails to show up for over a month, doctor suspects the availability of the products of that manufacturer and stop prescribing their drugs.

37. To make the product available, it is essential that retailers are also taken into confidence. Regular visits by the Medical Representatives to chemist help in assuring them that the company is active. Hence they will not hesitate the stock the products so that prescriptions don’t bounce. 71 % of doctors and 77 % of all the respondents agreed that Regular visit by Medical Representative to chemist & druggist is essential to make the products available which are essential for prescription.
7.2 SUGGESTIONS

I. Marketing and Promotional Activities

1. Exposure to promotion influences prescribing more than some doctors realise. With intense competition, it is becoming more important to build an emotional bonding and a relationship of trust and comfort with the Doctors to ensure loyalty and hence consistent sales. Hence there is a need to differentiate a product from competition and establish a positive image of the drug and the company in the eyes of the customer. The pharma companies need to reserve budget for a minimum of 25-30 percent of sales as branding cost.

2. As pharmaceutical companies have sought ways to reduce promotion costs, sampling has followed suit. A closer look at just those doctors who have never prescribed the detailed product shows a marked advantage for products which details which did leave a sample. A well planned sampling strategy is required instead of just distributing drugs sample to doctors randomly.

3. Continuing medical education (CME) refers to a specific form of continuing education (CE) that helps those in the medical field maintain competence and learn about new and developing areas of their field. These activities should be organised as live events, written publications, online programs, audio, video, or other electronic media. Content for these programs must be developed, reviewed, and delivered by the faculty who are experts in their individual clinical areas with high credibility and trust with the peer circle of doctors.

4. Pharmaceutical promotion is persuasive communication and a major source of information to the health-professional. Each pharmaceutical company must have their in-house evaluating team ensuring that the message disseminated for the promotion should be factual, evidence based, unambiguous and balanced.
5. Pharmaceutical Companies should create their own un-branded sites like, silenceyourrooster.com or iwalkbecause.org, to foster relationship with patients' group through online activity. The contents of these sites could be generated by the users themselves of the respective social medium. With the help of click-through links these sites lead to the branded sites of the concerned companies.

6. Pharmaceutical companies should increase their commitment and investment to causes that appeal to both doctors and patients which will increase the trust factor which is currently very low.

7. Instead of just focusing on marketing drugs, the pharmaceutical companies should launch initiatives that will improve patient’s lives and help doctors in improving their service to patient. These are the kinds of higher-level benefits that many pharmaceutical brands should aspire to provide, yet they can do so only by intimately understanding how not just their products and services but their marketing satisfies potential customers’ unfulfilled needs and fits into the overall experience of their lives.

8. The trust between Doctors and the Pharma Industry has decline. Thus in pharmaceutical marketing, Public Relations (PR) becomes an invaluable communications tool. It has the ability to deliver fairly balanced and objective information to enhance scientific exchange, and can be cost-effectively utilised throughout a product's life cycle, even for mature brands and those going off patent. This means that scientific data on investigational drugs can be included in press releases intended for physicians, patients and the public. In addition, companies conducting medical research can also meet with patient groups to update them on scientific developments with regard to both investigational and marketed drugs, as such information potentially may have value for their audience. These interactions, typically driven by the PR function, can take the form of educational information packs and personal meetings.
9. To satisfy the ever increasing hunger for information by patients, pharma companies must introduce their own disease management programmes for patients and doctors. This seems strategy will help pharma companies to burnish their image and prove that they put patients’ health above profits.

10. Using an alternate channel such as internet is essential for physician engagement that integrates education, virtual detailing, and information delivery based on specific customer profiles can help increase share of voice in a cost-effective manner.

11. Patient advocacy groups are an increasingly valuable resource for pharma manufacturers and FDA throughout the drug development process, since they provide, among other things, a crucial perspective. Pharmaceutical companies should form a healthy relationship with few of them which has high credibility amongst Doctors.

II. Marketing Administration

12. Instead of wasting promotional budget on expensive gift for doctors, pharmaceutical companies should utilize the budget for improving the quality of service provided to doctors and help them in serving the patient in the most effective way.

13. While defining the detailing folder, efficacy should be mentioned for all the products communicated to doctors during briefing as Efficacy is one of the most important attributes for doctors.

14. Since safety is always on top of the mind of doctors while writing prescription, complete safety profile of the products including the risk and side effects, should be effectively communicated to doctors through flip chart, hand-overs, or emails.

15. One of the allegations against pharmaceutical companies that they keep unreasonable profit margin. Pharmaceutical companies should introduce
an internal mechanism to avoid unjustified profit margin so that medicines become affordable.

16. In all forms of communication, doctors must be informed about the specific dosage about the individual products. Promotional material must give specific details about the product dosage with complete details.

17. While designing promotional literature the focus should be on the basics such as efficacy, safety and dosage rather then on colour, shape, size and packaging of the products.

18. The quality of the patient-physician relationship is important to both parties. The better the relationship in terms of mutual respect, knowledge, trust, shared values and perspectives about disease and life, and time available, the better will be the amount and quality of information about the patient's disease transferred in both directions, enhancing accuracy of diagnosis and increasing the patient's knowledge about the disease. The pharmaceutical companies should promote better understanding between patient, doctors and pharmaceutical trade to improve the over all image of the industry.

19. The fact that because of the advancement of Information technology and the availability of information through internet the importance of Medical Representatives depends on the quality of authentic information provided by them on every visit to the doctors. The product management team of the pharmaceutical should conduct thorough research, scanning all the available medical research journal and other sources and only provide the most authentic information to doctors.

20. The pharmaceutical companies should strive to create a positive image in the mind of the doctors by launching initiatives benefiting the patients, which will attach positive attributes such as caring, respect, honest, sincere, devotion etc to the company’s image.
21. Doctors are not impressed by the name of the company even if it’s multinational. Size of the operation, number of products and turn-over does not impress doctors. Instead on relying on their image, Pharmaceutical companies should focus on providing better service to both doctors and patients.

III. Prescription Generation

22. Medical Representatives is a vital link between doctors and Pharmaceutical Company. They are the most important face representing the company. Recruitment process needs to be made stringent, also offering better salary and over all package to attract the best talent.

23. Before any promotional material goes to doctors, a team of Medical Representatives should be consulted and their feed back taken as they are the one who are continuously interacting with doctors and know their requirements.

24. Not enough research is done on the various personal and professional attributes which are essential for the optimum performance from Medical Representatives. The Pharmaceutical companies need to conduct an in-depth research on these aspects and include them in their HR Policy for recruitment and training of Medical Representatives.

25. There is no mechanism to monitor the performance of Medical Representatives inside the Doctors chamber. This is the Achilles heels of the pharmaceutical promotional strategy. The industry desperately needs to evolve a system to effectively evaluate the performance of Medical Representatives inside the Doctors chamber.

26. Medical Representatives training schedule in the industry is not taken very seriously as they are expected to be on the field and generate prescription. Atleast twice in a year, seven days training programmes
should be arrange for making them effective in generating prescription from doctors

27. For developing healthy relationship between Doctors and Medical Representatives, Pharmaceutical companies should increase the budget for imparting training to them and enhancing their personal and professional competency.

28. Since Medical Representatives have to meet doctors having different specialisation, the pharmaceutical companies instead of relying on external consultants or trainers should develop a customised training module keeping in mind their product portfolio so that Medical Representatives developed a presentation styles suitable for the specific products and specialisation.

29. The Doctors call list should be upgraded periodically keeping in mind the season and product promotion schedule ensuring that important doctors are not missed.

30. Missed call list (Visits missed by the MR to doctors) should be maintained for every promotional cycle to ensure that important doctors are not missed for a long period which might results in decline in prescription as doctors start suspecting the availability of the products at the retailers level.

31. Chemists have limited space and finance. A proper planning should be done ensuring regular visit by the Medical representative to chemist ensuring enough inventories of the products, so that no prescription bounces. Doctors immediately stop prescribing a particular brand if any of the prescription of that brand bounces because of the lack of availability.
32. The need of the hour is to adopt a fresh approach to reach physicians through communication strategies that adapt to their clinical interests and needs. In the current multichannel environment, based on the preferences, it is important to successfully engage physicians on their own terms using an alternate channel that provides them control over when, where, and how they get information. With media fragmentation on the rise, it is critical to offer physicians a variety of content format options and use all available communication channels in an integrated manner. A transition from a predominantly “push” model to one where a mix of “push” and “pull” elements are judiciously leveraged is critical for success.

33. The ideal solution would be one that provides the infrastructure to deliver high-quality rich content in an interactive manner. Product management team should focus on collecting most authentic data that can be analysed to refine the physician engagement process to make it more meaningful for the physician as well as the company.

34. The pharmaceutical companies should seriously think of adopting an Alternate channel. The guiding principle of the Alternate channel is that the medical information should be “pulled” by physicians when they need it rather than “pushed” at them by pharma companies. It is aligned toward the goal of physician education and skill enhancement. It should provides physicians with pertinent, contextual information tailored to their immediate needs and access to multiple knowledge access points, including on-demand live video detailing sessions with medical representatives and a scientific discussion with medical science liaison (MSLs).

35. **Managerial Implications**: This study will not only help managers to draw out factors that motivate prescriptions from physicians so as to properly allocate the resources but also draw a analysis of present resource utilization practices in the pharmaceutical industry for prescription generation.
7.3 CONCLUSIONS

The world of pharmaceutical marketing is continuing to evolve with changes in the pipeline, the sales force and among the physicians themselves.

A perfect storm is brewing that will force a major course shift for pharmaceutical marketers. The trends shaping this change are: the end of the era of blockbuster drugs, growth in specialist-driven drug development and a shift in the information needs of physicians.

Together, these variables have changed the game for companies that had been focused on traditional Medical Representatives models for the past decade. In their place, Pharma is embracing novel ways of engaging physicians through sophisticated multi-channel marketing programs that incorporate e-mail, handheld devices, desktop computers, direct mail and face-time.

As these tactics continue to gain traction, marketers will find significant efficiency increases. But before these results can be realized, the industry will have to further embrace the multi-channel mindset.

When a pharmaceutical company has a blockbuster on its hands, there is simply no more effective way to promote it than through armies of detail Medical Representatives, paired with aggressive consumer awareness. This regular regimen of physician and consumer contact helps create a push/pull effect in which consumers ask their doctors about the drug and doctors are well-armed with information.

But the landscape has shifted. There are very few mega blockbuster drugs projected or in the pipeline. That doesn’t mean that pharmaceutical companies are in trouble. Far from it, the level of innovation coming out of the lab these days is unparalleled. But the targets are less obvious.

What worked for the general practitioner who needs an expansive knowledge of dozens of different treatment options, will not work for the oncologist who sees 16 patients a day, each with a slightly nuanced strain of leukemia. That specialist may
focus on one component of the disease, and refer patients to another specialist as the disease progresses or as different treatment courses are pursued.

As such, marketing strategies need to recognize that different audiences need to receive information at different levels. To be effective, they need to be designed and created from the physician’s perspective. Whether targeting a generalist or specialist, they need to support focus areas that continue to become more and more specialized.

Building brand loyalty is a difficult task in any industry. The pharmaceutical industry has firmly established principles for its marketing, but these rules slowly have to be adapted as patients become more information-savvy and demand more choice and freedom when making important decisions about their healthcare. Differentiation is the key, particularly in a market where specific medicines produced by a number of different companies, such as Asprin, contain virtually identical ingredients.

For most consumers, the number one concern when choosing a pharmaceutical product is how a particular product can benefit them and improve their well-being. Communicating these benefits in the most effective and simplest terms is a priority for most pharmaceutical companies. The important evolution for the marketing of drugs is that people as consumers are less focused on what is in it and rather on how it improves their life. Ways in which the communication can be made are pretty critical to building the relationship between the Doctor and the brand.

Many pharmaceutical marketing initiatives suffer from a lack of direction when re-vamping their products, and need to perfect the balance between maintaining a scientific look whilst also appealing to consumers on a more relatable level. Pharmaceutical companies lack a sense of urgency to improve their marketing techniques. As a result, there is a likelihood they might suffer in the long-term. A lot of drug companies are used to making a lot of money and that can breed a lot of complacency when it comes to their marketing. Many rely on the fact that their product is better and therefore it will sell better. However, what the doctor sees as better isn’t necessarily what the pharma company sees as better.
Spreading the Word

The internet has become one of the most effective knowledge channels in recent years. As a result, patients are able to surf the internet for information about healthcare, thus becoming less reliant on doctors and other medical experts for advice. Additionally, consumers now rely very much on peer networks for advice and recommendations on reliable and dependable products to buy. In response, drug marketers are trying different approaches, most predominately to speak to consumers on their level rather than too authoritatively, which has been the case in the past.

“For drug marketers, the trick is to acknowledge that people have access to more information and have a demand and appetite for much more. They need to create a partnership dialogue between the brand and the consumer, rather than what has historically been an adult-child relationship.

Before, the brands and the doctors would tell the consumers what was right for them. That has now changed. The opportunity now is to create dialogue, connection and to have some new areas beyond the delivery of drugs as product.

Broken Trust

One of the biggest challenges drug companies face is overcoming the sensitive issue of trust, which has deteriorated between doctor and drug companies. Drug companies are viewed with apprehension and suspicion by consumers who consider them to have an emphasis on profits above all else. Repairing this damage is likely to be a long-term and difficult process.

Doctors’ anxiety needs to be combated. All the pharma companies have a huge problem with trust. The only time trust isn’t a problem is when a product is so price-sensitive that consumers have no choice but to choose it. Where there are other issues, then consumers are asking questions. They do need to provide us with more information and to write in plain language that consumers can understand. Drug companies aren’t helping to engage with the consumer and to create trust. Better communication is essential as trust is already damaged. If they want to up their bond and improve consumer loyalty then they need to reach the consumer on their level rather than talking down to them.
Looking Ahead

As the internet continues to provide masses of information, consumers’ appetite for more knowledge regarding their health and well-being is likely to grow. The internet is a perfect tool to search for answers without any constraints. It also provides pharmaceutical companies with an opportunity to reach millions of potential customers “The growing emphasis on the web and online marketing initiatives is definitely going to continue to increase. Doctors are increasingly pressed for time in terms of trying to maximize the number of patients they see during office hours. This can create a challenging environment for a pharmaceutical Medical Representative who is trying to see a doctor and convey key messages relating to the therapeutic benefits of their medicines.

Building a better relationship between consumers, healthcare professionals and drug companies is also likely to become much more apparent. Drug companies are slowly beginning to realize that an ethical image is crucial to attracting and retaining customers. We will see much more dialogue between consumers, healthcare professionals and drug companies. The whole ethos of people in the world and how they interact is changing – they will expect brands to act in a responsible and meaningful manner, and will enter into relationships with businesses and brands that meet the expectations people have of them. Dialogue and listening will be important.

As competition continues to increase, so will the need for pharmaceutical companies to improve and adapt their marketing to attract customers. Building back trust must be the first crucial step. What’s needed is for drug companies to inject a dose of balanced and impartial information into their marketing, whilst striving to preserve the all-important physician-patient relationship through putting the public’s needs before their own.

The model of a Medical Representative that visits the doctors frequently and informs/pitches the physician about the drug need drastic make over. Infact instead of a Medical Representative what doctors want to see is a partner. The company that produces the drug should know best about the drug. About it’s real efficacy, its side effects and its off- and on-label use.
The Medical Representative should be a person the doctor can call anytime and ask questions he doesn’t find in the package leaflet. But although pharmaceutical companies try to do so, many doctors still show least interest when interacting with the Medical Representative. Their perception is that just another brochure, another free pen, another Medical Representative that wants me to prescribe more of the drug. This needs to be changed with the use of available technology.

Now something called eDetailing has emerged over the past years. The idea is to bring old-fashioned drug brochures to life with multimedia presentations that are being distributed via e-mail or newsletter. Another approach is so-called TeleDetailing, where the actual Medical Representative is behind a computer and hooks up with the doctor over a video conferencing tool. Now this is primarily due to cost-cutting efforts of pharmaceutical companies, but they also envision to bring a closer and long lasting relationship with the physician.

Having a personal visit from a Medical Representative though shows that the doctor is being treated as important, that the company cares about her and takes time. On the other hand it can be time consuming, inefficient and repetitive.

Eventually there must be something in between. Important physicians (Key Opinion Leaders) will always be visited by Medical Representative. Young resident doctors and fresh graduates or junior doctors could be contacted via digital channels. But the goal must be to access the doctor in a pull – and not a push – way. Meaning that the doctor should make use of a service or product that helps her in her daily clinical routine (i.e., physicians should ideally be the ones who “pull” the information from the pharma company). Pharma should start building products that help physicians and Medical Representative do their jobs.

In the pharmaceutical business, most companies work on monthly, bimonthly or quarterly promotional cycles; and promotional resources are carefully allocated to ensure that the company achieves maximum sales. Most organisations bring out ‘strategy guides, which provide details on inputs, information on competition, approaches to detailing and sometimes a chart on incentives.
Specialty areas such as oncology, neurology, cardiology and diabetology, owing to their continued developments, require greater amount of Medical Representatives training. Pharmaceutical marketing in India is quite a challenge due to highly fragmented nature of the market, with over 60,000 brands battling for a share of about $9 billion domestic market. With the result, even the industry leader has just about six percent of the market share. The lack of product patent protection until 2005 resulted in market getting flooded with me too brands for the same molecule, sometimes even 20-100 brands of a single molecule competing for the same indication.

Products which require a lot of knowledge and understanding to ensure knowledge flow to doctors require their Medical Representatives to be well trained. Some such products are oncology drugs, biologics, drugs used in intensive care situations, etc. Such Medical Representatives are few in number, and spend a much longer time with their physicians as they detail the effect of the drug on patients apart from just creating awareness of the products.

Sales and marketing expenses can be broadly broken into product promotion through Medical Representatives, product promotion through limited number of free samples to encourage usage and discuss the feedback of the drug, Medical Representatives trainings and educational events where product can be discussed by key opinion leaders or thought leaders.

Branding has been the best marketing strategy that has added value to the drugs and distinguished them as ‘branded generics’ in the market. This is especially important for the Indian pharma companies with over 60,000 brands competing for attention.

**Pharma Detailing**

Sales Representatives rely on various types of Marketing/Promotional material to engage doctors but they often face a losing battle. In a bid to stand out from the rest of the herd, pharma companies are deploying new techniques and technologies to breath fresh life into the detailing process.
In India, the role played by promotional aids and channels becomes critical thanks to the country's low doctor-patient ratio. Medical Representatives, the key link between pharma companies and doctors, get hardly a couple of minutes with doctors to detail new products and retain share of voice in the market. Effective detailing techniques and aids are therefore more essential than before.

"A transition from a predominantly “push” model to one where a mix of “push” and “pull” elements are judiciously leveraged is critical for success.

However, doctors no longer welcome Medical Representatives as before. Several studies have highlighted that oversized sales forces have saturated the market, and doctors are more reluctant to see Medical Representatives in their offices. About 20 per cent of doctors in the US and the UK now refuse to see any Medical Representatives leading to a decline in the return on investment (ROI) on detailing. The situation is similar in India as well. With pharma companies in India launching newer products in the marketplace, this problem is only going to increase in future.

The sales tool has a rub off on the attitudes of the employees as well, introducing an element of newness into the detailing routine.

Engaging Doctors

Unfortunately, India has not seen too many innovations in the sales and marketing area. Innovations in this sphere have been very rare. After the invention of the detail aid, nothing much has ever happened till E-detailing took over in fits and starts. Even E-detailing is in its infancy and most pharma companies still depend on the printed visual aid.

Reasons for this dearth of options are primarily monetary. The cost of hardware, supporting software coupled with a wide spread operational structure restricts the use of modern devices. A low cost of generics resulting in lower realisations further impedes the decision to shift to modern media.

Globally, there has been a trend to move from local, offline solutions to more online solutions when it comes to CRM solutions. Detailing has moved from hard
copy to electronic formats, to mobile devices like smart phones. some of the global pharma companies across different geographies, they have observed a shift toward multichannel marketing, sales, marketing programmes, and platforms that include web, mobile, tablets, and iPads as well as engagements such as tele-detailing. These alternate channels allow pharma companies to effectively engage doctors on their own terms in a cost-effective manner and are being seriously explored by most big pharma companies.

Variations of these moves are being seen in the Indian pharma market place as well. Use of the smart phone for detailing has not yet been seen in India, but some larger pharma organisations have developed a support system for detailing which involves call planning, messages, tracking discussion of last call, objection raised by customer, commitments given and reporting which will be helpful in planning the next call. Some sporadic efforts are being tried wherein web based doctor relationship management programmes are being initiated.

One of the global pharma company with India operations has engaged Indegene for a large-scale digital-based platform that allows them to engage doctors leveraging content, interactive cases, and continuing medical education. Indegene is seeing early signs of success in terms of enrolments into this programme and in time spent by the doctors online. More than 16,000 doctors have registered for this programme. On an average, doctors visit the platform twice every month, with an average time of five minutes spent at each visit. Cardiology, endocrinology, oncology, and dermatology have shown higher physician engagement compared to other specialities.

There are cases where pharma companies are stepping in to provide more services. If hospitals and individual doctors want a second opinion in complicated cases, pharma companies provide a diagnosis service on a case-to-case basis via the web with overseas consultants. The message and medium are both equally important. There is also the problem of the message getting lost when Webinars and webcasts of experts’ presentations are commonly used by pharma companies as a marketing strategy. Patient portals (for online doctor-patient collaboration) are mainly used by diagnostics as well as equipment / instrument companies for their stakeholders.
Online events like seminars, CME events, KOL events, or web conference are also being used.

**Patient Benefits**

Pharma companies are often criticised for investing more on marketing and sales promotion aids than in R&D but they argue that the benefit of these tools trickle down to patients as well. With newer detailing tools, the doctor/physician can update himself with the latest in his field without his or her clinical time being encroached.

Doctors can provide topical, relevant, and credible information to the patient through better pictorial representation, graphics, and demos. In time pharma companies can hope for delivering better quality of care and better patient compliance to treatment plans through these newer tools. Digital platforms now allow doctors to enrol their patients for education and provide treatment reminders, thereby expanding the scope of patient care.

Patients with chronic illnesses could especially benefit if pharma companies go beyond the traditional business of developing and manufacturing products. In such cases, pharma companies arrange product demonstrations in collaboration with doctors in order to educate the patients.

**Medium Versus Message**

While pharma companies are spending more on new platforms and new age media, they are only too aware that the content too has to match up. Healthcare is primarily a content business. What is ‘content’ today is ‘primitive’ tomorrow and what is ‘primitive’ is considered ‘trash’ the day after. Most ‘content’ in India is global and sourced from the web with the only exception being recordings of "key opinion leader" KOL lectures/seminars and MNCs sourcing own content from their HQs abroad. An important source for developing messaging is the medium of clinical trials, which too is only now happening in some numbers but these are always a part of a global initiative. Any ‘content’ so developed is once again a part of a particular MNC which sponsors the whole effort on a global scale.
The message and medium are both equally important. There is also the problem of the message getting lost, when clients try to convey too much information. High attrition levels in the industry too play havoc as a change in the product manager could mean that the consistency in the message gets lost. This debate is a perennial question for pharma industry. The message needs to be further sharpened while the medium needs to be further substantiated as they are non exclusive.

A transition from a predominantly ‘push’ model to one where a mix of ‘push’ and ‘pull’ elements are judiciously leveraged is critical for success. In the current multichannel environment, based on preferences, it is important to successfully engage physicians on their own terms using an alternate channel that provides them control over when, where, and how they get information. With media fragmentation on the rise, it is critical to offer physicians a variety of content format options and use all available communication channels in an integrated manner.

**Engaging Patients**

To stay relevant, companies will need to address issues and concerns of multiple stakeholders. With increased scrutiny from regulators and patient activist groups across the world, pharma companies have to engage with and provide more value to key stakeholders such as patients and payors. The principal reason for this is the increasing focus on chronic diseases. A study published in the American Journal of Hospital Pharmacy by Bond and Hussar has documented that patient adherence to treatment of chronic diseases is hovering around 40 per cent. According to a recent report from the Task Force for Compliance, which was first established and funded by 20 major pharma manufacturers in 1992 to study the problem and examine solutions, it is estimated that over 50 per cent of prescriptions written annually are not adhered to correctly resulting in a revenue leakage of over $70 billion. Adherence programmes for patients have therefore started to gain prominence along with the use of alternative channels for physician access.

Catching and retaining a doctor's attention therefore calls for a multi-pronged approach. Simply hoping that the doctor will go through the material on his smartphone or online would be foolish because why would a doctor self-detail when he avoids a live detailing session?
Healthcare communication campaigns will be influenced by evidence based medicine endorsed and substantiated by trials, testimonials, case papers and CME’s. There will be a gradual shift towards consumers gaining more awareness on health and wellness issues through use of new age media rather than depending solely on the physician as a health advisor. Similarly, creating a web based doctor patient interface will enable doctors to treat better and faster.

So will the tried-and-tested old faithful visual aid be consigned to the archives of pharma detailing? Not likely. It still is the one detail that gives the biggest bang for the buck, does not need to boot up, nor recharge and has the maximum chance of remaining on the doctor's table longest; provided of course, the content is worth the attention. As the E-detailer is still at a stage of infancy, they will adopt an innovative hybrid process of E-detailer supported with few print scientific inputs that will give the rep the flexibility to use the right tool according to the situation.

Sales and marketing capabilities have largely been the basis of large pharma’s value proposition to the market. As the “commercial engine” of the industry, large pharma can add value by serving as the conduit between diverse patient segments and the growing number of targeted therapies.

To this end, large pharma needs to redefine sales and marketing functions so that they own patient relationships and engage prescribers and other stakeholders effectively. As the business model and portfolio changes, more companies are adopting small specialty teams instead of the traditional, large General Practice (GP) teams. In fact, a few pharmaceutical organizations in India have disbanded their GP teams altogether. Instead, some pharmaceutical companies are adopting the business unit concept, combining marketing and sales as operations that strive for commercial excellence. Pfizer has taken its overall business unit strategy a step further by having the global business unit structure focus on customers, with the overall business unit spanning both clinical and commercial development.

**Marketing Model Progression**

Marketing has always been considered an art, whereas an alternative approach would be to treat it more as a mix of art and science. Executed with business
oversight, marketing campaigns should have clear ROI measurements and other metrics. However, it is important to understand that marketing ROI should not be defined as just a financial measure - it should include measures that offer visibility of the collaboration and interaction among sales, service, and other company functions. Marketing ROI should also provide a vehicle to help close the loop between campaign execution, measurement, and overall strategy and planning to help drive continuous improvement. Measurements and budgets can then be set based on customer value, retention goals, and other value metrics.

Pharmaceutical companies need to evolve from a simple reach-and-frequency approach with physicians to a more sophisticated model dependent on customer value and segmentation. A comprehensive approach to segmentation considers all stakeholders, their influence, and the product lifecycle in Sales force model progression. The traditional go-to-market strategy of deploying a sizeable sales force has served the industry well over the past few decades. But sales and marketing is estimated to consume almost one-third of total revenue. And with exploding sales force numbers and intense competition for prescriber’s limited time, there is a rapidly diminishing return on the sales call. It’s not surprising, then, that a number of pharmaceutical companies’ major layoffs have included cutting their sales force numbers, pointing to an end in the “arms race.”

Yet, the restructuring of the sales force function is more of an evolutionary change rather than a revolution. The traditional medical representative-physician model still continues to drive sales in most companies and will remain a vital component, with drastic change deemed too risky in the short term.

Rather, the evolution seems to be dictated by the product portfolio strength of the pharmaceutical company. Pharmaceutical companies with expanding portfolios are taking a watch and-wait approach while collecting information on sales representatives’ value and productivity in the physician’s office. At the same time, companies with declining portfolios are seeking faster change and are more willing to experiment with new approaches. This includes the use of contract sales organizations. Indeed, many companies are now taking advantage of outsourcing’s greater flexibility as part of their sales force strategies. However, pharmaceutical
companies need to develop clear frameworks and service level indicators to best manage this partnership rather than handling it in an ad-hoc manner.

The increasing number of stakeholders exerting influence on prescribing choice also necessitates a review of sales force strategy. The term “customer” now refers to a variety of stakeholders other than direct prescribers. Account and relationship management is therefore evolving and growing in importance as pharmaceutical companies recognize the relative influence of these stakeholders.

**Striking the Right Balance between Short and Long Term Strategies**

Pharmaceuticals save lives. They prevent more serious, life changing conditions, they prevent surgery, and they improve the quality of life for many patients. The environment in which these products are developed and commercialized is in a period of great transformation.

The winning strategy will be a combination of short, mid, and long term strategies. Short term strategies will revolve around training the field staff and optimum utilisation of resources. The mid term strategies is to identify the relevant technologies and use them to serve the doctors and patients. The long term strategy is to build around long term relationship with both doctors and patient by offering them the customised solution/

Pharma companies have to reduce the cost of their marketing and promotion and focus on patient oriented and not product oriented.

Thus three parts of todays pharma business that need to be deserve attention and that need be disrupted entirely. Sure, there are many regulatory aspects that need to overcome:

1. **Sales – The Other Way Round**

Pharma Marketing and promotion needs a radically new distribution approach and entirely new sales channel. Still, most of its sales goes through Medical Representative working closely with doctors. Showing some graphics and trying to convince the physician of some drug. In times of guidelines and stiff competition
those fancy graphics are not enough anymore. Sales need to be digitalized and pharma has to become the physician and patient’s partner.

2. **Build Trust**

   Especially among patients the pharma industry has a reputation problem. Tons of money going into CSR and branding campaigns do not change the fact that a vast amount of people still questions the ethics of the pharmaceutical industry. In order to create trust it needs to be more authentic, more honest about their scientific research, publish papers that not only prove the effectiveness of its products, but also show problems, obstacles and issues – this, on the long run, creates trust, which in turn will create long term customers – just like in any other business in the world.

3. **The Modern KOL**

   The future KOL will be the patient. The mature patient, who makes use of the internet, will be the single most important acceptance criterion, for gaining trust on the market. It will be harder to market drugs that are simply not working, just through physician-catered sales strategies. The patient is already and will question clinical research that is sponsored by the industry.

   Key Opinion Leaders (KOL) are still one of the most important corner stones for the marketing machines of pharmaceutical companies. Their network, expertise, reach and authority is what pharma is interested in.

   Social media is here to stay and the day will come when even doctors will embrace it as professionals. The pharmaceutical marketers must understand that. A future KOL, might not be a local hero, but rather known around the globe. Through Twitter and Facebook, the geographic borders vanish. So it has become quite easy to turn into a leading voice in your specific medical field with the help of novel (at least for physicians) social media outlets.

   The implications of this vary. For sure though, pharma will need to work with these global KOLs in the digital sphere. A tweet from guys like Bryan Vartabedian (@doctor_v) can help and harm brand in an instant. Think about how pharma will need to embrace social media in order to keep up and cope with such
physicians. They must understand that it’s bidirectional, it’s not sales anymore, it’s pure and absolutely transparent communication.

The pharmaceutical industry has been dormant throughout the last decades when it comes to finding new business and sales models. The big ones have been keen on keeping competitors out of their businesses by close surveillance or legal action. In order to sustain and grow their revenue, the pharmaceutical industry has one of the most effective salesforces out there, which is why those companies have been doing really well financially – and still do.

According to various reports and the fact the numerous blockbuster patents will expire in the next years, the pharma industry will somehow need to save money. And as it is with any business out there, the employees are the most expensive (and most important) asset of a company. Thus, they are the ones who’ll likely be suffering from such cuts. Especially the Medical Representative are going to be reduced significantly. Pharma is intensively looking for new ways to distribute their products and market them within the very strict legal requirements. This is different in Europe and the US, then in our country. Whereas the industry may market their products towards the customer a.k.a. patient directly in the US, this is not allowed in India, because it’s being regarded as unethical.

In need for new models on how to access patients and physicians there must be something new, something disruptive. eDetails are not going to be pharma’s sales savior; neither are tele-reps. Generally speaking, we believe that pharma needs to move away from a push marketing approach and immediately start moving into a pull-marketing direction. The often cited “Medical Representative as a partner to the physician” needs to transformed into some real life model.

An electronic gateway between the pharmaceutical industry and it’s single most important partner – the physician.
The Age of Analytics

On the surface of it all, the process of constructing psychographic profiles of narrowly focused physicians may sound daunting. But, when compared with the cost of a single Medical Representative it is actually cheaper to be smarter.

In the current environment, a Medical Representative is lucky to get 60 seconds of face-time with a decision-maker. Meanwhile, a comparatively cheap e-mail campaign targeting physicians when they are in their after-hours information gathering mode, will yield a much higher return-on-investment. In the end, it’s about working smarter, not harder, to meet the needs of a changing marketplace.

Directions for Future Research

More work is needed to establish causal relationships between promotion and prescribing of drugs which have little or no place in rational prescribing, or which have serious adverse consequences when over-prescribed, such as antibiotics.

Other gaps include the lack of evidence from developing countries. All of the studies presented in this dissertation are from developed countries. It is very difficult to untangle the effect of promotion from other inadequacies in systems of medicines distribution in developing countries.

In line with these implications, I suggest three important areas for future research in pharmaceutical marketing. First, more extensive and more detailed research is required covering more pharma companies. In this dissertation, I have collected data from five pharma companies.

Second, in my dissertation, I have limited my focus mainly on four important players in the pharmaceutical industry, i.e. Pharma Managers, Medical Representatives, Chemist and Doctor. However, there are many more players involved in this industry, such as patients, regulators, insurers, nurses etc. The omission of many of these players from the analysis is not only a limitation of my dissertation, but also applies to the
pharmaceutical marketing literature in general. Future research can benefit greatly from the inclusion of multiple of these less-researched market players into the analysis; however this might also require the development of new models.

Finally, most empirical research on pharmaceutical marketing considers its impact on financial outcome variables, such as prescription generation, sales, prices and profits. However, little data is available on these variables to apply other quantitative techniques.