Psychological Mapping of Medical Practitioner for Brand Association

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ABSTRACT

The pharmaceutical industry has been a growing market. Despite recessions in the economy this sector continues to grow both because of the intrinsic nature as well as government policies of liberalisation. As competition has already ushered in, companies need to understand the dynamics of the Indian market. This study is an endeavour to understand the marketing initiatives that would be more effective in increasing the prescribing of the concerned medicines. The traditional marketing interventions need to be revisited and modified for greater efficacy. The study has been done in Delhi/NCR and is an honest attempt to understand the promotional mix elements for pharmaceutical industry.

CURRENT INDIAN PHARMACEUTICAL MARKET

The Indian pharmaceutical market (IPM) accounts for approx. 1.4% of the global pharmaceutical industry in value terms and 10% in the volume terms. The IPM was valued at Rs 860 billion for the year ending March 2015. The growth in 2015 stood at 12.9%. Owing to robust historical growth and future prospects, many MNC companies have active presence in the Indian pharma space. The IPM is highly fragmented with about 24,000 players (330 in the organised sector). The top 10 companies including domestic and MNC companies make up for more than a third of the market. The market is dominated majorly by branded generics, which constitutes nearly 70% to 80% of market (Pharmaceuticals Sector Analysis Report, Feb 03, 2016).

The IPM size is expected to grow at 9–12% CAGR between 2013 and 2018. The growth in Indian domestic market will be boosted by increasing consumer spending, rapid urbanization, increasing healthcare insurance, drugs and so on. On the global front, the IPM is ranked 13th in terms of value. Owing to robust growth, its ranking is expected to improve to 11th position by 2018(Pharmaceuticals Sector Analysis Report, Feb 03, 2016).

Very few studies have been conducted to find out the influence of promotional tools on physicians prescribing behaviour. Researchers have reviewed major studies conducted in this area. Studies by Taneja et al., 2009 have found that promotional tools having personal touch are perceived to be better as compared to common promotional tools. In the United States pharmaceutical organizations spent more than $57 billion on marketing, in 2004, approximately twice their expenditure on R&D (Gagnon and Lexchin, 2008).

The doctor plays an important role in deciding which pharmaceutical brand is suitable for patient’s treatment, so the main focus of pharmaceutical industry is to influence the decision making process of physicians (Peters et al., 2009). The researchers have observed that physicians have two types of medicines; evidence based and marketing influenced medicines, and concluded that evidence based medicine is a noble idea, while marketing based medicine is the current reality (Spielmans and Parry, 2010). A lot of research is trying to analyse and to understand the factors which influence physician prescribing decisions and practice (Theodorou et al., 2009). The factors of influence on the prescription behavior which were identified in the study (Girdharwal and Singh, 2007) were assessed by the physicians according to the importance given to each one on a scale from 1 to 10. On the first positions there were the factors quality of the products, the price of the products and respectively their availability. remaining factors in sequence were Image of the company, Regular visits of the representatives of the producing companies, Research in the molecular domain, the specialty literature/journals, the personality of the medical representatives, sponsorships for participating in conferences, new combinations, Medical educational programs, presentation way (package), obtained incentives, personally received gifts, samples of the products, free campaigns for the identification of illnesses and existence of the websites of the medicine producers (Girdharwal and Singh, 2007).

RESEARCH METHODOLOGY

A survey was carried out in order to investigate the prescribing attitudes of physicians in Delhi/NCR and in the present paper the main survey results have been presented. The paper outlines in a comparative and detailed way the main factors influencing the decision making and the drug prescription choices of physicians. More specifically, it reveals the criteria which justify prescription choice, the sources of physician information, the attitudes towards generic or new innovative drugs, the importance of the drug cost in the decision, etc. This information can help policy makers to identify the measures needed to improve the effectiveness of health policy and
consequently it can contribute towards a greater economic and clinical efficiency and effectiveness in the regions under consideration.

The study will help policy makers to quantify and apply the findings of the project to achieve economic leverage for their product and to accordingly establish their brand image.

**OBJECTIVE OF THE STUDY**

The primary objective of the study is:
1. To determine the cause of orientation of intermediate customer i.e. medical practitioner in prescribing a particular brand

The secondary objectives are:
1. To study the psychological mapping of the medical practitioner
   - This objective would seek to evaluate the psychological orientation of samples in prescribing a specific brand, too find how they are influenced towards the brand.
2. To determine the prescribing pattern towards a specific brand
   - This objective is far more exploratory and this will help to discover what appeals to the sample taken for prescribing the particular brand.

**Data Collection**

A questionnaire was developed by researchers, specifically for the purpose of the study. This was then administered to:
- Sample size: 60, physicians (MD, MS, DGO)
  - Study Area: Delhi and NCR
  - Stratified by: sex, age, experience, specialty and type of organisational set-up (government or private)

The physicians who participated in the pilot study made significant comments towards the improvement of the instrument and all of their recommendations were taken into consideration and were incorporated in the final conclusion.

The random, stratified sampling technique was used to draw a sample, on the basis of physician geographical region, specialty, experience and organisational set up in which the doctor is working.

Excluded from the sample were physicians who were not authorized to prescribe, either because they were still interns or because they belonged to a specialty that is not permitted to prescribe (radiology, nuclear medicine, microbiology).

**LIMITATIONS**

Gives a sample specific view, findings cannot be generalised as number of sample are less as compared to the actual presence.

1. Depth interviews might be required to find out the underlying motives as study might be misleading.

**Findings and Interpretation**

The findings have been clubbed under the following heads:

**Influential factors**

As mentioned earlier, the first part of the questionnaire was intended to investigate the criteria which physicians take into consideration when making prescribing decisions and their sources of information regarding advances in pharmaceuticals.

**Prescribing new drugs**

The study gives information regarding attitudes in relation to new drugs. It was seen that a majority of physicians believe that a higher price does not necessarily imply better patient outcomes. There are also differences in relation to the perceptions of new drug effectiveness. Some physicians believe that new drugs are more effective. Finally, regarding the sources of information about new product launches, these mainly include medical journals, congresses and sales representatives and secondarily scientific medical societies and the internet.

**Adverse drug reactions and safety**

The study presents information regarding physician attitudes towards safety issues. As indicated, physicians get information about side effects primarily from the National Organisation for Medicines and secondarily from the internet, pharmaceutical companies, colleagues, and the media. Side effects appear to be a major cause of prescription choice modification, as more than 90% of doctors declare that they change their prescription patterns in cases of side effects.

**Information sources**

Physicians derive information to guide and justify their prescription choices mainly from medical journals, medical textbooks, proceedings of medical congresses, sales representatives. Doctors rely more on scientific publications and medical textbooks and less on pharmaceutical representatives.

Fig 1 shows that sample compromised of near about equal number of doctors from government hospital and private practicing/hospital doctors.

*Finding:* It was difficult from the point of view of a researcher to get data from government doctors.

**Fig. 1** Medical prescriber distribution (Govt. Doctor 25; Private Doctor 35).
• Research molecule and scientific literature also has a major impact on prescription orientation.
• Sponsorship, incentives and personal gifts although showed less than some of the factors, companies’ emphasis on regular visit by MR but doctors showed reluctance to the factor.
• Samples are not what doctors look forward to, as it showed the least preferred choice.

Findings: Product quality and availability were the most preferred choice while sponsoring a conference was the least preferred.

In Fig. 2, choices were clubbed:

4 & 5 = Most preferred
2 & 3= Avg. preferred
0 & 1 = Least preferred

<table>
<thead>
<tr>
<th>RATING</th>
<th>FACTORS</th>
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<tbody>
<tr>
<td>9</td>
<td>Efficacy</td>
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<td>8</td>
<td>Availability and product quality</td>
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<td>7</td>
<td>Comp. image and new combination</td>
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<tr>
<td>6</td>
<td>Personal gifts and samples</td>
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<td>5</td>
<td>Website information, regular visits, MEP, disease detection</td>
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<tr>
<td>4.5</td>
<td>Literature</td>
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<tr>
<td>4</td>
<td>Research molecule and price</td>
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<td>3</td>
<td>Incentive</td>
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<td>2.5</td>
<td>Personality</td>
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<tr>
<td>2</td>
<td>Sponsorship for conference and packaging</td>
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</table>

From the table of Fig. 1, it could be concluded that while prescribing a brand its efficacy, product quality, availability are major choice factors.

Fig. 2 Preference of doctors while choosing a brand (total doctors surveyed 60).

Fig. 3 Graph showing different choice factors and their influence in private and government setting.
No. of private hospital/clinics – 6; No. of govt. hospital/clinics – 4.

Factors for prescribing the medicines in govt. hospital

1. Product availability (96%)
2. Efficacies (94%)
3. Product quality (89%)
4. Price of the drugs (90%)
5. Regular visit (15%)
6. Sponsor conference and incentives (69%)
7. Personal gifts (63%)
8. Company image (49%)
9. MEP (48%)
10. New combinations (38%)
11. Disease detection camps (31%)
12. Packaging and samples (21%)
13. Website information (15%)
14. Research molecule (54%)
15. Samples (17%)

Factors for prescribing the medicines in private hospital

1. Product quality and efficacy (97%)
2. Availability of drugs (92%)
3. Research molecule (88%)
4. Regular visit (36%)
5. Company image (77%)
6. Literatures (76%)
7. Price (65%)
8. Disease detection camp (56%)
9. New combinations (53%)
10. Personal gifts (42%)
11. Packaging (39%)
12. MEP (36%)
13. Website Information (33%)
14. Sponsor conference and personality (32%)
15. Samples (17%)
Findings

- The data from Fig. 3 and its findings indicates that doctors in government hospital emphasis more on product availability whereas private hospitals doctors emphasis more on product quality.
- Most factors showed similar response but there was difference in various factors as well:
  1. Private doctors are less inclined towards Incentives and freebies as compared to government doctors who are more open to giving response to incentives and freebies.
  2. Government doctors showed less net savvy as were unaware of the part of website information.
  3. Regular visits were almost double when private and government doctor’s response were evaluated.
  4. Government doctors less likely to start with new combination as compared to private doctors.
  5. Price is less effecting factors for private doctors as compared to the government (might be because of the segment they cater).
  6. Education programmes are not well accepted by government doctors.
- All these factors put a light on the fact that the doctors in government hospital focus on that there should be no scarcity of product in hospital and it should be in affordable prices whereas in private hospital more emphasis on product competencies and company’s image.

The table of Fig. 4 indicates that before prescribing the medicines the factors considered for influence are efficacy, product price availability and price the new research molecule. It also gives indication that freebies are part of healthcare as if sponsorship, Incentives and personal gifts are clubbed together gives out a good chunk of positive response.
The preference of doctors on the basis of experience is also mainly on the product availability, its price new research molecules and its combination with efficacy. Important thing is that with experience of 25 years and more focus on the product quality and its efficacy and with experience of 20 and 10 years besides also give preference to company image. Fig. 5 shows that the doctors have greater inclination for prescribing medicines on the basis of effectiveness of products with all its features. It gives out the following important indications:

- The young doctors are more technology savvy, and more inclined towards new researches.
- The middle age doctors are more inclined towards freebies and incentives as compared to other categories.
- Price and company image are important factors for young and middle age doctors whereas it is less relevant for older doctors.
- Packaging and personality of MR plays a role in choice of young doctors but less likely to effect older doctors.

**CONCLUSION**

As per all the findings it put a light on the real facts which attract the doctors for prescribing the medicine are mainly product availability, its efficacy, price, product availability, new research molecules and new combination as the findings done on the basis of doctors in government and private hospitals which give an enlightening view that private doctors prescribed the drugs on the basis of product efficacy, quality, new research molecules and new combination besides this they not reveal about the personal gifts and incentives which is provided by pharmaceutical companies. On the other hand, the government doctors prescribed on the basis of product availability, its price and its efficacy. The other finding is done on the basis of choice which giving more emphasis on efficacy, another one on the basis of years of experience they also giving more emphasis on the product quality and efficacy.

Since efficacy has been the most preferred factor so companies should come with new molecules and should provide better scientific feedback for better market share. To better the availability, companies should invest more on their logistic and training of supply partners to make the product readily available. Providing reminders is a better way of reinforcing than giving free samples. Knowledge of the medical representative is more important than the personality. The segmentation for targeting doctors for promotional activities should be done on years of experience and the service affiliation (private or government).

**REFERENCES**


WEBSITES
2. http://fampra.oxfordjournals.org/cgi/content/abstract/20/1/61


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ANNEXURE I

SAMPLE QUESTIONNAIRE

1. For how many years you have been practicing?
   i) < 5 years   ii) >5<10 years  iii) More than 10 years
2. How many patients do you get on an average per day?
   i) 10-20     ii) 20-30     iii) More than 30
3. How many Medical representatives do you meet per day?
   i) 1-5     ii) 5-10     iii) More than 10

Please choose the cause for your choice (Please tick your preference).

Q. How do you rate the following factors in your choice of a particular brand?

<table>
<thead>
<tr>
<th>Least preferred</th>
<th>Most Preferred</th>
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<tbody>
<tr>
<td>a) Product Quality</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>b) Availability</td>
<td>0 1 2 3 4 5</td>
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<tr>
<td>c) Price of Product</td>
<td>0 1 2 3 4 5</td>
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<td>d) Company Image</td>
<td>0 1 2 3 4 5</td>
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<td>e) Regular Visits of Medical Representative</td>
<td>0 1 2 3 4 5</td>
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<td>f) Research Molecule</td>
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<td>g) Literature/Updates/Journals</td>
<td>0 1 2 3 4 5</td>
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<tr>
<td>h) Personality of Medical Representative</td>
<td>0 1 2 3 4 5</td>
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<td>i) Sponsorship for conferences</td>
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<td>j) New Combinations</td>
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<td>k) Medical Education Programmes</td>
<td>0 1 2 3 4 5</td>
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<td>l) Packaging</td>
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<tr>
<td>m) Incentives</td>
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<td>n) Personal Gifts</td>
<td>0 1 2 3 4 5</td>
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<td>o) Samples</td>
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<td>p) Free disease detection camps</td>
<td>0 1 2 3 4 5</td>
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<tr>
<td>q) Having molecule information on Websites</td>
<td>0 1 2 3 4 5</td>
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<td>r) Efficacy</td>
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Give ranking on scale given below

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<th>Mostly/Partially/Occasionally/Rarely</th>
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