

Modulation in Pharmaceutical Marketing during Covid-19 Period Causing Impingement on Prescribing Behaviour of Indian Doctors: A Critical Review

Rahul Srivastava^{1,a}, Dr. Vishnu Prakash Mishra²

¹United University, Prayagraj, Uttar Pradesh, India-211016

²United University t, Prayagraj, Uttar Pradesh, India-211016

^aCorresponding author: assignmentqtm@gmail.com

Abstract

The third-largest by volume and the fourteenth-largest by value in the world is the pharmaceutical industry in India. It is one of the highest distributors of medicines in the world. The pharmaceutical market of India has unique characteristics and differentiate it from other countries. It has its own opportunities and challenges.

There are only certain sectors which have flourished in Covid -19 period and pharmaceutical industry is one of them. Pharmaceutical marketing strategies in right direction will play an important role in the changing scenario. Those Pharmaceutical companies which will be selecting strategically correct marketing strategy, to influence the prescribing behaviour of doctors will be benefitting maximum. Huge promotional budget is allotted by the pharmaceutical companies for the advertisement of products, but choosing correct method of influencing the prescribing behaviour of doctors has a vast significance. This paper review & examine the various pharmaceutical strategies applied by the companies on doctors and their impact.

Research has a vast academic relevance that it will provide an in-depth insight in the field of pharmaceutical marketing and managerial relevance in a way that conclusions of this research will guide the pharmaceutical companies to make better decision making in regards to selection of efficient pharmaceutical marketing strategy. The finding reveals that there are several strategies which are being used by pharmaceutical companies and there is a strong effect of these pharma marketing methods.

Keywords: Pharmaceutical marketing, prescribing behaviour, Covid-19 period.

Introduction

One of the most significant engines of the worldwide modern economy is the pharmaceutical business. To increase their market share, the majority of pharmaceutical businesses invest a significant portion of their sales revenues in research and development. Compared to other general marketing strategies, pharmaceutical marketing has a special notion that is difficult to follow and implement (May Alowi et al,2019). Among the most developed industries during the Covid-19 period is the pharmaceutical one. Science and technology have fueled the expansion of the pharmaceutical industry. (Manuel Palencia et al.,2021). The pharmaceutical industry accounts for

the major chunk in any country's research and development, and at the same time the cost of pharmaceutical products is increasing continuously, leading to the selection of correct pharmaceutical marketing practice (Darius N. Lakdawalla,2018).

The pharmaceutical industry receives huge revenues making it one of the largest industries of the world. It has seen drastic changes during past few years creating new demands from the manufacturers. Customers now expect similar convenience from pharmaceutical industries, as they expect from other sectors. The difficult situation that occurs when the client is not the customer affects the pharmaceutical sector(May Alowi et al,2019). For such demand pharmaceutical companies focus their marketing efforts towards doctors. Doctors are now aware about these efforts & the convenience by which pharma companies are able to influence them (Jeremy A. Green,2007).

Pharmaceutical businesses frequently use a variety of marketing techniques to boost product sales. The nature of pharmaceutical industry is global, yet local geographical area has a strong impact on the prescribing behaviour. This can be understood by the structure of the pharmaceutical market which differ from country to country. They must devote a lot of time and resources to these marketing techniques in the hopes of success.that pharmacist and specially doctors will become convinced to the advantages of their product and will definitely prescribe their product to the patients (customers). For marketers it is indeed a difficult area to engage with. The nature of the marketing is different for different kind of medicine, which is divided into Medications can be broken down into two distinct groups: OTC and Prescription. Direct to consumer advertising is common for over-the-counter medications. Corstjens has defined four main parties for prescribing the drugs – Prescriber which includes doctors & pharmacist, influencer which includes hospitals, consumer i.e. patient, & financier includes health care organisations (Joan Buckley,2009).Pharmaceutical companies therefore uses different marketing strategies for influencing the prescribing behaviour of doctors .Additionally, there has been a voluntary code of marketing standards for the Indian pharmaceutical business that is now in effect (UCPMP,2009). Consequently, it is important to investigate determine which promotional methods are most effective in encouraging doctors to prescribe a particular medication and the effect that pharmaceutical marketing efforts have on doctors' prescription habits. In conclusion, we can state that one of the major factors influencing the choice of a specific brand of pharmaceutical product is affected by physicians' prescription behavior. Academically, the study is relevant because it will offer a comprehensive understanding of advertising and marketing and its potential effects. From a managerial standpoint, The study's results can help the pharmaceutical industry develop more persuasive marketing campaigns that persuade doctors to increase their use of their products.

Objectives

1. The purpose of this research is to learn about the various pharmaceutical advertising approaches.
2. To examine how pharmaceutical marketing affects doctors' prescription habits pre- and post-Covid-19.

Methodology

The exploratory character of the study necessitates a literature assessment of the qualitative information obtained from secondary sources. In order to gain a thorough grasp of the research

issue throughout the COVID-19 period and gather in-depth information regarding the research objectives, this research methodology was chosen.

Challenges and shift

Pharmaceutical marketing is defined as the activities which are focused on making doctors & general public aware of pharmaceutical companies, products and brands. The development of economy and health education has strongly affected the medical industry frame work and forcing pharmaceutical companies believe pharma promoting to be an important and crucial component of the industry (Mahfuzur Rahman khan 2021). The outbreak of coronavirus can be declared as one of the biggest health disasters of the current century. It has affected almost every country around the world, so we can say that Covid-19 pandemic is a wellbeing emergency influencing all aspects of the life across the world. Even today the actual cause and impact of the crisis is unknown, but almost every business and industry have now understood that this condition is still prevailing and there is uncertainty that when this situation will stop and therefore almost all the industries have shifted down their entire strategies and innovating to adapt and survive. Withstanding the same effect, pharma industry has also incorporated certain changes in their marketing practices for adapting the change and making more influential marketing.

indian pharmaceutical industry

In terms of both volume and revenue, the pharmaceutical industry in India comes in third and fourteenth, respectively. Pharmaceuticals is one of the top ten foreign investment-attracting sectors in India. The automated technique allows for 100% foreign participation in medical device companies. Foreign investment above 74% and up to 100% government approval is required for initiatives involving ancient drugs. Under the automatic procedure, foreign investors may own up to 100% of pharmaceutical greenfield projects.

Major discontinuities are currently occurring in the world's pharmaceutical marketplaces. In the next ten years, emerging markets will gain importance while development in mature economies will stall. Along with China, Brazil, and Russia, the Indian medicines sector will drive growth in these markets. The pharmaceutical industry in India is a significant part of the nation's international trade and offers lucrative potential for investors.

India holds an important position in the global pharmaceutical market. Next generation artificial intelligence, cellular programming, nanotechnology, genetics, prescription are the new emerging trends for the Indian pharmaceutical market (Vishavadia Krunal,2020). India's expanding population and burgeoning economy help to drive up demand for pharmaceuticals and healthcare services in general. Research suggest that more than 60 percent of the pharmaceutical marketing cost account for the communication with doctors. Other important target customers in India are the pharmacists, hospitals, wholesalers, governmental forces and so on (Suresh Kumar et al. 2018).

While the Indian market has become more optimistic, it is also undergoing a period of change. This is a result of two factors: first, the healthcare industry as a whole is undergoing a period of discontinuous development; and second, The leading players in the pharmaceutical sector have changed significantly in recent years(Mckinsey report, 2020)

Effects of pharmaceutical marketing

For businesses to thrive in today's information-driven, customer-centric economy, the paradigm of traditional marketing approaches must be rethought (Mihart, 2012). "fulfilling needs and preferences through an exchange of resources" is how Philip Kotler and Armstrong define marketing (Kotler, 2010). Product, price, place, and promotion are the four pillars of the pharmaceutical marketing mix that Borden established in the early 1960s (cumulatively termed as the 4Ps in the concept of marketing) (Ding et al., 2016). The 4 Ps work together to develop prescription orders from physicians and make sure that the product reaches consumers, allowing a company to achieve the required amount of sales in the targeted audience (Ahmed et al., 2014). The principal source of earnings for PCs is prescription drug marketing. Pharmaceutical businesses frequently use a variety of marketing methods to enhance medicine sales. Most drug companies spend a lot of money and time on advertising in the hopes that doctors would prescribe their products (Al-Haddad et al., 2014). Irrespective of the standards of pharmaceutical medical practices and the WHO ethical guidelines governing the promotion of prescription medications, still there exists some morally reprehensible commercial practices that affect prescribers' decisions by providing not-so-neutral information and being more concerned with increasing the company's profits (Shaw & Whitney, 2016). According to Hailu et al. (2021), drugs are vital elements of the healthcare system and contribute a critical role in saving lives. When used properly, they can help alleviate patients' symptoms. Doctors' first priority is to treat patients in a logical manner. If doctors and pharmaceutical companies are going to work together, it's important that they do it in an ethical manner. Hailu et al. (2021) investigated the perceived effect of pharmaceutical marketing mix methods on hospital physicians' prescription practices. The results showed that promotion, one of the pharmaceutical companies' marketing strategies for doctors, has been discovered to affect prescription behavior. Corporate continuing medical education, information from medical representatives, frequent visits by MRs, and promotional medicine pamphlets are all part of this campaign.

The deployment of MRs in the market is the most popular marketing strategy used by PCs. In the marketing of prescription medicines, MRs often provide knowledge to prescribers and doctors about medication, including dosage, frequency of use, therapeutic applications, and potential adverse effects for the drugs they are prescribed. In addition, they provide details on the distribution and application of their product. As a brand reminder, medical representatives also bestow the price of their goods and promotional materials (Workneh et al., 2016). Despite the fact Sales people represent the most expensive and widely used of the several marketing strategies employed by the pharmaceutical industry to spread the word among doctors and other medical professionals about the benefits of their drugs. Conflicts of interest, which may lead to over-prescribing a product or company's products, has been identified as one of the most serious consequences of interactions between doctors and pharmaceutical salesmen. When this happens, it can put patients' health and bank accounts at risk. In addition, doctors may not realize how much pharmaceutical advertising influences their own prescribing behaviors, but they can certainly see when their colleagues prescribe drugs for the wrong reasons. (Ibrahim & Bélanger, 2015).

The companies that are into pharmaceuticals will have to develop digitalization in the future along with improved connectivity, evaluation of the data and collaboration. The digital approach would soon become the basis for the entire pharmaceutical industry if they are able to and have the

strategies for marketing and establishing them. The health care team and the patient will be providing a platform for communication for the brand. The conventional method of one-way association in the healthcare system would change to a two-way association with the help of digital technology in the pharmaceutical industry (Parekh et al., 2016). A study was conducted with aim two and has the entire model that would provide the factors which lead to the purchase of a product in the pharmaceutical industry and their association (Ting et al., 2019). The findings were able to show that the decision to purchase, especially the evaluation of the features of the product was found to be an important determinant for its use and purchase. The moderation of impact was done by personal factors and facilitating conditions. Another research was conducted with an aim to recognize the most common and effective sales campaign used by pharmaceutical corporations to influence a consumer's decision to shop at a neighborhood pharmacy (Ben, 2019). The research's findings were able to demonstrate that the technique for consumer promotion has the most impact on the decisions consumers make regarding their purchases, whilst merchandising was shown to be the most typical technique for sales promotion at the neighborhood pharmacy. The promotion of trade was seen to be the most impactful and prevalent technique by the sales representatives and the pharmacist. Moreover, the findings of the research were able to show that the tools that had the highest influence were sales promotion on the purchasing decision of a consumer but the design of the showcase and its arrangement; the buy 1 and get 2 free for the promotion among the consumer; and the provider of the gift for Trade Promotion. The two were recognized as the most important by all the respondents. The samples for free for the products that were promoted proved to be the most important tool, but at the same time, it was seen to have a lesser effect.

According to Smolynets et al. (2016), pharmaceutical companies have a clear understanding of what degree of market demand they want. In actuality, demand does not always correspond to the projected level. There are eight distinct conditions that describe the current status of demand. The availability of negative demand for medications and medical services is linked to conversational marketing. Stimulating marketing is concerned with a lack of demand, which occurs when a prospective market does not indicate (or almost does not reveal) interest in a certain offering. Remarketing refers to a reduction in demand for medications or medical services over a set period of time. Supportive marketing is tied to satisfying demand availability, whereas sync marketing or irregular marketing is connected to uneven demand. Demarketing is linked to a demand excess, which means that the demand for drugs is greater than the supply. Irrational demand drives counteractive marketing, which is detrimental to one's health, as well as the welfare of consumers and society. The marketing that is developing is linked to the need for medications that are in the early stages of development. Analyzing these events aids in estimating market prospects and determining an appealing marketing activity path in which the company may get a competitive edge.

Direct-to-physician channels, such detailed direct advertising in medical journals, have always been the pharmaceutical industry's go-to for reaching doctors and persuading them to buy medical decision-making model. Empowerment patients is a new medical decision-making idea that states individuals are more involved in treatment selection by implication, the develop practices and pharmaceutical marketing. Relationship marketing has at least two distinct meanings in the healthcare sector (1) physician-led initiatives to strengthen patient relationships, and (2) pharmaceutical-led initiatives to promote patient or physician relationships (Camacho, 2014). While

direct marketing methods may be simpler to notice, Wilcock (2020) stated that it is as crucial to be able to distinguish the indirect processes used to promote and boost the uptake of medications. Marketing tactics for medications may not be completely owned and supplied by the pharmaceutical business. Large networks that gather, develop, control, and transmit information let pharmaceutical corporations maintain their enormous influence. Funded research, publishing in medical journals, the establishment of key opinion leaders, and information distribution through sales agents and patient support organizations are all examples of indirect strategies. Nandy & Pal (2015) highlighted that according to a pharmaceuticals sector research study by equity master, the Indian medicines industry is the third biggest in terms of volume and the thirteenth-largest in terms of value. Better pharma marketing will make both physicians and marketers delighted in terms of updating product knowledge and sales, as every product, old or new, requires substantial promotion. Companies must adapt their marketing and sales activities significantly and properly when their focus shifts to a variety of speciality treatments. Drug promotion has a significant impact on prescription behaviour, and pharmaceutical corporations are employing a variety of strategies to persuade prescribers. Since firms only have a limited amount of time with doctors, it is really critical to stay focused and deliver exactly what is needed. According to Hailu et al. (2021), the pharmaceutical industry relies heavily on sales of prescription drugs, hence these businesses invest much in advertising to convince doctors to prescribe their products. Because of rising pharmaceutical costs and widespread medication safety issues, the public's interest in physician-led outreach initiatives has grown. Thus, the pharmaceutical sector must create marketing mix tactics that comply with regulations. To accomplish so, it is necessary to recognize and analyze the several forms of advertising and promotion used by businesses.

Physician prescription decision

The pharmaceutical industry has developed a lot during the last three decades. earlier in the pharmaceutical industry there were very limited companies who were selling a certain handful of medicines, today there are a lot of companies who are able to sell products in millions to the physician which developing more competition in the chamber of the physicians and putting more pressure on the companies to become more innovator in the strategies to sell their products (Vyas & Panesar, 2019). More and more filing of patents by pharmaceutical companies, more multinational players entering the pharmaceutical industry, and adoption of a better model for sales like management of channel, KAM, and CSO have been making increase in intensity of competition in the pharmaceutical market. Different Indian pharmaceutical firms market the same active ingredient molecules under different brand names. There are various marketing methods that pharmaceutical companies use to push the physician to describe their brand, like gifts, sponsoring their travels, giving samples, etc. A lot of countries have been trying to decrease the influence of providing incentives on the behaviour of prescriptions. Researchers in India want to learn how pharmaceutical company advertising influences doctors' prescription habits (Narendran & Narendranathan, 2013). Good connection with the doctor, meetings during lunch, company reputation, the draught quality, and the name of the brand had notable influence over the prescription behaviour while emailing them directly, genre advertisements and giving pads for letter and another reminder of the brand was seen to be less influential. The basic techniques of providing samples were not considered to be the most effective method for influencing prescription behaviour. The quality of the product and the good brand name of the company was still considered to be important factor in impacting

prescription behaviour. The choice of a brand by a physician is impacted by the marketing done by the pharmaceutical company. It was found that the strategies involved in public relations are more expensive than they are more effective. In short, the marketing done by pharmaceutical companies impacts the physicians' choice of a brand. The pharmaceutical industry in India seems to be an industry that is growing quickly in the country. The association between the marketing technique used by pharmaceutical companies and prescription behaviour is not very steady. The Pharmaceutical market in India has been growing at a fast rate and the competition for a single product is also very high when it is marketed by different companies under the same name or brand. The pharmaceutical companies usually consider different strategies to insurance the doctors so that they can promote their products. Search strategies of impact the prescription behaviour of the physician, This may have varying effects on urban and rural medical professionals. A study examined how pharmaceutical marketing strategies affect doctors' prescribing patterns (Gupta et al., 2018). Different factors had influenced people to get prescriptions for doctors in urban areas as well as in rural areas. all the factors like product cost, seminars, the reputation of the company, brochures, catalogues, audiovisual materials, samples and gifts, and launch parties had a similar impact other than emailing where the doctors from urban areas were more influenced. Research conducted in a study aims to recognize the importance of the equity of brand on the prescription behaviour of doctors (Srivastava & Bodkhe, 2020). The study showed that brand equity influences Indian doctors' prescriptions. many doctors in India should be loyal to the branded generics because of their easy availability, lower cost, and the results of the drug being satisfactory. It was found that the doctors were going to end up with promotional literature, including the result of a trial that provides an opportunity to look back at the old strategies of marketing and tap the segments that are still untouched. It would be very cost-efficient if the healthcare industry and the companies in pharmacy reduce expenditure on the strategies for marketing that would not work today. Research was held with the purpose of understanding the effect of actresses of pharmaceutical marketing on the recommendations by the physician for providing certain medicines in Jordan (Albarq & Suleiman, 2021). From the observations of the study, it was concluded that the practices of pharmaceutical marketing had a significant influence on formality relating to the prescription behaviour of the physician. The paper was able to analyze how effective the different promotional tools used by the companies to achieve their target. After going through the entire report it was found that public relation was the most important strategy, whereas the strategies that use advertisement techniques like print media was going to be not much influential. The research was conducted to focus on the promotional tools of marketing that are utilized by the companies in the pharmaceutical industry in India and the response of the doctors to the marketing strategies for their prescription behaviour (Narayan, Mohanty & Kumar, 2020). The selection of the samples for the research was done using a simple random sampling method. The detailed analysis conducted in the study was able to show that more than 60% of the doctors accepted that promotional strategies used by the pharmaceutical companies had a certain impact on prescription behaviour. Moreover, other than the forms of marketing and the promotion of drugs used by pharmaceutical companies, the economic situation of a patient was seen to be the most important factor when prescribing certain medications. The results of the study also revealed a notable difference in the prescription provided by different doctors on the requirement of presentation of drugs as a tool for marketing promotion and various advantages for attending the presentations of drugs and the launch of their product. Negash & Adamu (2017) were able to observe that the promotion of sales and selling personality has a strong impact on the prescription behaviour of the doctors when compared to various other

promotional tools that are used by the pharmaceutical companies in Ethiopia. The result of another study was able to find that strategies of marketing and pharmaceutical companies are associated with the prescribing behaviour of the doctor (Khazzaka, 2019). Through study, the authors were able to show that many of the tools for promoting the world most of the time provide motivation to the doctors to prescribe the drugs that were promoted. A lot of the participants who were doctors in the study agreed that most of the time they were motivated by the visitations of medical representatives and the samples of drugs while the calls regarding sales made by the pharmaceutical companies were seen to be less influential. On the other hand, the acceptance of the gift was found to be ethical practice by the physicians. The results also highlighted that the samples for free were utilized for helping the patients by the doctors.

Further in another study, the researchers were able to show that different activities of promotion like details provided by the representatives of the pharmaceutical company, a continuation of education in the medical field, medical camps, and customer relationship management had a major influence on prescription behaviour of the physician (Krunal et al., 2021). Customer relationship management has a very important role to play such as promotions, details provided by the representatives, medical camps, and conditions in the education of medicine, which was seen to have a notable impact on the choices of prescription for the doctors. A study was conducted on him to understand the impact of marketing and the satisfaction of the physician (Harahap, & Surip). The factors that good satisfaction like the quality of the product, price of the product with benefits, promotion of sales, and availability of the drug. The factors for the satisfaction of a physician like the performance of the drug and expectations that are acceptable have impacted the prescription decisions. Product satisfaction was unaffected by the trial. The study shows the Expectations of the doctors regarding the drug are influenced by different aspects like availability of the drug, promotion, and price. The variables of distribution, promotion, and price have a notable impact on the satisfaction variable of a doctor. the satisfaction variable of a doctor has a notable influence on the decision when prescribing medicine. The findings of another study were able to show the relationship between variables like material for promotion, proper checking on a timely basis, activities that are personalized and conferences and the behaviour of prescription of the doctor that was mediated by a strong personal relationship between medical representatives and brand image companies in changing the prescription behaviour of the doctors (Ahmed et al., 2016).

Lastly, the Table 1. Presented below summarize the varied marketing strategies and techniques utilized by pharmaceutical companies.

Medical representatives' employment	Medical representatives' knowledge	Promotional pricing	Patient Education Program
Continuing Medical Education	Corporate image impact	Digital marketing	Medical camps
Literature and reminders	Customer Relationship Management	Endorsements	Gifts and Incentives

Table 1: Pharmaceutical promotional methods and tools

Research Gap

The cost of pharmaceutical research and development is lower than the cost of promotion and marketing. Based on the review of previous research, it is found that a variety of factors as well as strategies (as listed above) impact doctors' prescription behaviour, the most well-known of which is visits by MRs representing different pharmaceutical companies. With a few exceptions, the majority of the studies focus on doctor-pharmaceutical company interactions and the influence of MRs in particular. However, a much more thorough study is needed to emphasize the complementing impact of other promotional techniques when MRs contact physicians. There are varied aspects that affect the interactions between MRs and physicians which include training and experience of MRs, the way of handling conversations with physicians in a short time, utilizing digital technologies during interactions, and many more. All of these are micro aspects of pharmaceutical marketing techniques that influence the prescribing behaviour of doctors. These aspects are discussed separately in context to different objectives in the literature, however, the cumulative and combined effect of these micro-aspects needs to be addressed while analyzing the actual effect of applied pharmaceutical marketing techniques on doctors' decisions while prescribing medicines. This leads to a gap in the literature in this research area.

Conclusion

Physicians are widely believed to prescribe a limited number of medications within a therapeutic class. This is frequently linked to two main causes. The first is clinical experience, in which physicians acquire expertise with medicine and subsequently prescribe it to a large number of their other patients. Pharmaceutical marketing is the second aspect to consider. Due to a number of variables, the Indian pharmaceutical sector is predicted to grow rapidly in the next years. When it comes to the healthcare and pharmaceutical businesses, a convoluted set of decision-makers determines the specifics of the transactions (prescriptions) for whom the direct customer (doctors) is responsible. According to research (Bala & Sharma, 2019), MRs are an important part of pharmaceutical marketing that contacts doctors in order to influence prescription trends in their favour. Another study (Hailu et al., 2021) indicated that promotion, as one of the pharmaceutical corporations' marketing tactics for physicians in the format of company-sponsored continuing medical education, data from medical records, regular MR visits, and details from advertising drug brochures, all affect prescription behaviour. Furthermore, more than 60% of doctors agreed that pharmaceutical corporations' advertising techniques influenced prescribing behaviour in some way (Narayan et al., 2020). Therefore, even though MRs are the most utilized and effective means of pharmaceutical marketing, the contributing role of other existing and merging promotional strategies cannot be ignored. The cumulative and combined effects of all applicable approaches' must be considered. To validate the level of influence and analyze interrelationships with other factors influencing doctors' prescription patterns, more research with an empirical focus on the impact of these combined factors is needed.

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