
Involvement of Pharmacy Faculty in the Development of Policies for Pharmaceutical Sales Representatives

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Background. Few studies evaluating the impact of the pharmaceutical industry on postgraduate medical education have been done. Recently, position statements and professional guidelines have emerged to ensure the integrity of physician-industry relationships in the areas of clinical judgement, research, and medical education.

Methods. The present study surveyed directors of family practice residency programs in the United States to define the level of pharmacotherapy curriculum development and the existence of policies for pharmaceutical sales representatives.

Results. Of the 383 directors, 325 (85%) responded to a mailed survey. Nearly one third (32%) of the responding programs had pharmacist faculty, the majority of whom held a doctor of pharmacy degree. Approximately 30% of programs reported that they had printed guidelines for pharmaceutical sales representatives.

Conclusions. Programs with pharmacist faculty are more likely to have a well-developed pharmacotherapy curriculum and printed guidelines for pharmaceutical sales representatives.

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There is a paucity of information regarding the impact of the pharmaceutical industry (specifically, drug representatives) on postgraduate medical education. Although scattered "letters to the editor" in the medical literature discuss methods of "training the resident to meet the detail men," few studies to date have been published to evaluate the impact of industry on medical education.¹⁻⁶

Medical ethicists and concerned physicians have begun to analyze the practice of accepting gifts from drug companies and the issue of potential conflicts of interest between medical professionals and the pharmaceutical industry.^{7,8} Chren et al⁸ stated that "students and physicians in training should be instructed in the ethical dangers inherent in relationships with drug company representatives." They proposed that the medical profession acknowledge these issues and address them directly.

Recently, the American College of Physicians (ACP) has drafted a position statement, endorsed by the Pharmaceutical Manufacturers Association (PMA), that was designed to ensure the integrity of physician-indus-

try relationships in the areas of clinical judgement, research, and medical education.^{9,10} The ACP supports educating medical students and residents on acceptable responses to offerings from the pharmaceutical industry and believes that faculty members should set examples for their students by conducting themselves in a highly principled manner.⁹ One strategy suggested by ACP to accomplish this goal is to notify drug companies of the scope and boundaries of activities judged to be suitable for that campus.⁹ This statement was followed by the American Medical Association (AMA) guidelines to physicians on accepting gifts from pharmaceutical, device, and medical equipment companies.^{11,12} The paper by the AMA states that "scholarship or other special funds to permit medical students, residents, and fellows to attend carefully selected educational conferences may be permissible as long as the selection of students, residents, or fellows who will receive the funds is made by the academic or training institution."¹¹

The objective of this study was to obtain demographic information from family practice residency program directors concerning pharmacist involvement in the development of curricula and the existence of policies for pharmaceutical (drug) sales representatives. This information may be useful in assessing the impact of the pharmaceutical industry on resident training and continuing medical education. Information was also elicited

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about the presence of pharmacist faculty members to determine whether there was a correlation between their presence and restrictions on prescribing and policies for pharmaceutical representatives. Specific research questions included determining the following: (1) the number of family practice programs that involved a pharmacist in the development of the pharmacotherapy curriculum; (2) the number of family practice programs that limit the medications that may be prescribed within their model practice; (3) the number of family practice programs that structure the interaction between pharmaceutical representatives and providers and the ways this interaction is restricted; and (4) the perceived impact of the pharmaceutical industry on physician prescribing.

Methods

A survey with 35 questions was piloted among the eight family practice programs in North Carolina in September 1989. Program directors were asked to comment on the content of the survey and on any difficulties encountered in completing it. Suggestions were incorporated into the final questionnaire, which was subsequently mailed to 383 family practice program directors in the United States in November 1989. Respondents were asked to return the completed survey as soon as possible. A second mailing was sent to those who had failed to respond by January 1990.

The survey consisted of questions addressing the demographic profile of the residency program, the involvement of a pharmacist in the curriculum, and the policies regarding pharmaceutical representatives, as well as a series of attitudinal statements about the perceived influence of pharmaceutical representatives on resident education. Descriptive statistics were used to determine the percentage of respondents in each category of questions asked.

Results

A total of 325 (85%) usable questionnaires were returned from program directors. Of the 325 programs represented, 260 were community-based, 50 were university-based, and 12 were affiliated with a military hospital; 3 program did not specify any affiliation. The average number of residents in each program was 20.48.

In response to the question, "Do you have a pharmacist faculty member coordinating the pharmacotherapeutics curriculum for your program?" 32% responded yes and 66.8% responded no. Of those programs with a

Table 1. Pharmacy Faculty and Pharmacotherapy Curriculum Teaching Strategies from 325 Family Practice Residency Programs

Teaching Strategies	Program with Pharmacist Faculty (%)	Program without Pharmacist Faculty (%)	P value
Monthly conference	65.4	37.8	.000
Chart review	57.7	48.9	.138
Newsletter	27.9	12.0	.000
Unit lectures	47.1	27.7	.001
Consultation	86.5	42.4	.000
Handbooks	23.1	24.9	.724
Other	30.8	13.8	.000

pharmacist faculty member coordinating the curriculum, approximately 32% were community-based programs vs approximately 44% that were university-based programs. The difference in programs was not statistically significant. Of those programs with a pharmacist faculty member, terminal degrees were reported as follows: 78.9%, PharmD; 9.6%, BS; 4.8%, MS; and 4.8%, PhD. Approximately 54% of these are full-time positions and 46% are part-time positions. Of those programs with no pharmacist faculty member coordinating the pharmacotherapy curriculum, 9.6% reported they have a nonpharmacist faculty member who teaches the curriculum (76.2% of whom are MDs), while 86.2% reported no to this question.

Teaching strategies used to implement the pharmacotherapy curriculum included: monthly conferences (47.1%), chart review (52%), newsletters (17.5%), unit lectures (33.8%), consultation (56.9%), and handbooks (24.3%). Programs with pharmacist interventions were more likely to have monthly noon conferences, newsletters, unit lectures, consultations, and other teaching strategies than programs without pharmacist interventions (Table 1).

In response to the question, "Does your curriculum include methods to evaluate the materials (eg, brochures, study reprints) provided by drug representatives?" 20.5% responded yes, 72% responded no, 2.5% reported "do not know," and 5% did not respond. Programs with pharmacist interventions were more likely to include methods to evaluate the materials provided by pharmaceutical sales representatives (35.4% with pharmacist interventions vs 16.8% without pharmacist interventions [$P < .001$]).

Approximately 43% of residency family practice centers had an on-site pharmacy staffed by pharmacists.

Table 2. Policies for Pharmaceutical Sales Representatives*: Survey Answers from 325 Family Practice Residency Programs

Policy	Yes (%)	No (%)
Samples for patients	72.9	25.2
Samples for personal provider use	47.1	51.1
Promotional literature	40.9	56.6
Limited contact with faculty and residents	78.8	20.2
Limited access to building	64.0	32.9
Limited access (by appointment only)	70.5	26.2
Limited number of interactions	45.8	42.8

*Totals do not equal 100% because some programs responded "do not know" or did not respond.

Of those who responded, 35% reported that there were limitations to the medications that could be routinely prescribed within the practice, while 63.7% reported no limitations. Approximately 45% responded that drug samples are restricted. There was no difference in the limitations put on the medications routinely prescribed between programs with pharmacist interventions and programs without pharmacist interventions. However, programs with an on-site pharmacy were more likely to have limitations to the medications that could be routinely prescribed (51.4% with an on-site pharmacy vs 23.9% without an on-site pharmacy; $P = .007$).

Program policies for pharmaceutical sales representatives are summarized in Table 2. Samples were available for patients in 72.9% of programs. Approximately 50% of programs permitted samples for personal use. Fifty-seven percent of programs did not permit promotional literature, 79% limited contact between pharmaceutical sales representatives and faculty and residents, and 64% had limitations on sales representatives entering the building. There is no difference in program policies for pharmaceutical representatives between programs with pharmacist interventions and programs without pharmacist interventions. The types of pharmaceutical support permitted are listed in Table 3.

Approximately 30% of programs reported that they had printed guidelines for pharmaceutical representatives. Programs with pharmacist faculty were more likely to have printed guidelines for pharmaceutical represen-

Table 3. Types of Pharmaceutical Support Permitted for Residency Program Activities*: Responses to Survey from 325 Family Practice Residency Programs

Types of Support	Yes (%)	No (%)
Display in model practice	60.6	31.7
Conference food	87.7	9.2
Conference speaker	87.7	8.3
Social activities	79.4	15.7
Funding for research	68.3	23.4
Books and references	88.3	7.4
Office supplies	86.5	8.9
Patient educational materials	89.8	4.9

*Totals do not equal 100% because some programs responded "do not know" or did not respond.

tatives than programs without pharmacists (40.2% with pharmacists vs 25.2% without pharmacists; $P = .007$).

Program directors were asked to indicate their degree of agreement with a series of attitudinal statements about the influence of pharmaceutical representatives on resident education and physician prescribing practices using a five-point Likert scale ("strongly agree" to "strongly disagree"). Most respondents "agreed" that residents are provided with a "balanced" exposure to the pharmaceutical industry (55.7%), that pharmaceutical representatives are a valuable resource of drug information to both residents (48.3%) and practicing physicians (55.1%), and that the information and resources that are provided by pharmaceutical representatives affect the prescribing behavior of residents (56.3%) and practicing physicians (56.2%). There was no correlation between pharmacist intervention and whether the program director believes that the information or resources provided by pharmaceutical representatives affect the prescribing behavior of residents. In programs without a pharmacist faculty member, it is more likely for the program director to believe that the resources provided by pharmaceutical representatives affect the prescribing behavior of practicing physicians ($r = .14$; $P = .014$).

Discussion

The objective of this study was to survey family practice residency program directors and obtain demographic information concerning pharmacist involvement in the development of curricula and the existence of policies for pharmaceutical representatives. This survey revealed that nearly a third (32%) of responding programs had pharmacist faculty, the majority of whom held a doctor of pharmacy (PharmD) degree.

Programs with pharmacists were more likely to have

monthly noon conferences, newsletters, unit lectures, consultations, and other teaching strategies than programs without pharmacist interventions. More than half of the programs surveyed did not have an on-site pharmacy, and only 35% limited the medications that may be prescribed within the practice. In this area, there was no difference between programs with pharmacist interventions and programs without pharmacist interventions, although programs with an on-site pharmacy were more likely to have limitations on the medications that may be routinely prescribed.

There was no difference in program policies for pharmaceutical representatives between programs with pharmacist faculty and those without, but programs with pharmacists, were more likely to have printed guidelines for pharmaceutical representatives and were more likely to evaluate the materials that they provided.

Finally, program directors' impressions of the influence of pharmaceutical representatives on resident education and the practicing physician were favorable, with the majority agreeing that drug company representatives were a valuable resource, affording residents a balanced exposure to the pharmaceutical industry.

Based on the information derived from this survey, future research efforts should include an assessment of the impact of pharmacist faculty on the pharmacotherapeutic knowledge of family practice residents. A comparison of resident attitudes of the impact of the pharmaceutical industry on their training based on whether their programs have guidelines for pharmaceutical sales representatives or an established pharmacotherapy curriculum would also be of interest.

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See editorial comments on pages 29 and 32.
