# Structured approach to pharmaceutical representatives

Family medicine residency program

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#### ABSTRACT

**PROBLEM BEING ADDRESSED** Family medicine residents frequently interact with pharmaceutical sales representatives (PSRs) during their medical training; the literature indicates that these meetings affect future prescribing habits. We needed to develop a structured approach to PSR visits because our program did not provide residents with a consistent experience in dealing with PSRs.

**OBJECTIVE OF PROGRAM** To develop a structured approach to PSR visits that would permit residents to better understand the role of PSRs and to gain more from their interactions with PSRs in the future.

**MAIN COMPONENTS OF PROGRAM** First-year family medicine residents at an academic teaching unit in Edmonton were surveyed on their knowledge and attitude to PSRs and then given a 1-hour educational seminar and five structured visits from PSRs. Following each PSR presentation, residents completed an evaluation form and discussed the interaction with their preceptors.

**CONCLUSIONS** We believe that a structured educational program is better than a written policy restricting interactions between PSRs and residents for providing residents with an understanding of the role of PSRs and making them better prepared for future contact.

#### RÉSUMÉ

**PROBLÈME** Les résidents en médecine familiale ont des rapports professionnels fréquents avec les représentants de sociétés pharmaceutiques durant leur formation médicale; les ouvrages publiés indiquent que ces rencontres influencent les habitudes ultérieures en matière de prescription. Il nous fallait élaborer une approche structurée à ces rencontres avec les représentants, car notre programme n'offrait pas une expérience cohérente des relations à entretenir avec ces personnes.

**OBJECTIF DU PROGRAMME** Élaborer une approche structurée à l'égard des visites des représentants de sociétés pharmaceutiques qui permettrait aux résidents de mieux comprendre le rôle assumé par les représentants et de tirer davantage parti de leurs relations avec ces personnes à l'avenir.

**PRINCIPALES COMPOSANTES DU PROGRAMME** Un sondage a été réalisé auprès des résidents de première année en médecine familiale d'une unité d'enseignement universitaire à Edmonton. L'enquête portait sur leurs connaissances et leurs attitudes à l'endroit des représentants de sociétés pharmaceutiques. Par la suite, on a offert un séminaire éducatif d'une heure et on a organisé cinq visites structurées avec des représentants. Après chaque présentation, les résidents ont rempli un formulaire d'évaluation de la rencontre et ont discuté de l'interaction avec leurs précepteurs.

**CONCLUSION** Pour permettre aux résidents de comprendre le rôle assumé par les représentants de sociétés pharmaceutiques et mieux les préparer aux rencontres futures, nous croyons qu'un programme éducatif structuré est plus valable qu'une politique écrite de restriction des rapports entre les représentants et les résidents.

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amily physicians must have access to accurate evidence-based information on prescribing. Each year, dozens of new drugs become available, and physicians must make decisions on how and when to prescribe

them while keeping in mind safety, efficacy, convenience, and cost.

One source of drug information and samples for many family physicians is pharmaceutical sales representatives (PSRs), but their information is sometimes inaccurate and biased.<sup>1</sup> Although physicians hold firm to the belief that they can resist pharmaceutical company influence, the literature indicates otherwise. Junior interns, residents, and physicians have been shown to be influenced by interactions and "gifts" from pharmaceutical companies.<sup>2-6</sup> Lexchin<sup>6</sup> concluded that strong evidence indicates that interaction with the pharmaceutical industry influences physicians' prescribing behaviour and that physicians' use of detailers could lead to inappropriate prescribing.

Market research indicates that PSRs effectively promote drug sales. In 1992, the pharmaceutical industry in Canada spent an estimated \$349 million on sales representatives<sup>7</sup> and an additional \$286 million on journal advertising, direct mail, product exhibition, samples, and product literature (including translations).8

A MEDLINE search from 1966 to 1996 using the terms pharmaceutical representatives, family medicine, family practice, and residency training did not elicit any examples of Canadian programs educating doctors about the pharmaceutical industry. Literature from the United States identified two educational interventions in family medicine residency programs. One used a lecture and discussion format followed by a PSR presentation to be evaluated by the residents<sup>9</sup>; the other had an educational seminar followed by two 10-minute appointments with a PSR to practise skills.10 The authors concluded that their courses provided physicians with skills to be more active during 

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encounters with PSRs. Their data also showed residents' confidence in dealing with PSRs improved. Shaughnessy et al<sup>9</sup> noted that "teaching residents to evaluate the pharmaceutical sales process enables them to identify logical loopholes, meaningless testimonials, uneeded improvements in drugs, and unlikely claims."

A recent Canadian article<sup>11</sup> described a continuing education program developed for the Roval Australian College of General Practitioners in which a discussion and video illustrated both effective and ineffective PSR-physician interactions. This method certainly saves time (1 hour vs 5 hours) but does not give participants practice at actual PSR encounters.

Brotzman and Mark<sup>12,13</sup> have suggested that, in view of the educational mission of residency training programs and recent concern over ethics in the relationship between the medical profession and the pharmaceutical industry, it would be prudent for all programs to develop written policies and formal training sessions to help guide residents in their interactions with pharmaceutical representatives.

The Canadian Medical Association Journal published residency program guidelines for interactions with the pharmaceutical industry that were developed by the Residency Training Programme in Internal Medicine in McMaster University's Department of Medicine.<sup>14</sup> The three key elements were to deny industry representatives access to residents during sponsored events; to decline funding contingent either on industry input into the sponsored program or on residents' accessibility to industry representatives; and to refuse to condone residents' receiving non-educational largesse from the industry. The Canadian Medical Association (CMA) also published guidelines on physicians' relations with the pharmaceutical industry in the areas of research, continuing education, samples, and personal material gain.15

Given that interactions with PSRs influence physician behaviour and that pharmaceutical companies spend hundreds of millions of dollars in advertising directed at health professionals, we believe it is very important to educate our students and residents and provide them not only with practical guidelines but actual experience in dealing with PSRs.<sup>6,12-14,16-18</sup> Primary areas of concern are ethical conflicts, accuracy and value of material presented, material offerings (gifts, lunches, travel), and the degree of influence pharmaceutical companies have on junior residents.<sup>12-14</sup> In 1994, the Department of Medicine at the University of Alberta developed guidelines on

medical education and the pharmaceutical industry that indicated that residency programs should provide forums for appropriate education and discussion about the goals and strategies of the industry.<sup>19</sup>

#### Objectives of the program

In our clinic, interactions with PSRs varied widely depending upon how each of the four staff physicians dealt with them. Frequency of office visits varied from 12 in a 3-month block for some residents to none for other residents. Because office visits are the most frequent types of contact family physicians are likely to have with the industry, we thought it necessary to give all our residents an opportunity to interact with PSRs. We also wanted to try to determine whether a structured approach to PSR visits would help residents better understand the role of PSRs and gain more from future interactions. To eliminate variability and provide a standard curriculum, we devised a structured approach to visits with PSRs.

The program had four objectives: to understand the role of PSRs, to practise communicating with PSRs, to practise critical appraisal of advertising and promotional material provided by the drug industry, and to practise communication skills when presenting drug information to preceptors.

### **Program description**

The program began July 1, 1994, and has continued since then at the Misericordia Family Medicine Centre in Edmonton. All first-year family medicine residents (15 each year) who were on block time at the clinic participated in the project. The curriculum consisted of a 1-hour educational seminar presented by a staff physician and a pharmacist and eight structured PSR drug presentations.

To avoid potential bias, no specific inclusion or exclusion criteria based upon company, drug product, or representative were used to choose the PSRs who participated. All PSRs who were making routine office calls were invited to participate.

The seminars were presented to groups of four residents biweekly throughout the block rotation. Five 1-hour sessions were held during each 12-week block rotation and were repeated for each new group of residents throughout the year. All residents were given preliminary reading materials: the CMA *Policy Summary*; *Physicians and the Pharmaceutical Industry* (update 1994)<sup>15</sup> and summaries of the Pharmaceutical Manufacturers Association of Canada's *Code of Marketing Practices*,<sup>20</sup> the Pharmaceutical Advertising Advisory Board's *Code of*  Advertising Acceptance,<sup>21</sup> and the Council for the Accreditation of Pharmaceutical Manufacturers Representatives of Canada's *The Blue Badge of Professionalism.*<sup>22</sup>

During the first scheduled session, participants responded to a six-question true-or-false test to determine their knowledge of the pharmaceutical industry and to a 12-question survey of their knowledge, attitudes, and behaviours with regard to drug detailers.

After completing the written surveys, residents met with a family physician and pharmacist. This seminar provided a forum for discussing the CMA's policy summary<sup>15</sup> as a basis for ethical behaviour between the two groups, research, physician education events, samples, and personal interactions. The pharmacist discussed the role of the Pharmaceutical Manufacturers Association of Canada, including restrictions on the industry regarding advertising, promotion, and physician support, and also explained the format for the upcoming PSR visits. The seminar also dealt with PSRs' educational background and onthe-job training as well as selling techniques that could be used during PSR visits.

For the next four sessions, following each PSR presentation, residents were asked to complete evaluation forms and to discuss the advertising techniques used by the PSR during the presentation (**Figure 1**). Residents were then asked to meet with their preceptors to discuss the drugs covered in the presentation so that preceptors could evaluate residents' knowledge following each PSR visit. At the conclusion of the PSR sessions, residents were asked to evaluate the project.

### Discussion

Our educational intervention allowed all the residents to experience the various types of promotional methods used by PSRs during office visits (discussion, videos, computer-simulated modules, formal presentations, gifts, food, and written materials). It also gave residents several opportunities to practise effective communication during discussions with their preceptors about the PSR presentations.

Responses from the 12 (out of 15) residents who returned seminar feedback forms (**Table 1**) were positive. Eleven (92%) thought the drug-detailer seminars should continue, and they believed they were better prepared to interact with PSRs as a result of the seminars. Six (50%) thought regular visits from PSRs were of little or slight importance. The most often-cited purposes filled by PSRs, of a number of options, were answering questions regarding manufacturers' products, providing cost information, and providing comparative product information.

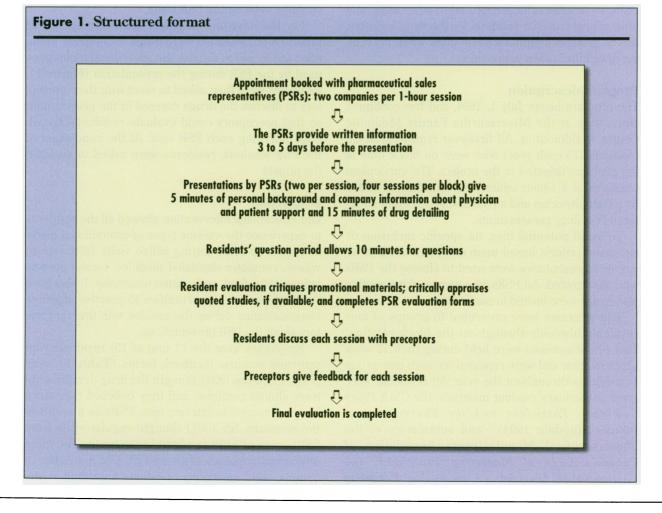
A surprising finding was that, in both the preliminary and final surveys, our residents indicated that journal advertising seldom influenced their decisions about pharmaceuticals. We know from the literature that the pharmaceutical industry spends hundreds of millions of dollars on journal advertising, yet our residents indicated that this information is not used. We speculate that residents' critical appraisal skills are leading them to be skeptical of journal advertising and that, therefore, they are not viewing it as a legitimate source of drug product information.

Of the 53 out of a possible 64 (82%) evaluations of the PSR visits completed, 50 (94%) resulted in discussions between residents and their preceptors, and, at almost all the meetings, residents could consistently explain the use of the products and their cost. This is encouraging because it suggests that, at the end of these encounters, both preceptors and residents would have better knowledge of the product. Most of the PSRs indicated that they liked the new format, and they encouraged us to expand the project to other teaching clinics. They noted to us that a 30minute presentation was not a "typical" office call, but they did appreciate the opportunity to give both personal and company information to the residents.

## Conclusion

We believe that our educational module is better than a written policy that severely restricts interactions between PSRs and residents for providing residents with a better understanding of the role of PSRs and for better preparing them for future professional interactions. While some Canadian programs have decided that their residents will have no industry contact, we have found that a facilitated, structured approach to PSR visits gives residents a stronger foundation for future interactions with the pharmaceutical industry.

Although we continue to offer this educational module, we have not formally surveyed residents who have since finished the program to see



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#### Key points

University of Alberta family practice residents listened to five structured presentations by pharmaceutical sales representatives (PSRs) combined with a seminar led by a pharmacist and a physician and discussions with their preceptors. This program helped to prepare residents for dealing with PSRs in practice.

whether changes in attitudes or prescribing behaviours continue into practice. Further studies are needed in this area. We plan to survey our residents once they are in practice to determine the nature of their ongoing interactions with the pharmaceutical industry.

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### References

- 1. Ziegler M, Lew P, Singer B. The accuracy of drug information from pharmaceutical sales representatives. *JAMA* 1995; 273:1296-8.
- Chren MM, Landefeld CS. Physicians' behavior and their interaction with drug companies. A controlled study of physicians who requested additions to a hospital drug formulary. *JAMA* 1994;271:684-9.
- 3. Chren MM, Landefeld CS, Murray TH. Doctors, drug companies and gifts. *JAMA* 1989;262:3448-51.
- Vinson D, McCandless B, Hosokawa M. Medical students' attitudes toward pharmaceutical marketing: possibilities for change. *Fam Med* 1993;25:31-3.
- 5. Avorn J, Chen M, Hartley R. Scientific versus commercial sources of influence on the prescribing behavior of physicians. *Am J Med* 1982;73:4-8.
- 6. Lexchin J. Interactions between physicians and the pharmaceutical industry. What does the literature say? *Can Med Assoc J* 1993;149:1401-7.
- 7. Pharmaceutical Manufacturers Association of Canada. A 5 year report on the Canadian brand name pharmaceutical industry: 1988-1993. Ottawa: Pharmaceutical Manufacturers Association of Canada; 1993.

- 8. Commission of Inquiry of the Pharmaceutical Industry. *The report of the Commission of Inquiry of the Pharmaceutical Industry.* Ottawa: Pharmaceutical Manufacturers Association of Canada; 1985. p. 223.
- 9. Shaughnessy A, Slawson D, Bennett J. Teaching information mastery: evaluating information provided by pharmaceutical representatives. *Fam Med* 1995;27:581-5.
- 10. Anastasio G, Little J. Pharmaceutical marketing: implications for medical residency training. *Pharmacotherapy* 1996;16(1):103-7.
- 11. Shear NH, Black F, Lexchin J. Examining the physiciandetailer interaction. *Can J Clin Pharmacol* 1996;3(4):175-9.
- 12. Brotzman G, Mark D. Policies regulating the activities of pharmaceutical representatives in residency programs. *J Fam Pract* 1992;34(1):54-7.
- 13. Brotzman G, Mark D. Policy recommendations for pharmaceutical representative-resident interactions. *Fam Med* 1992;24:431-2.
- 14. Education Council, Residency Training Programme in Internal Medicine, Department of Medicine, McMaster University. Development of residency program guidelines for interaction with the pharmaceutical industry. *Can Med Assoc J* 1993;149:405-8.
- 15. Canadian Medical Association. Policy summary. Physicians and the pharmaceutical industry (update 1994). *Can Med Assoc J* 1994;150:256A-C.
- Sergeant M, Hodgetts PG, Godwin M, Walker D, McHenry P. Interactions with the pharmaceutical industry: a survey of family medicine residents in Ontario. *Can Med Assoc J* 1996;155:1243-7.
- 17. Guyatt G. Academic medicine and the pharmaceutical industry: a cautionary tale. *Can Med Assoc J* 1994;150:951-3.
- Lurie N, Rich EC, Simpson DE, Meyer J, Schiedermayer DL, Goodman JL, et al. Pharmaceutical representatives in academic medical centres: interaction with faculty and housestaff. J Gen Intern Med 1990;5:240-3.
- 19. Toth E, McAllister F. Medical education and the pharmaceutical industry. Position of the Department of Medicine, University of Alberta, with special reference to the residency training program. *Bioethics Bull* 1995;7(1):4-5.
- 20. Pharmaceutical Manufacturers Association of Canada. *Code of marketing practices.* Ottawa: Pharmaceutical Manufacturers Association of Canada; 1993.
- 21. Pharmaceutical Advertising Advisory Board. *Code of advertising acceptance*. Pickering, Ont: Pharmaceutical Advertising Advisory Board; 1993.
- 22. Council for the Accreditation of Pharmaceutical Manufacturers Representatives of Canada. *The blue badge of professionalism*. St Laurent, Que: Council for the Accreditation of Pharmaceutical Manufacturers Representatives of Canada.