

Influence of Medical Representative on Knowledge, Attitude & Practice of Medical Practitioners in Private Setup

Aashutosh J Patel¹, Chandresh B Dumatar²

¹Resident, Department of Pharmacology, B.J. Medical College, Civil Hospital, Ahmedabad

²Associate Professor, Department of Pharmacology, B.J. Medical College, Civil Hospital, Ahmedabad

Abstract: ***Objective:** To assess the knowledge, attitude and practice of physicians regarding influence of Medical representatives in private setup. **Methods:** This was a questionnaire based study involving physician doing private practice in Ahmedabad. The questionnaire contained 18 questions, 6 to evaluate knowledge, 7 to assess their attitude and 5 to judge the practice regarding approach of MR and effect on their practice and information they get. **Results:** 89% doctors said they get some new information from MR but 82% also believed that MR conceal some facts like major adverse effects(99%) and rationality(61%).75% doctors found some discrepancy between information given by MR and their actual experience in use of the drug. 65% doctors cross checked the information given by MR from internet(80%), from colleagues(28%) and from books(78%).88% doctors admit that they are offered some kind of gifts like educational gifts (99%), educational and commercial vouchers(40%) and offer of lunch and dinner(96%). 64% doctors believed that reducing this gift and samples could not reduce the actual price of the drug. 98% doctors did not know any ethical guideline for drug promotion by MR. **Conclusion:** Despite good knowledge of issues related to drug promotion by MR, active participation and awareness is must for physicians to reduce irrational drug prescription and also to reduce impact of MR on practice of physician and also make them aware about drug promotion guideline.*

Keywords: Medical representatives, doctors' prescribing decisions

1. Introduction

The World Health Organization (WHO) defines drug promotion as "all informational and persuasive activities by manufacturers and distributors, the effect of which is to influence the prescription, supply, purchase or use of medicinal drugs." [Smith R, 1986] [Norris P, 2007]. The term "promotional" means those informational and marketing activities, the purpose of which is to induce prescribing, supply or administration of medical products [Walker G, 1993]. It includes the activities of medical representatives (Health and public policy committee of the American college of physicians,1988) [Avron J et al.,1982], and all other aspects of sales promotion such as journal and direct mail advertisement [Editorial,1993]; participation in conference exhibitions; the use of audio-visual materials; the provision of drug sample, gifts [Charen MM,1989] (American college of Physicians,1990) [Patel JC,1992], and hospitality for medical profession and seminars [Kessler DA,1991].

DTP (Direct to Physician) method has influence on physicians' prescribing practices and studies have shown that pharmaceutical promotion influences physicians' behavior [Khakhkhar et al., 2013]. Most healthcare professionals get commercial sources of drug information from medical representatives, drug brochures, leaflets etc., and it has huge impact on prescribing behavior [Gopalakrishnan and Murali, 2002].

Every pharmaceutical company employs and trains medical representative to promote and sell drugs, using printed product literature, drug samples and gifts. The size of worldwide sales force of different companies ranges from

2,500 to 8,000 (Health and public policy committee of the American college of physicians, 1988) and the number has been increasing. In India, an estimated 1,40,000 medical representatives are given employment by the industry. Besides the salaries, they also receive incentives, increments in salaries, abroad tour, promotion for achievement of sales targets, which might tilt the balance in favour of aggressive drug promotion. (Bhatt AD)

All companies of Organization of Pharmaceutical Producers of India (OPPI) have to follow IFPMA (International Federation of Pharmaceutical Manufacturer Associations) code. IFPMA code sets standards for Ethical promotion that member companies must follow [IFPMA, 2012]. Many OPPI members have their own codes and the promotional material has to be approved by medical advisor. However, in many companies in India, there are no qualified medical advisors and in many, marketing department takes overriding decisions on promotional materials, particularly if the medical staff reports to the marketing manager (Bhatt AD). However, scenario is changing.

The medical representatives are trained by the company to sale the medicine by using the companies services to the doctors and these services influence the prescribing habits of a Physician and change his prescription as well. There has been considerable discussion on these practices in western literature [Editorial,1993], [Charen MM,1989],[Smith R,1986], [American college of Physicians,1990]. There is hardly any Indian literature available on this subject.

Aims and Objectives

The present study was designed to evaluate the influence of Medical Representatives (MR) on Knowledge, Attitude and Practice of Medical Practitioner in Private setup in the city of Ahmedabad (Gujarat, India).

2. Materials and Methods

This is a cross-sectional study carried out over a period of two months from September 2013 to November 2013. All the participants had given their informed consent for being a part of the study.

The pertinent literature relating to drug promotion by pharmaceutical companies was reviewed and the questionnaire consisting of 18 questions (Table 1) was developed addressing the issue of influence of MR on knowledge, attitude and practice of physicians in private setup. The physicians having fixed salary whether in private or government job were excluded. The reliability of the questionnaire was investigated by conducting a pilot study on 15 physicians. As per feedback from pilot study, minor changes were made in questionnaire to make it more clear and understandable. Finally, 153 physicians were randomly included in this study; printed copies of questionnaire was given personally to physicians in their private clinic/hospital, explained the purpose of the study and were assured that anonymity of all the participants would be maintained. No difference in age or academic achievements was taken into consideration for evaluation of results. Statistical analysis of the compiled data was done using Microsoft Excel Worksheet 2007.

3. Results

Total 153 physicians were given the questionnaire but 150 physicians submitted it (response rate: 98%). Distribution of answers to all questions was calculated and presented as percentage of subjects answering particular answer to each question (Table 1).

Table 1

Questions	Response	Response Rate (%)
1. How frequent does MR visit your clinic?	<ul style="list-style-type: none"> • 1 visit / week • 1-3 visit / week 	96 04
2. How much time do you spend for each MR?	<ul style="list-style-type: none"> • <15 min • 15-20 min 	99 01
3. Is it acceptable for a doctor to charge fees for a visit by a MR ?	<ul style="list-style-type: none"> • Yes • No 	28 72
4. Do you get any new information from MR?	<ul style="list-style-type: none"> • Yes • No 	89 11
5. Do you find that MR tries to conceal certain facts about the drug?	<ul style="list-style-type: none"> • Yes • No 	82 18
6. Do you find any kind of discrepancy between sample/information given by MR and drug available in market?	<ul style="list-style-type: none"> • Yes • No 	78 22
6a. If yes, what kind of discrepancy?	<ul style="list-style-type: none"> • Effectiveness of a drug 	99 27

	<ul style="list-style-type: none"> • Rationality of a drug • Cost 	25
7. Have you ever tried to cross check the information given by MR?	<ul style="list-style-type: none"> • Yes • No 	65 35
7a. If yes, how have you cross checked?	<ul style="list-style-type: none"> • From internet • From literature/book • From colleague (other health professionals) 	80 78 28
8. How does MR convey information about the drug?	<ul style="list-style-type: none"> • Verbally • By power point presentation • By visual aid • By brochure • By drug information sheet • By samples/related products 	58 15 29 91 78 52
9. Have you attended any conference/seminar arranged by Drug Company?	<ul style="list-style-type: none"> • Yes • No 	79 21
9a. If yes, have you found them useful?	<ul style="list-style-type: none"> • Yes • No 	62 38
10. Does any MR offer you any kind of gift?	<ul style="list-style-type: none"> • Yes • No 	88 12
11. Do you think that stopping of gift and samples can reduce the price of drugs?	<ul style="list-style-type: none"> • Yes • No 	64 36
12. Are you offered any recreational facility by Drug company ?	<ul style="list-style-type: none"> • Yes • No 	82 28
13. Do you give trial to any new drug recommended by MR, over your preferred drug?	<ul style="list-style-type: none"> • Yes • No 	54 46
13a. If yes, what is the reason behind it?	<ul style="list-style-type: none"> • To confirm efficacy of a new drug • Others 	98 12
14. Do you think that MR tries to push you to prescribe irrational drug for the benefit of the drug company?	<ul style="list-style-type: none"> • Yes • No 	71 29
15. Is there any kind of approach by MR/Drug Company outside your working premises?	<ul style="list-style-type: none"> • Yes • No 	51 49
15a. If yes, how do they approach you?	<ul style="list-style-type: none"> • By e-mail • By post/courier • Personal meeting outside working premises • Others(SMS) 	96 12 01 27
16. As a physician, what is preferred in the interest of the patient?	<ul style="list-style-type: none"> • Cost of the drug • Effectiveness of drug • Compliance of the patient 	62 84 65
17. Do you suggest a drug promoted by MR to your known health professionals?	<ul style="list-style-type: none"> • Yes • No 	65 35
18. Do you know any ethical guidelines for drug promotion by MR?	<ul style="list-style-type: none"> • Yes • No 	98 02

4. Discussion

All promotion making claims about drugs should be accurate, informative, up to date and Ethical. They should not contain misleading, false and biased statements. All promotional material must include a succinct statement about the indications(WHO,1988). In a UK survey of general practitioners, 58% mentioned a sales representative as a source of new product they prescribed but they also felt that sometimes the information on side effects was not enough and more indication were promoted than registered (Anonymous, 1991). However, in present study, 89% said that they got some new information from MR as shown in Figure 1. Since they were good source of information about new drug, 72% physicians said that no fees should be charged from MR for visit to a physician.

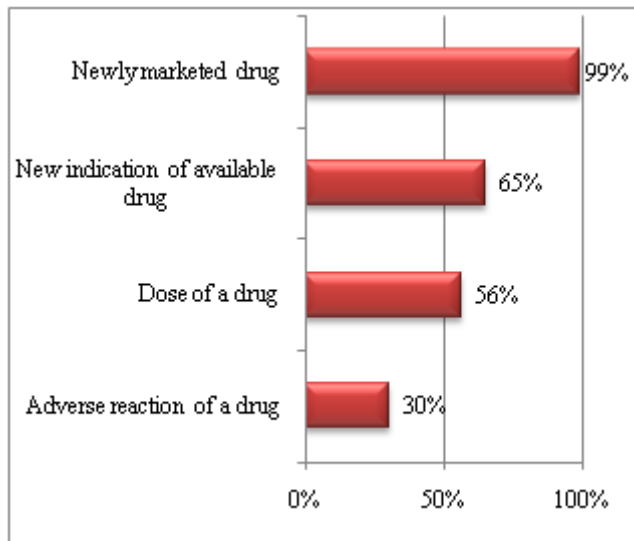


Figure 1: Information gained from MR by Physicians

The IFPMA code (International Federation of Pharmaceutical Manufacturer Associations, 1989) and ABPI (Walker G,1993) codes suggest that the drug information should be accurate, current and balanced. Superlatives must not be used and word safe should not be used without qualification (Walker G,1993). In present study, 82% said that MR try to conceal some important fact about drug as shown in Figure 2. Also, 74.6% found some discrepancy between sample/information given by MR and their actual experience about the drug as shown in Figure 3. This shows that a large number of physicians were of the opinion that they received some new information about drug but they were also aware that MR usually try to conceal some facts about the drug. So, they tried to cross check the information given by MR by searching the internet or by interacting with colleagues.

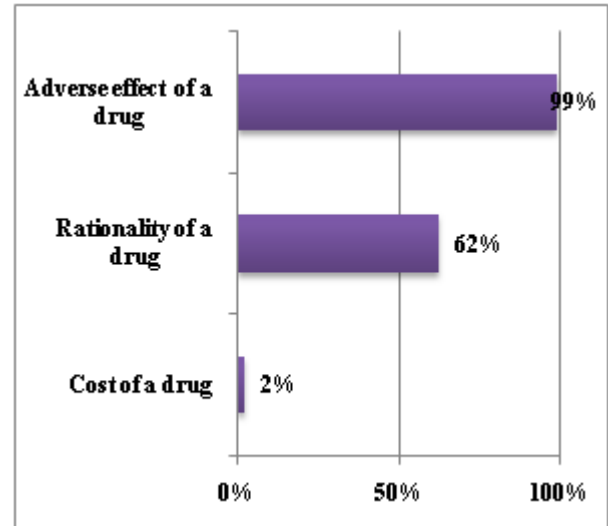


Figure 2: Information of drug which MR try to conceal

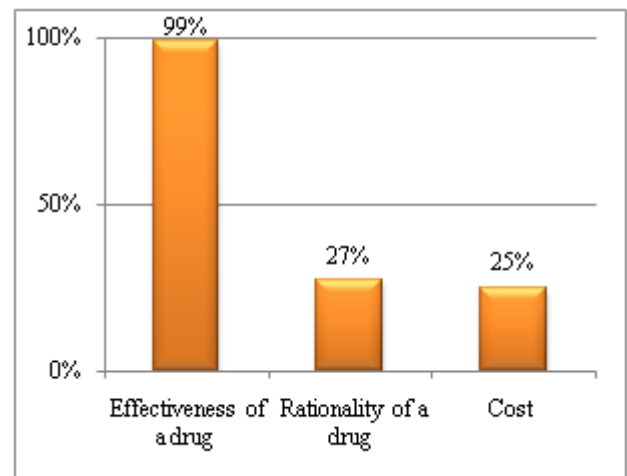


Figure 3: Discrepancy in Information given by MR

Out of 150 physicians, 71% said that sometimes MR try to push them to prescribe some irrational drug for the benefit of drug company. In present study, 98% of physicians did not know any ethical guidelines for drug promotion by MR e.g. IFPMA. In UK, the ABPI code insists on adequate training of MR and a high standard of ethical conduct in discharge of their duties (Walker G,1993).

The number of calls including attendance at a medical meeting or a visit to follow up a report of an adverse reaction made by a medical representative each year should not exceed, on an average three visit to each doctor (Walker G,1993). In present study, 81% preferred 1 visit of MR per week and 58% preferred less than 15 minutes to visit each MR.

Out of 150 physicians, 54% physicians gave a try to some new drug over their preferred drug because 98% of them believed that giving try to some different drug might reduce competition of some costly drug and also some better efficacious drugs could be known. Some physicians believed that availability of a drug in the market could be improved by prescribing new drug.

The pharmaceutical industry has a powerful influence over prescribing habits and is often blamed for its marketing

practices (Editorial 1993). More than 7,000 drugs and 75,000 formulations are available in India (Bhatt AD,1992). As new drugs are added, these numbers continue to increase and influence the prescribing practice of physician. Avron and associates examined the opinions of practicing physicians in regard to drug prescribing and found that physicians are not always able to recognize the commercial messages and inputs that ultimately bear on therapeutic decisions and the actual prescribing practices of physicians appeared to be heavily influenced by the view of pharmaceutical industry (Avron, 1982). These have led to restrictions on the activities of medical representatives.

One of the tools used by pharmaceutical industry is to give gifts to the doctor. The variety of gifts include stationery, time related, bags, books, folder, office-desk, medical, household, personal and innovative items and overseas trips (Patel JC,1992). Out of 150 physicians, 88% reported that they were offered some kind of gifts (Figure 4). Charen and associates feel that whenever physician accept a gift, an implicit relationship is established between the doctor and the company or MR and there is an obligation to respond to the gift(Reference). The gift usually reminds the doctor about the brand name of the drug and results in a prescription (Patel JC, 1992). However, gifts cost money which is ultimately passed on to the patients without their explicit knowledge (Charen MM,1989). However, in present study, 64% physicians did not believe that reducing this gift and samples could reduce the actual price of the drug and would ultimately lead to patient's benefit. They believed that multiple factors can affect cost of the drugs so only reducing samples or gifts would not affect that much.

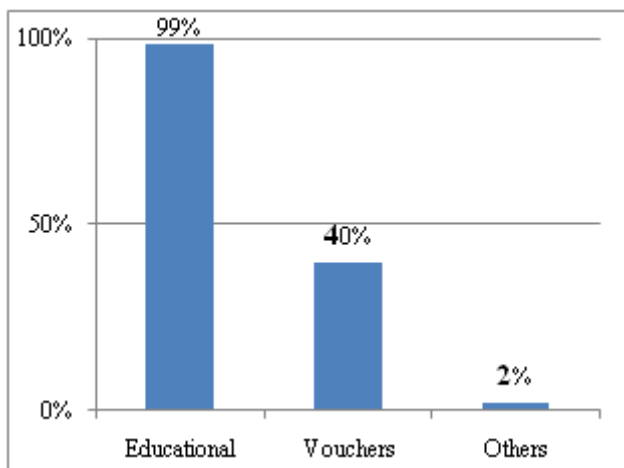


Figure 4: Kind of gifts offered by MR

The American Medical Association and US Pharmaceutical Manufacturers Association Guideline suggest that the gifts should involve a benefit for the patients and should not be of a substantial value and should not be accepted if there are strings attached for prescriptions (Patel JC,1992). American college of Physicians advises that a gift should not be accepted by the doctor, if acceptance might influence the objectivity of the clinical judgment (American college of Physicians,1990). Certain educational gifts e.g. books, journals or case record forms and trivial gifts such as pens and calendars may be considered acceptable (Charen MM,1989), (American college of Physicians,1990).

The ABPI code advises companies to distribute gifts which are inexpensive and relevant to practice of medicine (Walker G,1993). Drug sample can only be provided to a doctor in response to a signed request and should not exceed four days treatment for a single patient (Walker G,1993).

In Sweden, the MR must meet a group of doctors after obtaining an appointment from the head of the department. On an average, only two such meetings per year are permitted. The promotional material is screened by the head of the department and the presentation by the representative allowed only if the product information is new and scientific (Smith R,1985). The MR are not allowed to hand out free gifts or pads (Smith R,1985). Although this apparently innocuous practice is generally accepted as a norm, many doctors feel uneasy about its ethical repercussion (Charen MM,1989),(Waud GR, 1992).

MCI (Medical Council of India) has also introduced its new code of conduct for doctors to taking gifts, taking the sponsorship for attending the seminar, conferences, etc in India or abroad by any Pharmaceutical Company.

In present study, 82% reported offer of some recreational activities by Drug Company, as shown in Figure 5. Happy hours includes movie tickets, fair tickets, some big event tickets, etc. Physicians are advised to avoid involving themselves with a program that emphasizes recreational events. Also, 51% reported that MR sometimes approaches them outside their premises. 27% reported that they got regular good morning SMS from MR and sometimes product related SMS.

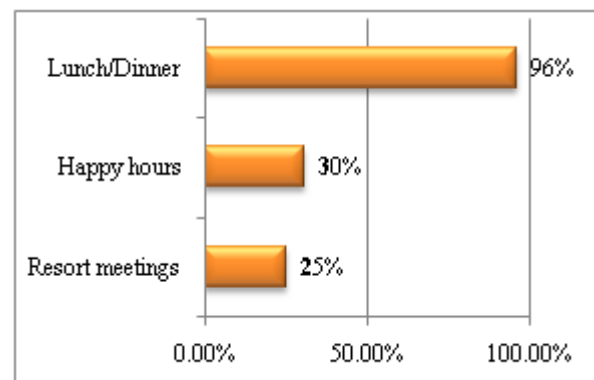


Figure 5: Recreational facilities offered by MR

Conventional methods of drug promotion have increasingly been supplemented by non traditional approaches such as symposia that rely heavily on the involvement of medical researchers and other experts. Over the past two decades, the number and cost of such events have increased dramatically. In India, there are hardly any meetings, conferences, seminars or workshops held without funding from the pharmaceutical companies (Bhatt AD). In present study, 62% said that they had attended conferences/seminar arranged by drug company. Opinion regarding usefulness of attending conferences is shown in Figure 6.

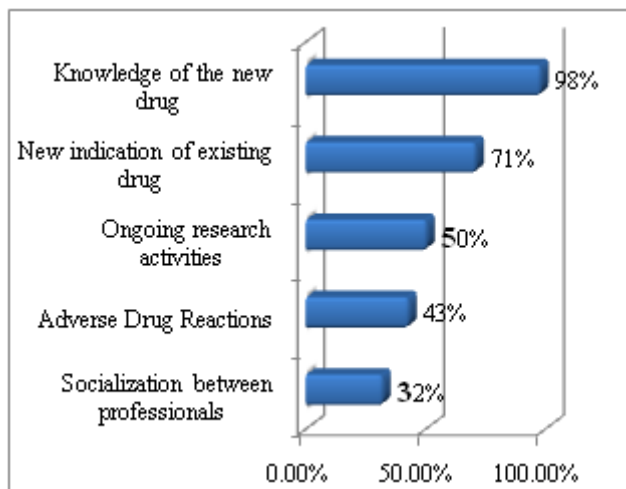


Figure 6: Usefulness of attending conferences

The pharmaceutical industry may well be considered a primary source of continuing medical education; but these activities are often promotional and they can undermine the unbiased exchange of scientific information and raise questions of professional ethics (Kessler DA,1991). These activities have been criticized and guidelines proposed for the conduct of medical meetings (Walker G,1993) (Kessler DA,1991). The sponsor of an activity should not have express or implied control over the scientific content of the program (Kessler DA,1991). The meeting should be organized through a recognized medical association and the seminar should focus on treatment of a disease or therapeutic class. Anecdotal or personal use of a drug is not acceptable. The post seminar activities such as journal supplements on a product should also follow above guidelines (Walker G,1993) (Kessler DA 1991).

There is a need both for the industry and doctor to develop mutually agreeable limits for promotion of drugs. There is a need to make doctors aware about codes for pharmaceutical promotion. The available codes provide a useful guideline but they are still considered the beginning rather than the end of this debate (Walker G,1993),(IFPMA,1989). With the medical profession coming under the ambit of consumer protection act, it is likely that industry – doctor relationship might come under such scrutiny.

The prescription of a drug is an event in which the doctor is decision maker for the ultimate user - the patient. Although the doctors have the sole and absolute power to determine the sales of drugs, which are available on prescriptions, the pharmaceutical marketing and promotion practices are blamed for irrational prescribing habits and their consequences. Let us pray that wiser counsel prevail and both sides – industry and doctor – work towards a healthy and ethical relationship.

5. Conclusion

While doctors uniformly deny that their understanding of drug is influenced by the activities of industry, this survey shows that personal encounter with a medical representative shapes doctors' knowledge, attitude and practice towards drugs and influence their prescription

pattern. However, further large scale studies are needed to confirm these findings.

References

- [1] Bhatt AD. Drugs for misuse or use? J Gen med 1992; 4:31-36
- [2] Health and public policy committee of the American college of Physician: improving medical education in Therapeutics. Ann intern med 1988; 108; 145-147
- [3] Editorial – drug promotion. – stealth , wealth and safety. Lancet 1993; 341; 1507-1508
- [4] Charen MM, Lenderfeld S, Muray TH. Doctors, Drug companies and gifts. JAMA 1989; 262; 3448-3451.
- [5] Smith R. Doctors and drug industry; too close for comfort. Br Med J; 1986; 193: 905-906.
- [6] Waud GR. Pharmaceutical promotion. free lunch: New England journal of Medicine; 1992: 327; 351-353
- [7] American college of Physician. Physicians and Pharmaceutical industry. Ann Int Med 1990; 112: 624-626