

# EFFECT OF PROMOTIONAL TOOLS OF PHARMACEUTICAL COMPANIES ON DOCTORS PRESCRIBING BEHAVIOUR

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**Abstracts:** It is advocated that Doctors are the strategic customers for pharmaceutical industry. Doctors are actually the ultimate decision holder of which brand should be prescribed to their patients. The involvement of Doctors' as key decision makers is the reason that they are the focus of most promotional efforts of pharmaceutical companies. Thus, influencing the Doctors is a key to the pharmaceutical sales, and the pharmaceutical companies are spending a lot of money on marketing their products to the Doctors. The aim of this paper is to investigate the key promotional tool and its effect Doctors prescribing behavior with reference to pharmaceutical industry. The questionnaire was designed on the basis of literature finding and inputs from practicing manager of the pharmaceutical industry. The correlation and regression analysis, t-test has been used to study the effect of promotional tools. The implication of this study is pertinent for practicing managers of pharmaceutical companies in designing the promotional strategies for their brands to persuade the Doctors.

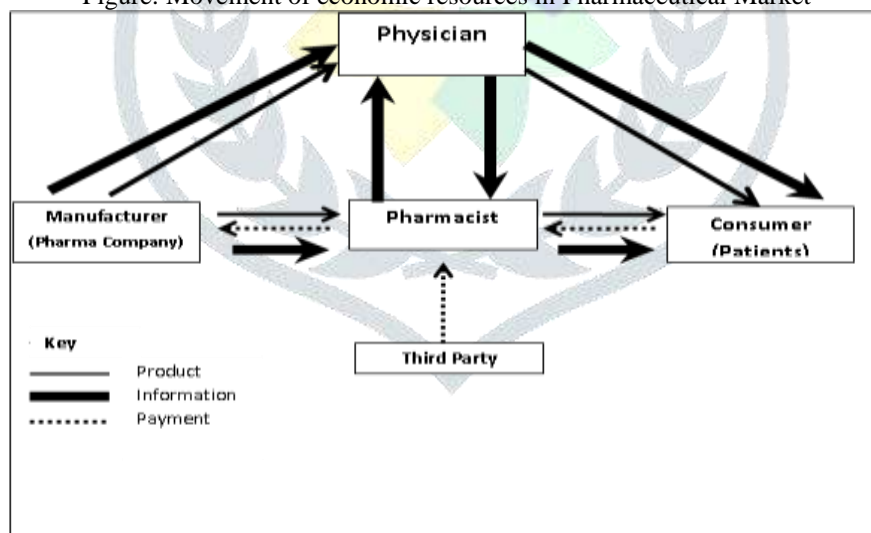
**Keywords:** Pharmaceutical Industry, Promotion mix, Doctors prescribing behavior. Pharmaceutical brand

## 1. Introduction:

Pharmaceutical marketing is unique as the decision making of buying the medicine lies in the hand of intermediate Doctors rather than final consumer (patient). Thus pharmaceutical companies try to influence the Doctors rather than final consumer (Patient).

The exchange process of prescriptions is unique from most consumer products. The prescription drug demand curve is derived by the Doctors rather than the actual user of the products. The product is selected is based on the disease condition of the patient. The prescriber considers the effectiveness and safety profile of the product. Because prescriber has no financial stake in the purchase, their decision is often not sensitive to price. The prescription is then purchased at pharmacy when it is either paid in cash by third party agent. The complexity of the pharmaceutical market is depicted in below mentioned figure, which describes the flow of information, product and money between the manufacturer, physician, pharmacist, third party and the consumer (patient).

Figure: Movement of economic resources in Pharmaceutical Market



Source: Authors Compilation

## II. Literature Review:

Pharmaceutical companies try to influence prescription pattern of Doctors in favor of their brands by offering various kinds of promotional inputs like samples, gifts and sponsorships etc. (Arora and Taneja, 2006). Usual marketing practices followed by most of the large and mid-sized companies include valuable gifts, arranging foreign trips with family and complimentary tickets and memberships for social activities to Doctors (Jayakumar, 2008). Interaction of the medical professional with the pharmaceutical industry starts as early as in medical school. The Doctors and sales representative meet about 4 times a month (Ziegler et al, 1995). In Canada, on an average 6 gifts are received per year by Doctors with average value of \$60. Eighty per cent of residents take pharmaceutical industry paid meals about 14 times in a year in Canada (Hodges, 1995). The expenses for travel, stay and even local sight-seeing are paid directly to the tour operator by the pharmaceutical company or travel ticket and hotel accommodation are booked by the company in the name of the Doctors. The expenses of not only the Doctors but also of their spouse and family are borne by the pharmaceutical companies (Mehta, 2000).

The policies adopted by the pharmaceutical firms may include extravagant marketing practices like offering vacation/travel expenses; gifts of substantial value; lavish meals and entertainment; offering cash/ commission for prescribing a particular brand/drug; offering money for drug trial; samples and promotional material; and CME (continuous medical education) funding and honoraria (Wazana, 2000). One study

involving about one hundred Doctors s, conducted to determine the roles of various information sources in influencing the prescribing behaviour of Doctors s, revealed that promotional information by pharmaceutical companies (commercial sources) plays a greater role in the decision process of the Doctors s to prescribe the drugs than even scientific sources of the information (Chaganti, 2005). Social scientists describe and the pharmaceutical industry follows the, "norm of reciprocity" i.e., the obligation to help those who have helped you, as one of the fundamental guiding principle of human interactions. It is not surprising, therefore, that pharmaceutical companies rely on this principle of human nature by giving gifts to Doctors s in hope that they will prescribe their firm's product in return (Verma, 2004).

**III. Methodology:**

The thrust of this research is to study the effect of promotional activity on the Doctors prescribing with reference to pharmaceutical Industry. Survey via personal interview with structured questionnaire was used to explore the information. The questionnaire was designed on the basis of literature finding and inputs from practicing manager of the pharmaceutical industry. The sample size was 25 General Practitioners practicing in the vicinity of Pune city. As there is currently no information suggesting any geographical or other demographic divergences in relation to Doctors’s opinion, the respondents selected are all situated in the periphery of Pune City.

**IV Data collection and Framework of Analysis**

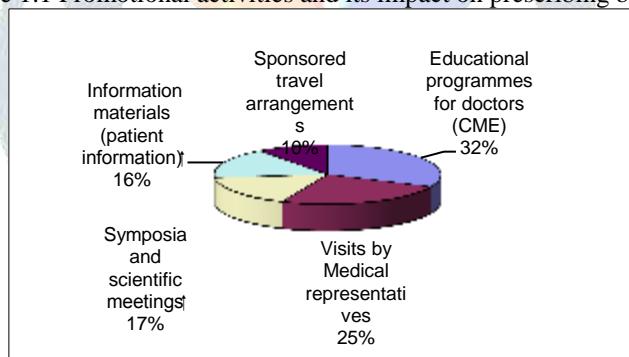
The initial contact with the Doctors was done by doing direct cold calling to the clinics or hospitals. The questionnaire was filled up at the Doctors clinics in order to ensure a relaxed atmosphere and to limit the disruption of their time schedule also to extract qualitative and quantitative information. The secondary data is collected through CMIE, MIMS, Drug Index, Pharmabiz portal; Express Pharma pulse etc. to build up the foundation for the study. The underline objective and associated hypothesis is examined by preparing response sheet and using statistical techniques includes graphical analysis, measures of central tendency, measures of dispersion, correlation and regression analysis, t-test and chi-square test for independence and ultimately verified the stated proposition and concluded the outcome of the research study.

Table 1.1 Promotional activities and its impact on prescribing behavior

Sr.No.	Details	Frequency	Percentage	Cum. Freq
1	Educational programmes for Doctors s (CME)	477	31.80%	31.80%
2	Visits by Medical representatives	371	24.73%	56.53%
3	Symposia and scientific meetings	250	16.67%	73.20%
4	Information materials for the patient (Awareness posters, leaflets of the diseases)	248	16.53%	89.73%
5	Advertisements & mailing	154	10.27%	100.00%

Source: Survey

Figure 1.1 Promotional activities and its impact on prescribing behavior



Source: Survey

Here the major three factors viz. Educational programmes for Doctors (CME), Visits by Medical representatives and Symposia and scientific meetings are considered for analysis the above hypothesis. The combined proportion of the factors is 0.73.

Table 1.3 Administration of Test

Sr.No.	T calculated	Test Statistics	p value	Decision
1	5.18	1.98	0.0000	Reject H0

Significance level:  $\alpha = 0.05$

Since p value is less than  $\alpha$  ( $\alpha = 0.05$ ) hence we reject the null hypothesis, i.e.  $H_0$ : *The Physician’s prescribing behaviour is not affected by various marketing activities of Pharmaceutical companies* is rejected, it means that less than or equal to 50% physician’s prescribing behaviour is affected by various marketing activities i.e.  $p=0.5$ . In other words, we accept the alternative hypothesis, i.e.  $H_1$ : *The Physician’s prescribing behaviour is affected by various marketing activities of Pharmaceutical companies* it means that more than 50% physician’s prescribing behaviour is affected by various marketing activities i.e.  $p>0.5$

Hence it is proved that, there is effect of various promotional activities on the Doctors prescribing behaviour.

**V. Conclusion**

The marketing strategies are being focused towards them to draw the attention of Doctors for prescribing the pharmaceutical brands. The present study examines the impact of promotional tools on Doctors s' prescribing behavior. The analysis clearly reveals that doctors perceive

different types of promotional tools under five Educational programmes for Doctors s (CME), Visits by Medical representatives, Symposia and scientific meetings, Information materials for the patient (Awareness posters, leaflets of the diseases) and Advertisements & mailing.

It was found that Educational programmes for Doctors (CME) has highest frequency with 31.80 and visit of Medical Representative has 24.73. The Educational programmes for Doctors (CME) to be the third most important factor. The Information materials for the patient (Awareness posters, leaflets of the diseases) promotional tools are the next most important factor. Thus it can be concluded that the marketers have to understand the real needs, beliefs and attitudes of customers towards products and services. Doctors being the most important players in pharmaceutical sales, write the prescriptions that determine which drugs (brands) will be used by the patient. It is suggested to the marketing practitioners that should adopt flexibility policies for promoting the pharmaceuticals to different category of Doctors. Findings of the study can help the marketing managers of pharmaceutical companies in designing their promotional strategies especially for Doctors.

#### VI. Limitations and scope for future research:

This study was undertaken on one specialization of doctors i.e. Doctors. The findings of this study can only be generalized for understanding the impact of promotional tools on Doctors prescribing behaviour. The study can be extended to the national survey with increase in sample size. Further study may be conducted among general practitioners and comparison of different medical specialty doctors. .

#### References

- [1] Arora, Usha, and Taneja, Girish (2006), "An analytical study of doctors behaviour towards marketing of pharmaceutical products", *Indian Journal of Marketing*, Vol. 36 (11), pp. 10-13
- [2] Chris, W. et al., (2003), "Characteristics of general practitioners who frequently see drug industry representatives: national cross sectional study", Vol. 326, pp. 1178-1179.
- [3] Hodges, B, (1995), "Interactions with pharmaceutical industry", *Can Med Assoc J*, Vol. 153, pp. 553-559.
- [4] Jayakumar, P.B. (2008), "Drug firms may stop freebies to doctors", *Business standard*, 22nd July, pp 4.
- [5] Kotler P et al., (1997), *Principles of Marketing*, PHI, New Delhi.
- [6] Madhavan, M. M. et al., (1997), "The gift relationship between pharmaceutical companies and doctors: an exploratory survey of doctors", *Journal of Clinical Pharmacy and Therapeutics*, Vol. 22 (3), pp. 207-218.
- [7] Mehta, P.N. (2000), "Drug makers and continuing medical education", *Indian Pediatrics*, Vol. 37, pp. 626-630.
- [8] Nargundkar, Rajendra (2005), *Factor Analysis in Marketing Research Text and Cases*, Tata McGraw Hill, New Delhi.
- [9] Narendran, R. & Narendranathan, M. (2013). Influence of pharmaceutical marketing on prescription practices of Doctors. *The Journal of the Indian Medical Association*, 111 (1), 47-50
- [10] Orłowski, J P, and Wateska, L (1992), "The effects of pharmaceutical firm enticement on doctors prescribing patterns", *Chest*, Vol. 102, pp. 270-273.
- [11] Ramaswamy, V.S and Namakumari, S. (2007), *Marketing Management*, MacMillan, New Delhi.
- [12] Randell, T (1991), "Ethics of receiving gift considered", *Journal of American Medical Association*, Vol. 265, pp. 442-443.
- [13] Taneja, Girish, Influence of Promotional Tools Offered by Pharmaceutical Industry on Doctors Prescribing Behavior (December 1, 2007). Available at SSRN: <http://ssrn.com/abstract=2049747> or <http://dx.doi.org/10.2139/ssrn.2049747>
- [14] Verma, S.K. (2004), "Physician-Pharmaceutical Industry Interaction: Changing Dimensions and Ethics", *Indian Pediatrics*, Vol. 41, pp. 29-36.
- [15] Wazana, A. (2000), "Doctors and the pharmaceutical industry is a gift ever just a gift?" *Journal of American Medical Association*, Vol. 283, pp. 373-380.
- [16] Ziegler, M.G, Lew, P, and Singer, B.C. (1995), "The accuracy of drug information from pharmaceutical sales representatives", *Journal of American Medical Association*, Vol. 273, pp. 1996-1998.