Attitudes of general practitioners in New Zealand to pharmaceutical representatives

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SUMMARY
Background. Pharmaceutical representatives are a vital component of the marketing of pharmaceutical products and an important source of prescribing information for general practitioners.
Aim. A study was undertaken to explore the attitudes of New Zealand general practitioners to pharmaceutical representatives.
Method. A questionnaire survey of 100 general practitioners was undertaken to which 67 general practitioners responded.
Results. The provision of practical prescribing advice by representatives and gifts relevant to medicine were seen as desirable activities by many respondents. However, gifts of value considerably greater than suggested acceptable in recent guidelines for general practitioners were also highly favoured by some practitioners.
Conclusion. Current ethical guidelines setting out the relationship between pharmaceutical representatives and medical practitioners are inadequate and should be based on the need for the general practitioner to become an unbiased promoter of patient health.

Keywords: pharmaceutical industry represetantives; doctors' attitude; GP–pharmaceutical industry relationship.

Introduction

FOR the pharmaceutical industry contact between its representatives and general practitioners is seen as a vital part of marketing activities. Gasson[1] estimated that 63% of the $25 000 spent in New Zealand by the pharmaceutical industry each year per general practitioner on promotion[2] is allocated to pharmaceutical representative activity. There is anecdotal evidence that the industry may be finding it more difficult to gain access to general practitioners. Many strategies are used to enhance such access including free gifts, educational competitions, and the use of educational weekends in hotels where participants socialize with the representatives.[3] In general, the New Zealand pharmaceutical industry adheres to a national code of ethics based on the Association of the British Pharmaceutical Industry guidelines,[4] failure to adhere to them carries no effective penalty.

For general practitioners, obtaining information about pharmaceutical advances relevant to their field may be difficult. In New Zealand the government has not seen its role as being a provider of independent prescribing advice although the recent advent of a

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prescription auditing and advisory service and the availability of the British national formulary to all practitioners, may have partially filled this need. Most general practices receive two categories of journals containing information on prescribing. First, there are peer review journals; with their research base these are seldom perceived to be relevant to everyday practice. Secondly, there are those journals that review current issues in management but as they are wholly funded by pharmaceutical advertising, they are not seen as being unbiased. Continuing medical education tends not to focus on the merits of one drug over its nearest rivals. Thus, the pharmaceutical representative is seen by many general practitioners as a potentially useful source of prescribing information.[3]

Given that there is a relationship between the needs of general practitioners and the pharmaceutical industry, contacts between them will undoubtedly continue. The industry, however, wishes to alter the prescribing behaviour of general practitioners, while the general practitioners primarily wish to learn about medicines, and perhaps alter behaviour if indicated. The likelihood of a general practitioner's behaviour being altered will depend at least in part on the degree to which the practitioner views the interaction with the pharmaceutical representative as positive.

A study was therefore designed to assess the factors in the behaviour of the pharmaceutical representative which would result in the representative being viewed positively by the general practitioner.

Method

Using unstructured face to face interviews, a qualitative exploration of the possible factors influencing the attitudes of general practitioners to pharmaceutical representatives was carried out in 1991. Ten general practitioners were randomly selected from the list of the Royal New Zealand College of General Practitioners for this part of the study. After analysis of the themes emerging from these interviews, a questionnaire was constructed to be used in a quantitative study of general practitioner attitudes. Attitudes to aspects of the pharmaceutical representative's visit were explored on a Likert type three point scale (1 = favourable, 2 = no effect, 3 = unfavourable), while the overall attitude to representatives was rated on a five point scale from 1 = very favourable, 3 = neither favourable nor unfavourable through to 5 = very unfavourable. The choice of scale dimensions was made after feedback from respondents during the pretesting of the instrument. There was space on the questionnaire for general comments.

General practitioners were randomly selected from the lists of health boards so that one third of the sample were in rural practices. An anonymous postal questionnaire, and a single follow-up mailing as required, were administered.

Some responses to questionnaire items were coded into blocks. The results were analysed using SYSTAT and EPISTAT computer packages. All significance levels were calculated using two sided tests of significance.

Results

One hundred questionnaires were posted. A total of 67 doctors responded. Thirteen doctors known to be in practice failed to reply and 20 doctors were uncontactable, having left their prac-

tices with no forwarding address. Thus, the overall response rate for doctors known to be in practice was 84%.

The mean age of respondents was 42.1 years (standard deviation (SD) 11.1 years). The respondents worked in practices with a median of two doctors (range 1–9), who together provided a median of two full-time equivalent doctors (range 1-8). The doctors worked a median of 9–11 half-days each week, and had been in general practice for a mean of 11.9 years (SD 10.7 years). Fifty respondents (75%) were men.

Of 66 respondents 77% reported having access to colleagues to discuss prescribing issues during normal working hours. Doctors who had no peer contact to discuss prescribing were significantly more likely to be in smaller practices than those with peer contact (Wilcoxon rank sum test, $P<0.001$). Other doctor characteristics (age, sex, number of years in practice, number of half-days worked each week) were not significantly related to levels of peer contact.

Fifty eight respondents (87%) reported that they saw pharmaceutical representatives, allowing a median of 15 minutes for each contact. One respondent from an isolated area would have liked to have seen representatives but none visited because of the practitioner's isolation. The median number of representatives seen was 3–4 per month (range 0–10).

Fifty eight doctors replied to an open question concerning the reasons for seeing pharmaceutical representatives. The most quoted reason for seeing pharmaceutical representatives was for personal education about new or existing pharmaceutical products (56 respondents). Less commonly the provision of pharmaceutical samples was considered important (10 respondents). Ten doctors saw the representatives out of a feeling of politeness or in response to perceived pressure from the representative or pharmaceutical company. Six respondents considered the representative contact as primarily an opportunity to get free gifts, while four saw the contact as a welcome break from the boredom of seeing patients.

The median score for general practitioners' overall attitude to pharmaceutical representatives was three. Only four respondents (6%) stated that they were 'very favourable' towards representatives, with a further 18 (27%) being somewhat favourable.

From a list of features, the features of the contact between representative and general practitioner that were associated with a positive or negative response from the general practitioner are shown in Table 1. Gifts of high cost and low relevance to practice were not generally favoured, for example, 22% of 65 respondents were not in favour of quizzes with prizes of expensive travel compared with 6% in favour of these. Gifts of high relevance were favoured, irrespective of cost. For example, expenses paid attendance at conferences was favoured by 50% of 64 respondents, only 5% not being in favour of such trips. Gifts of low relevance were considered favourably where they were of low cost: provision of stationery was favoured by 28% of 65 respondents and was not favoured by 6% (66% of respondents thought them neither favourable nor unfavourable). The attitude of respondents to representatives appeared little influenced by the provision of research based evidence of product superiority, respondents being equally divided between viewing this activity favourably or unfavourably.

Practitioners favourably disposed to representatives saw more representatives (Spearman rho, 0.39, $n = 65$, $P<0.05$). Doctors in larger practices saw fewer representatives (Spearman rho, –0.36, $n = 66$, $P<0.05$). The number of representatives seen was not significantly related to the doctor's age or years in practice, but was higher where peer advice was less readily available (rank sum test, $P<0.05$). The decision to see the representative was not related to doctor's age, years in practice, practice size, sex or availability of peer advice.

Table 1. Characteristics of pharmaceutical representatives associated with positive and negative responses from general practitioners, ranked by frequency of responses.[a]

Characteristics of pharmaceutical representatives considered:	
Positive by GPs (rank order)	Negative by GPs (rank order)
Provides practical prescribing information (1)	Has a forceful approach to detailing (1)
Provides pharmaceutical samples (2)	Fails to recognize doctor's patient demands (2)
Provides lunches with an educational video (3)	Arrives without an appointment (3)
Provides expenses paid attendance at conferences (4)	Has a background in sales (4)
Provides patient education materials (5)	Arrives in an expensive company car (5)
Provides expensive medical textbooks (6)	Encourages entry in a quiz with a prize of expensive travel (6)
Shows educational videos (7)	
Provides items of office stationery (8)	
Encourages entry in a competition with a prize of expensive medical equipment (9)	

[a]Rank orders of the differences between the percentage of respondents reporting that the attribute produced a favourable attitude and the percentage reporting that the attribute produced an unfavourable attitude towards the representative. All differences significant at the $P<0.01$ level (chi square).

Respondents' general comments about their attitudes to representatives included:

'What do you expect me to say, I'm human. If I said expensive gifts didn't work I'd be lying — otherwise why do they use them?'
'I learn little medically ...[but get]... great insight into how devious and powerful the marketing industry can be.'

In contrast, comments from other respondents included:

'The gifts don't make me see them [representatives], I would anyway.'
'Gifts make the day more pleasant but don't sell the drugs.'
'My attitude to the representative won't affect my prescribing.'

Discussion

The majority of general practitioners saw pharmaceutical representatives, despite few respondents being favourably disposed towards representatives. Those more favourably disposed towards representatives saw more representatives. As expected, education was the most important reason given by general practitioners for seeing representatives while provision of drug samples rated fairly low despite the high percentage of general practitioners who receive or dispense samples (Thomson A and Trent L, unpublished data, 1992).

While the provision of various gifts was seen as enhancing the practitioner's attitude to the representative, there was some sense of propriety in that gifts of high cost and low relevance were not favoured by respondents. Nevertheless, gifts with values in excess of those which would be considered acceptable in terms of recent guidelines were favoured by some respondents.[5,6] While several respondents denied the connection between their attitude to the pharmaceutical representative and their prescrib-

ing behaviour, this is unlikely to be a supportable position. Contact with representatives does influence behaviour,[7] and the results of the present study demonstrate that contact increases when representatives are viewed favourably.

It has been demonstrated that those doctors who obtain their prescribing information from pharmaceutical representatives are less rational prescribers than those who obtain such information from colleagues.[8] While there was no significant relationship between lack of peer contact and seeing pharmaceutical representatives, it is of some concern that 23% of respondents lacked peer contact about prescribing issues during their working day. Peers have been noted as important modifiers of prescribing behaviour.[9,10] It would be hoped that moves within general practice to enhance quality assurance may reduce the reported professional isolation.

General practitioners want practical prescribing information, such as the cost to the patient, to be conveyed by the pharmaceutical representative. However, it may not be realistic to expect that general practitioners will gain an accurate overview of a product group, or indications for use from contact with several pharmaceutical representatives, each providing information about their product. There is evidence that such information contains important and significant bias.[11] In addition, the industry has a need to produce behaviour change in a direction (that is, toward newer products) which, while not immediately disadvantaging the patient, will have cost implications which may not be in the interests of the health service.[12]

Prescribing is influenced both directly and indirectly.[13,14] Direct methods include the various mechanisms within law designed to limit the prescription of pharmaceutical products. Indirect methods are those of persuasion, for example continuing medical education and techniques used by pharmaceutical representatives. Indirect methods are influenced by aspects of the message, the source and the receiver. The message may be more compelling if it is two-sided, that is, in respect of pharmaceutical promotion where the competitor's products are constructively criticized,[15] or if it is new or relevant.[16] Even where a message is illogical and unconvincing, it can produce change where the source is seen to be attractive or powerful.[17] However, credibility of the source is important and, in respect of pharmaceutical products, this is achieved by reference to prestigious clinical research centres or specialists,[18] or association with scientific meetings. Persuasive sources must also appear honest, sincere, and trustworthy.[15] Pharmaceutical representatives can increase this perception by arguing against their own vested interests[19] for example by suggesting non-drug therapies or alternative medications. Finally, the receptivity of the receiver of the message will influence its effect. The present study has highlighted some aspects of pharmaceutical representative's behaviour which increase the receptivity of the general practitioner to their message.

In contrast, general practitioners are unimpressed by representatives who ignore the demands of general practice or employ other than low key approaches to marketing. Persuasion theories postulate, and the data here support, that successful selling is not characterized by hard sell techniques but by a range of more subtle methods. The pharmaceutical representative is seen by the industry first and foremost as a salesperson rather than as an educator.[20] This is demonstrated by the wording of advertisements for new representatives which include such statements as 'the successful applicant will have demonstrated a successful sales history... a medical or scientific background would be an advantage but is not essential'.

The receipt of gifts is seen as producing a norm of reciprocity[21] where the receiver is under an obligation to give some form of response.[22] While McKinney and colleagues demonstrated that the majority of doctors recognize that they could be comprom-

ised by accepting gifts, few see small gifts as potentially compromising.[23] Current North American guidelines[5,6] appear to assume that gifts of low value are not capable of altering a doctor's decision making. Our data suggest that for gifts of high cost, relevance is a factor in acceptability, a stand consistent with these guidelines. However, it is not justifiable to assume that small gifts have no effect. Festinger and Carlsmith have demonstrated that, at least in some settings, small rewards are more likely to alter behaviour in the direction desired by the donor than are large rewards.[24] Given this evidence, and the evidence from the present study, its seems that the North American guidelines are too lenient if the ethical guidelines on gift receipt are to be based on the effect of gifts on doctors' behaviour as well as, or opposed to, the effect on the overall cost of health care. More stringent guidelines, such as those proposed by Thomson, may be more appropriate.[12]

The pharmaceutical industry has the task of producing a profit from its involvement in pharmaceutical products. This requires them, as with all businesses, to market their product effectively. Central to marketing practice is not only meeting customer demands, but also producing demand and shifting the balance away from competing products to one's own products. Commercial ethics predominate and persuasion techniques are central to these ethics. The medical profession has the task of providing the best care for the patient at a price which society can afford. Its role with all treatment modalities, including pharmaceutical products, is to select the appropriate treatment based on the best evidence available. Relying on the pharmaceutical industry as the source of advice about drugs has been shown to be inappropriate.[3] Contact with pharmaceutical representatives involving the acceptance of gifts has been shown to make the practitioner more receptive to the industry's messages.[13,14,17] The medical profession should become aware of the marketing techniques used by the industry, and develop ethical guidelines for the general practitioner which are based on the need for the medical practitioner to be an unbiased promoter of patient health.

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