

PART VI

SYNTHESIS, CONCLUSIONS & RECOMMENDATIONS

6.1 DEMOGRAPHIC VARIABLES EVIDENCE TRUE REPRESENTATIVE SAMPLE

The study of the data generated with regard to the demographic variables of physicians suggests that the sample of physicians taken for this study is a true representative sample of its universe. To illustrate, the practice segment data broadly estimates the proportion of the general practitioners at about 62% and the specialty segment at around 38%. This correlates very well with the ground realities of the population of the physicians in India

6.1.1 Average patient volume per day

An Indian clinician, on an average, examines 27-29 patients per day. Although no Indian statistics on this demographic is available, an American study reported in *Journal of Clinical Pharmacy and Therapeutics* estimates it to be around 23 patients a day.¹ This information was solicited both from the physicians and the medical representatives. The physicians estimated their patient volume per day at 27.16, while the medical representatives estimated it to be 28.86. As shown earlier, there is no statistically significant difference between these values; suggesting that the physicians and the medical representatives are in conformity for this estimate.

6.1.2 Average prescription volume per day

Our study suggests that an Indian physician, on an average, makes out 21 prescriptions per day. This figure favourably compares with the estimate arrived at by Madhavan et al.²

6.2 PRESCRIBER PERCEPTIONS

6.2.1 Cost of medicines

Almost 50% of the Indian clinicians believe that the medicines are moderately costly in our country, while over 34% clinicians believe that they are reasonably priced. Just over 14% physicians consider the medicines in India to be very costly.

6.2.2 Cost of promotion

The Indian physicians are convinced that the largest contributing factor to the cost of medicines is the exorbitant promotional expenditure incurred by the pharmaceutical organizations. Over 71% of the physicians subscribe to this belief. This supports the basic premise on which this study was based, that the expenditure on marketing needs to be rationalized and made more cost effective. This could be achieved by devising and evolving new methods of promotion, which undoubtedly would be technology based in this era of innovative information dissemination techniques.

6.2.3 Sources of information

The prescribers have ranked 'Medical Representatives' as the most important source of information. This finding is in consonance with another study in the Indian context, which reported that 46% of the physicians mentioned them as their prime source of

information.³ The other sources of information ranked in terms of their importance are Medical journal articles, Seminars/conferences, Medical journal advertisements and recommendations from doctor friends/teachers/peers. Despite the fact that the medical representatives advance commercial information, they are adjudged to be the prime information source. This is no less a tribute to these professionals. Medical journal articles have been ranked at number two. Unless they are ghost written for the benefit of pharma promoters, they can be held as 'scientific source of information'. As discussed earlier, contents and deliberations of seminars/conferences, at times, are designed and controlled by the sponsors. If this can be avoided and the deliberations are truly unbiased, this source of information can be held as a 'scientific information source'. Medical journal advertisements, by design and default, are commercial sources of information. The prescribers have fairly discounted the importance of peers and have ranked this source as the least important source.

This finding implies that the pharma marketer should employ these sources in their order of importance and a right mix of these tools would entail information dissemination in a cost effective manner.

6.2.4 Product attributes

Product strategy envisages right mix of product attributes, namely, efficacy, safety, cost and dosage convenience. Product attributes decide the fate of a pharmaceutical product. The physicians in this study have ranked these attributes in order of their perceived importance, as under:

1. Efficacy

2 Safety

3 Cost

4. Dosage convenience

A pharmaceutical product stands to win in the marketplace if it is poised to maximize efficacy and safety, while minimizing the cost and dosage inconvenience.

6.2.5 Brand choice factors

The prescribers and medical representatives were asked to rank a set of brand choice factors. The differences in their rankings are striking and significant. They expound the incongruence between marketers' endeavours and physicians' expectations. While they are unanimous on the first rank, i.e 'authenticated technical information', the medical representatives have assigned more weight to corporate image of a pharmaceutical organization. Their rankings, as summarized hereunder, suggest that unless the pharma marketers align their market spend on brand promotion in line with the perceived importance of these tools by the physicians, they are likely to end up with extravagance.

TABLE 36
RANKING OF BRAND CHOICE FACTORS

Sr. No	Brand choice factor	Rank by prescribers	Rank by MRs
1	Authenticated technical information	1	1
2	Seminars/ conferences/CME programmes	2	3
3	Recommendations from friends/teachers/peers	3	5
4	Corporate image	4	2
5	Gifts from pharma companies	5	4

6.2.6 Promotional materials

Ahmed reported that during 1989, the total quantity of unsolicited promotional materials received by a general practitioner in France amounted to a staggering 160kgs.⁴ The physicians believe that most of the promotional materials received by them from pharmaceutical companies lack sufficient information and important warnings and precautions. What do the Indian clinicians do with the promotional materials received by them? Majority of them (over 66%) have stated that they read at convenience. Medical representatives agree with this observation. Over 67% of them believe that the physicians do read the promotional materials at their convenience. Less than 1% of the physicians have explicitly said that they dump them to wastebasket. More than 5% of the medical representatives believe that the physicians dump them to the wastebasket. May be the physicians are shy of admitting the kind of treatment they mete out to unsolicited promotional materials.

The message for the pharma marketer is that he should design promotional materials with some retention value, which will enthuse the physicians to preserve them for reading and re-reading at convenience. Some utility may be built in the promotional materials to justify its preserving.

6.2.7 Coping with negative feedback

Positive feedback about a drug has a favourable effect on the prescribing behaviour of the physicians, while negative feedback demotivates the physicians from issuing prescriptions. How do the prescribers react on receiving negative feedback about a drug product? Our study suggests that a large majority of the prescribers (above 90%) stop prescribing the drug and around 40% call the medical representative promoting the drug for explanation. This finding lends support to 'the challenge

model of change' proposed by David Armstrong and Hugh Reyburn⁵ (Refer to section 1.5.4) The shift in prescription behaviour is brought about abruptly by negative feedback about a drug product.

The medical representatives believe that physicians reduce number of prescriptions rather than stop prescribing, upon receiving negative feedback about drug products. Our finding suggests that the prescription shift is brought about more abruptly than the medical representatives anticipate.

6.2.8 Medical Representatives volume per day

It is widely believed that on an average 4 to 6 medical representatives call on a physician everyday. Our finding confirms this belief. The median average is 4.05 medical representatives per day.

6.3 MEDICAL REPRESENTATIVES' PERCEPTIONS

6.3.1 Doctor call average

In the developed world there exists one medical representative per 9-11 physicians in practice. In India the situation is quite comparable. Against around 50,000 medical representatives in profession, there are around 540,000 physicians in practice. Our finding that a medical representative on an average calls on 9.77 doctors per day is in line with the industry belief and MRs call setting plan of 10-12 calls per day. Going with the figures, it can be concluded that more often than not the medical representatives follow a monthly cycle of 250-300 calls.

6.3.2 Comfort of interaction with physicians

The interpersonal relationship between physicians and medical representatives cannot always be expected to be very comfortable. The reason is that at the very heart of the relationship between physicians and medical representatives lies a critical contradiction. A medical representative endeavours to maximize his sales, while the physician attempts to protect his patient's interest. Their objectives cannot reconcile; they are diverse by default.

This diversity in professional objectives creates stress in their interpersonal relationship. Our findings suggest that a large majority (over 63%) of the medical representatives consider their interaction with the physicians as 'comfortable'. More than one fourth of the medical representatives have even claimed it to be 'enjoyable', while a very small proportion (less than 7%) have labelled it as 'not very comfortable'.

Medical representatives are the principal interface of the pharmaceutical industry with their target audience; the physicians. Training programmes, which can help medical representatives improve their interpersonal relationship with their target clinicians would enhance their productivity and make their job more enjoyable.

6.4 PHYSICIANS' ACCESS TO INTERNET

The access and extent of use of Internet by physicians in the developed world has been estimated by several researchers, and the results, more often than not, do not tally. The claims of Internet access range from 13% to 75% (please refer to section 3.1). Our findings suggest that more than one fourth (27% to 32%) of the physicians in India have Internet access. The physicians' use of Internet for updating their

professional knowledge averages 0.91 hour per day. The physicians' claims of access to Internet and time spent on Internet are validated by their attendants, whose opinion on this aspect statistically correlates with what the physicians have stated in their responses.

The above information eloquently speaks of physicians' interest in this new gateway to global information on new technology and techniques. For the pharmaceutical marketer it signifies an alternative method of promotion, which could be potentially more cost effective. New web based promotion tools can change the way the medical products are promoted to the medical profession. The opportunities are overwhelming and unending

6.5 PATIENT-DOCTOR RELATIONSHIP

When a doctor perceives that a patient has made an implicit or explicit request for a prescription, the doctor generally obliges. A doctor's relationship with his patient is the deciding factor in motivating a prescription from a physician. Nevertheless, a doctor is not oblivious to his professional commitment to his patient. He would not accede to the request of a patient for a prescription, if he thinks that the drug is either unsafe or non-efficacious. Our study also suggests that the influence of the original prescriber prevails, and the physician, more often than not, continues to refill the prescription, provided the patient suggests that he is comfortable with the drug. However, if the doctor thinks that a patient needs to take a drug to which he is not favourably disposed, the doctor still prescribes the drug in the best interest of the patient. These findings suggest that though the patient-doctor relationship is a factor that affects prescription behaviour, its impact does not overshadow a physician's

professional commitment. He is not inclined to sacrifice his professional ethics for the sake of his relationship with his patient. He knows that a patient is not qualified to decipher the intricacies of effects a pharmaceutical moiety can evoke, and it is he who is empowered and authorized to decide on his behalf. He is convinced that when he disagrees with a patient on the matter of whether and what to prescribe, he is acting in the best interest of his patient, and that in his defiance lies the essence of a true patient-doctor relationship.

But the upright physician has his follies too! He would not like to accede to the request for a prescription of a generic drug instead of a branded one. He does not like anyone meddling with his right to choose a brand. The explanation lies in the fact that in India the pharmaceutical marketplace is still in its most primitive form, i.e. the physician driven model of prescription behaviour yet prevails. The doctor knows the best. There are no pre-formatted drug formularies to restrict the doctor's choice of medicines. A physician's behaviour in this respect is consistent with the stage of development of pharmaceutical marketplace in India.

Three principal components, namely, doctor's professional judgment, doctor-patient relationship and patient's likes-dislikes adequately explain various belief constructs devised on this aspect. Out of these, 'Patient's favourable-unfavourable attitudes' is a good predictor of the prescribing behaviour of physicians, in terms of its magnitude. However, its direction is negative, suggesting that such likes-dislikes are not adequate enough to dissuade the physicians from enforcing their judgment in respect of choice of a drug for prescription.

Although the microanalysis suggests that a doctor's professional judgment prevails over a patient's wish for a prescription of a non-efficacious or unsafe drug, the impact of this factor is not statistically significant. In fact the macro-analysis suggests that the predictor value of this factor is pretty low and our prescription behaviour model can aptly explain the prescribing behaviour of the physicians, even without this factor.

The third principal factor component, namely, 'Doctor-patient relationship' is a significant predictor of the prescribing behaviour. Nevertheless, its magnitude of impact is comparatively low.

6.6 MEDICAL REPRESENTATIVES

A medical representative is an interface through which the pharmaceutical industry meets its target customer, the physician. Our findings suggest that the stakes the pharmaceutical industry puts in them is more than justified. They have the biggest impact on the prescription behaviour of the physicians.

6.6.1 Medical Representatives' professional attributes

Trust in a medical representative motivates a physician to believe in his statements about medicinal products and he may eventually prescribe them. Honesty is held as a virtue and is duly rewarded. A medical representative who is honest in his sales talk enjoys credibility and receives respectful treatment. A medical representative whose commitment to his words is consistent and undeterred is held in high repute by the physicians. Regularity in fieldwork is recognized and duly rewarded by the medical profession. Frequent call setting under legitimate reasons serves as a subtle

reminder of products and yields results Adequate product knowledge and dissemination of requisite information favourably disposes a physician towards a medical representative. The physicians consider medical representatives as important source of information and appreciate them when they provide them educational and academic support. When a medical representative attempts to establish a gift relationship with a physician, he may not be turned down; but he cannot bet that the physician will be obliged to prescribe his products, solely on the basis of this relationship

The professional attributes of medical representatives emerge as the best predictor of the prescription behaviour of the physicians. It has the largest impact and a positive direction

The message to the marketer is unambiguous. Investment in training programmes aimed at upgrading the professional attributes of medical representatives will be a safe and rewarding investment

6.6.2 Medical Representatives' selling techniques

Physicians do not agree that they get carried away by the image of a pharmaceutical company. A medical representative is an ambassador of a pharma house; and a physician's primary evaluation of a pharma company gets coloured by the image the medical representative succeeds to project The physicians discourage advances from medical representatives to develop personal relationship, as they apprehend that the medical representatives use such relationship as a camouflage to later on exert a subtle pressure on them to prescribe their products. The physicians do not

appreciate when the medical representatives use pressure techniques to extract more prescriptions from them

The physicians are quite averse to medical representatives who make heavy demands of their precious time by making elaborate presentations and stretching their detailing stories. However, they are not unfriendly to medical representatives who persist with their prescription demands. In fact they grant them attention and favour them with prescriptions of their products. Nevertheless, they are conscious that the medical representatives deliberately endeavour to manipulate them to get more prescriptions of their products.

The selling styles of medical representatives reflect the tactics they learn and implement for getting prescription support from physicians. The selling styles have a significant impact on the prescription behaviour of the physicians. This factor is a good predictor of the prescribing process of the physicians. The selling techniques adopted by the medical representatives elicit mixed reactions from the physicians. They know that the medical representatives are focused on extracting more prescriptions of their products. They pose to ignore them, and at times even accede to their demands and requests.

A medical representative should be trained to subtly use the selling styles to his advantage. He should be smart enough not to cross the limits and earn apathy from his physician. He should politely and respectfully persist on his demand for prescriptions. But he should fine tune his detailing stories to make them sound short and crisp. He should be tactful enough to camouflage his manipulative moves so as

not to unnecessarily alarm the physician to shy away from developing a healthy professional relationship. A pharmaceutical organization should devise training programmes, which would fine tune a medical representative's selling styles and bring about a level of sophistication, which would empower him to use the selling styles to his best advantage.

6.6.3 Medical Representatives' personal attributes

Our finding suggests that the physicians do not care much whether the medical representative calling on him is a male or female. They do not agree that they are inclined to make out sympathy prescriptions in favour of lady medical representatives. Nevertheless, lady doctors are more favourably disposed to lady medical representatives. They are inclined to prescribe more for lady medical representatives.

Sympathy appeals from medical representatives do not affect the prescription behaviour of the physicians. They do not get influenced by such request on personal grounds. The overall personality of a medical representative is also discounted by the physicians. They do not get impressed so easily.

The personal attributes of a medical representative are a poor predictor of the prescribing behaviour of physicians. Though this factor is statistically significant, its magnitude is not convincing enough.

6.7 PROMOTION AND PRODUCT ATTRIBUTES

Information is power and it is truer in a technology driven sector like pharmaceuticals. Authentic technical information is a good motivator and builds

physician's confidence in a pharmaceutical product. The Indian physicians want us to believe that they are price conscious while making out prescriptions. However, if they know beforehand that a particular patient can afford a costly drug, they do not hesitate in making out a prescription of such a drug to an affording patient. Positive feedback from patients, a valuable product attribute, builds the product from strength to strength. During the journey of the product through its life cycle, positive feedback reinforces the justification of its use and lifts it to an enviable level in the eyes of its competitors. It boosts a physician's confidence in a product and motivates him to prescribe more of it. So is the influence of peer group pressure. Physicians look for ratification of their prescribing action in their peers. When they initiate prescription of a new product, they need to reinforce their decision. If the peers approve, they will continue with the prescription. If the peers do not reaffirm, they rethink about their decision to prescribe a particular drug.

When promotional efforts by a pharmaceutical company succeed in positioning a product in physicians' mind as a top-of-mind brand, the prescription flows fluently. Regular promotion is manifest by regular calls and reminders of the medical representatives. The physicians pose to be indifferent to and uninfluenced by the advertisement and publicity campaigns undertaken by the pharmaceutical houses. However, sponsoring of CME programmes, seminars, workshops and conferences etc. by pharmaceutical companies is viewed as agreeable, and the sponsors are suitably rewarded by way of increased prescriptions. Sampling of a particular product leads to increased prescriptions for that product.

The 'product attributes and promotion factor' is a powerful predictor of the prescription behaviour of the physicians in India. The magnitude of its impact on the

prescription behaviour of physicians is just next to the 'medical representatives' professional attributes' factor.

A product with the right blend of its basic attributes: efficacy, safety, economy and dosage convenience is bound to succeed. Proper promotion brings out these attributes in sharp focus and visibility of the medical profession. The outcome is obvious; it starts flowing from physicians' pens.

6.8 INDUSTRY PERSPECTIVE vs. PRESCRIBERS' PERSPECTIVE

Budgetary allocations for various marketing spends are made by the marketers based upon their beliefs and experience of the importance of various factors responsible for prescription generation. These allocations would be justified only if they are in line with the aspirations and expectations of the prescribers from pharmaceutical organizations.

Our study has brought out several striking mismatches between prescribers' perceptions and industry perspective. The perceptions of the medical representatives and marketing managers reflect the industry perspective. The responses from medical representatives, the in-depth interviews with senior medical representatives and marketing managers of pharmaceutical organizations collectively evolve into an industry perspective on various belief constructs relevant to our study

The industry appears to assign higher value to product information, trustworthiness of MRs and call regularity than the physicians do. Appeal for sympathy prescription

by medical representatives does not motivate physicians to prescribe as much as the MRs expect them to prescribe. The physicians do not agree that gifts motivate them for prescription favour as much as the industry thinks. The industry assigns greater importance to product knowledge, communication expertise and company image when compared to what the physicians do. The prescribers do not respond favourably to advances made by medical representatives for developing personal relationship as they are convinced that such moves ultimately lead to pressure for prescription favour. Their conviction is stronger than that of the medical representatives with regard to this belief construct.

The medical representatives are more conscious that if they pressurize the physicians for more prescriptions, they are likely to be deprived of their favour. Medical representatives have more faith on their personality for success in motivating prescriptions to which the physicians do not agree whole-heartedly. The industry thinks that lady medical representatives will earn sympathy prescriptions from physicians, but the physicians do not concede that. Of course our study evidences that lady doctors are more likely to be sympathetically disposed to lady medical representatives.

While the medical representatives view prescription demand as a very useful tool to motivate prescriptions, the physicians do not agree with equal diligence. On the other hand, the physicians ardently agree that medical representatives are an asset to their practice; and they value their support. The educational background of a medical representative matters more to a physician than what the medical representative himself/herself believes. The physicians do not readily agree with the

industry perspective that if a patient can afford a costlier drug, the physicians would not mind prescribing it. The physicians do not assign as much weight as the medical representatives do to advertisement, active promotion and sales pressure as prescription motivators. The medical representatives have assigned more value to the regularity of calls as a motivator for prescription generation.

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Although it appears that the industry and the physicians do not agree on most belief constructs, there are areas where they are in complete congruence. The industry efforts in this direction are therefore justified as they are aimed at satisfying their target customers. They think alike when they concede that honesty of sales talk and avoiding use of misleading statements strengthen the bond between them and formulate a conducive environment for a fruitful relationship between them. They agree that if the medical representatives are true to their commitments, they win the confidence of the physicians. They have similar views when they criticize a medical representative who takes more time of a physician in detailing his products. They also readily agree that price is an important criterion affecting the prescription decisions of physicians. The industry and the physicians unequivocally concede that samples motivate more prescriptions from the physicians.

The perceptual differences listed above bring in sharp focus the areas, which need improvement for rationalization of marketing budget spends. If a marketer aligns his marketing spends with the expectations of physicians, his expenditure will be more cost effective. A satisfied physician would deliver your expectations of prescriptions without your explicit requests or demands. The moral of the lesson is to cut unnecessary marketing spends on factors, which are considered as less important

by the physicians. Instead the money saved may be used to support the marketing activities the physicians have rated as more important.

6.9 THE IMPACT OF PHYSICIANS' PRACTICE VARIABLES ON PRESCRIBING BEHAVIOUR

The findings suggest that the prescribing behaviour of physicians is also a function of their practice variables like length of practice, patient volume, prescription volume and attachment to academic institutes. Significant correlations have been observed between select practice variables and physicians' beliefs.

While length of practice has a favourable impact on physicians' attitudes towards medical representatives, physicians in practice for long duration discourage their frequent visits to their clinics. As the years advance, the practice grows, leaving no time for screening medical journals to update their clinical knowledge. They tend to rely more on the medical representatives who brief them on new developments in the field of medicine. But for the same reason, i.e. the constraint of time, they do not encourage their frequent visits. Nevertheless, they do not appreciate impersonal approach of pharmaceutical companies, who may send them promotional literatures through postal/courier services. May be they feel gratified when medical representatives wait outside their consulting rooms to meet them. Once they are in practice for several years and their financial needs are fulfilled, they crave for recognition. To be on the call list of all the leading companies evidences their importance and achievement in their profession and fulfills the recognition need.

The findings also suggest that a physician having large patient and prescription volume is not significantly motivated by gifts. He does not concede that he is under some kind of obligation to reciprocate the gifts by way of prescription support. He probably is aware that no medical representative can afford to ignore his large practice. Gifts are bound to come his way, and he has no reason to feel obliged for them. He can afford to ignore the moral obligation, if any.

Product knowledge of a medical representative enthuses a physician to prescribe his product. However physicians who churn out a large number of prescriptions do not get impressed with the product knowledge and communication proficiency of medical representatives. They seem to be confident about their prescription decisions and discount the product information advanced by medical representatives.

Physicians who have been in practice for long do not exhibit any empathy for lady medical representatives. They seem to be beyond the gender bias; and lady medical representatives may not expect any extra favour from them. However, lady doctors are inclined to be more sympathetic to lady medical representatives.

The most heartening finding is that larger the patient and prescription volume and longer the duration of practice of physicians, stronger is their urge for professional update. They believe that Internet is a powerful medium, which can fulfill their need. This is a great revelation for pharma marketers, who can concentrate on developing web-based promotional tools, which could be more cost effective and have powerful reach across all continents.

The academic attachment of physicians is another practice variable of interest for this study. Physicians attached to academic institutes are found to be favourably disposed to medical representatives and consider them an important source of information. However, like senior physicians, they also dissuade medical representatives from making frequent calls on them. When they accept gifts from the industry, they do not think they are obliged to reciprocate by way of prescriptions. The product knowledge and proficiency of a medical representative do not impress them. It is likely that since they are in the academics, they find these aspects as superfluous and not matching their expectations.

Physicians attached to academic institutes can be expected to be more sympathetic to lady medical representatives and may grant them prescription favours. Peer influence appears to be more powerful in physicians attached to academic institutes. They also appear not to dither by the price of a product. May be they are operating within the protected environment of an academic institute which is generally immune to cost concerns, as the public exchequer foots the bill for the medicines. They, unlike their counterparts in private practice, do not assign much weight to regularity of calls by medical representatives. Samples are not great motivators for them. They are not as impressed by samples as their counterparts in private practice do.

Large pharmaceutical companies designate medical representatives who exclusively work in hospitals attached to medical colleges. In the light of the foregoing findings related to the prescribing behaviour of physicians attached to academic institutes, suitable strategies can be devised for a cost effective promotion plan relevant to this segment of the medical profession.

6.10 ALTERNATIVE METHODS OF PROMOTION

The geographical boundaries have started fading out with the onset of globalization in all aspects of life. The new tools of communication have widened the horizons. The pharmaceutical promotion is no more confined to four walls of the consulting chambers of physicians or their hospitals/nursing homes. It has now pervaded through physicians' homes and reached their computer and television screens.

Physicians today appear to be more knowledge savvy than their predecessors. They would search for professional knowledge through sources other than the conventional ones, like medical representatives, journal articles, peers etc.

6.10.1 Internet: a new promotional tool

Internet seems to be the preferred source of information for the physicians. Our findings suggest that more than one-fourth of the physicians in India have an access to Internet. They like to read online journal articles/new product information monographs on Internet. The physicians strongly believe that Internet is a powerful information medium to keep them update in their professional knowledge and skills. When they face some challenging disease conditions, which need second/expert opinion, they turn to Internet and search for interactive professional groups, who can assist them in successfully treating such disease conditions. Internet reaches across continents and brings quality information at their doorsteps with amazing speed and virtually no costs.

The increasing usage of Internet by physicians throws open numerous possibilities for web-based promotional tools to be devised and employed by pharma marketers.

6.10.2 Other non-conventional promotional tools

Our findings suggest that physicians in India do not wholeheartedly believe that direct-to-consumer advertising (DTCA) would be useful in Indian context. DTCA of prescription drugs has recently been permitted in USA and has been both applauded and criticized. This is a futuristic hypothesis, which does not get supported. Maybe the Indian physicians are not yet conditioned for DTCA. This method of promotion has a wide reach and can be very cost effective. However, it is not free from its undesirable consequences. The Indian consumers will have to mature to exploit its full potential as and when it hits the Indian pharmaceutical market. Once made official in India, it would provide a very cost effective and useful promotional tool to the pharma marketers.

A natural fallout of the DTCA would be patients approaching the physicians with requests for making out prescription of a drug they have seen being advertised on the Net or on other media. What would be the reactions of the Indian physicians to this? Well, seventy-five percent of the physicians have acceded that they would not be averse to such requests and may actually prescribe such drugs to their patients.

The physicians have opined that they would not mind if the pharmaceutical companies forward promotional materials to them through postal/courier services rather than the medical representatives calling on them and consuming their valuable time. This offers an opportunity to pharma promoters who can curtail costs of personal selling, by adopting this approach.

Other non-conventional promotional methods like direct mailings & telemarketing, e-marketing, e-cards, e-detailing etc. can be suitably employed to render the pharma promotion more cost effective.

It can be concluded that the traditional methods of pharmaceutical promotion are costlier and have limited reach. If they are blended with newer communication technologies, the outcome would be a cost effective solution to pharma promotion. The novel methods do not mandate the end of the profession of medical representatives. They cannot be ruled out. What is required is integrating and cross-referencing the Web and the MRs for maximizing their effectiveness. Their synergistic blend would offer an opportunity for utilizing each of them for what they do best. Internet is accessible twenty-four hours a day, 365 days a year, whereas a medical representative provides a personal human touch to the promotion and is a much better tool for creating awareness for a new medicinal product.

6.11 DIRECTION FOR FURTHER RESEARCH

This study has attempted to analyze various factors that motivate prescriptions from physicians and measure their impact on the prescription behaviour of the physicians. These factors have been grouped in the form of principal factors and a regression model has been evolved and found significant. The model explains the interactive play of these factors in affecting the prescribing behaviour of physicians.

During the course of this study, some areas have been identified, which offer excellent opportunities for further meaningful research that can make inroads into the web of complexities of the physician mind.

1. An experimental design can be evolved that may subject a group of physicians to new promotional tools suggested in this study for evaluating their efficacy in real life situations.
2. A study segmenting the physicians by their select practice variables can be designed to assess their prescribing behaviour and then integrating the information into a comprehensive and significant model to explain their collective and independent prescribing behaviour.
3. A study segmenting the physicians by their select practice areas, i.e. general practitioners, physicians, surgeons, gynaecologists etc. can be designed to assess their prescribing behaviour and then integrating the information into a comprehensive and significant model to explain their prescribing behaviour.
4. A study segmenting the physicians by their gender can be designed to assess their prescribing behaviour and then integrating the information into a comprehensive and significant model to explain their prescribing behaviour.
5. A cost analysis may be carried out comparing the conventional promotional tools with the new technology based tools to assess their cost effectiveness in real life situations.
6. Segmenting the physicians on their practice population area, their comparative responses can be measured on various belief constructs to assess the differences due to this demographic variable.
7. Segmenting the physicians on their age group, their comparative responses can be measured on various belief constructs to assess the differences due to this demographic variable.

- 8 A study may be designed to find out emerging trends in pharmaceutical marketing in wake of advent of WTO, which will have its full impact in India after the year 2005.

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