

# The Opinions and Experiences of Family Physicians Regarding Direct-to-Consumer Advertising

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**BACKGROUND.** The use of direct-to-consumer advertising (DTCA) by pharmaceutical companies is increasing. Our study examines the opinions and experiences of family physicians concerning DTCA.

**METHODS.** A survey instrument designed to elicit the opinions, experiences, and perceptions of family physicians about DTCA was sent to a 2% (N = 880) systematic sampling of active physician members of the American Academy of Family Physicians. Descriptive statistics were used to analyze responses with *t* tests and  $\chi^2$  tests for independence used to examine subgroup response differences.

**RESULTS.** Four hundred fifty-four (52%) physicians responded to the survey. Most physicians (95%) had encountered DTCA personally, and had been approached by an average of 7 patients over the previous 6 months with requests for specific prescription drugs. Prescription antihistamines and antihypertensive drugs were the most commonly requested. Overall, 80% of the physician respondents believed that print DTCA was not a good idea, while 84% expressed negative feelings about television and radio advertising. Both groups cited "misleading biased view" and "increased costs" as the most common disadvantages. Some reported benefits included "better informed patients" and "promoting physician-patient communication."

**CONCLUSIONS.** Overall, the study group physicians had negative feelings about DTCA in both print and electronic media. Studies directly examining patient perspectives, as well as cost benefits, are necessary to test the validity of the physicians' perceptions about DTCA.

**KEY WORDS.** Advertising; economics, pharmaceutical; marketing; prescription; physician-patient relations; family practice. (*J Fam Pract* 1997; 45: 495-499)

Traditionally, the pharmaceutical industry promoted prescription drugs to only licensed health care professionals. However, as the industry has become more competitive, companies have tried new strategies in the hope of increasing their market share. One new type of promotion is direct-to-consumer advertising (DTCA).<sup>1</sup> In this type of advertising, pharmaceutical firms market prescription drugs directly to the public using such popular media as television, radio, and print.

Previously, pharmaceutical companies feared that DTCA would alienate physicians. But during

the early 1980s, when Syntex first marketed Naprosyn in England, the drug became a topic of interest on several talk shows, resulting in sales that exceeded the typical revenues for a new drug.<sup>2</sup> Following the Syntex example, US manufacturers began marketing prescription products to the public. In 1983, the FDA issued a moratorium that restricted DTCA while the agency considered a change in its advertising policy. Although the FDA lifted the moratorium in 1985,<sup>3</sup> DTCA remains controversial.

Opponents of DTCA believe that it misleads the consumer. Additional concerns include the potential for pressuring physicians into ordering unnecessary drugs, fostering an overdependence on medication, undermining the doctor-patient relationship, and increasing costs.<sup>4-6</sup> Proponents of DTCA argue that this type of advertising could educate patients and make them better consumers. And, after viewing an advertisement for a prescription drug, patients

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might also seek out physicians' advice for a treatable condition.<sup>7,8</sup>

Previous research on DTCA has been restricted in generalizability because of biased sampling and weak methodologies.<sup>9</sup> Our study examined the opinions and experiences of family physicians concerning DTCA. We surveyed family physicians' knowledge about DTCA, their impressions of the impact of DTCA on their practice and patients, and its overall potential benefits and harm.

## METHODS

The study sample consisted of a systematic sampling of active members of the American Academy of Family Physicians (AAFP). We estimated that a sample size of 440 (1% of AAFP membership) would provide adequate power to detect a moderate effect when using a  $\chi^2$  test for independence to measure differences in categorical variables ( $df < 4$ ).<sup>10</sup> Anticipating a 50% response rate, we doubled the sample to 880 physicians. Each physician received a letter describing the study and a short questionnaire. Follow-up letters were used to increase the response rate.

The survey instrument was designed to elicit the opinions of family physicians about DTCA, their personal experiences with DTCA, their impressions of the impact of DTCA on their patients, and their overall rating of DTCA as a method of marketing new prescription drugs. Questions were divided into three categories derived from a review of the literature: physician behavior, patient behavior, and pharmaceutical company issues. The questionnaire was pilot tested within the Department of Family Medicine at the Medical College of Ohio and suggested clarifications were incorporated into the final draft.

Although primarily a descriptive study, Student's *t* tests and  $\chi^2$  tests for independence were used to examine differences in continuous and categorical variables. The  $\alpha$  level was set at  $P = .05$  for a two-tailed test. Responses to open-ended questions were reviewed and sorted into categories based on similarity of response by one of the investigators. The second investigator repeated the sort using the established categories. After a clarifying discussion, interrater reliability was 98%.

## RESULTS

Four hundred fifty-four (52%) physicians responded to the mailing, yielding 419 complete, usable surveys. The average responder was 46 years old, male (83%), and board certified (90%). Responders reported practicing in the following settings: 32% solo practice, 49% partnership or small group, and 20% multispecialty groups. These demographics closely approximate the active AAFP demographic profile with the exception of an overrepresentation of board-certified physicians ( $\chi^2 = 22.6$ ,  $P < .05$ ) and underrepresentation of female physicians ( $\chi^2 = 4.3$ ,  $P < .05$ ). There is no reason to suspect that nonresponders' answers would differ significantly from responders' in their perception and experience with DTCA.

## STUDY QUESTIONS

Physicians were asked to respond to eight statements; three related to patient behaviors, three to pharmaceutical company issues, and two to physician behaviors. Physicians were given four response choices: strongly agree, agree, disagree, and strongly disagree. Because several of the  $\chi^2$  analyses yielded empty cells, the four categories were collapsed into two: agree and disagree.

Most of the physicians (95%) had personally encountered DTCA through radio (25%), television (75%), or print (85%). Responders estimated that patients asked them about a drug an average of 6.9 times (range 0 to 100) in the previous 6 months, with 82% reporting at least one specific drug name. The most common prescription drug categories (brand names) listed were: antihistamines (Claritin-D, Hismanal, Seldane); antihypertensive drugs (Hytrin, Cardizem, Cardizem CD, Procardia);  $H_2$ -blockers\* (Zantac, Pepcid); and cholesterol-lowering drugs (Mevacor).

A majority of physicians (60%) agreed that "DTCA encourages patients to take a more active role in their health care." Fifty-six percent agreed that "DTCA encourages patients to seek medical advice for conditions that may otherwise go untreated," and 73% agreed that "DTCA alerts patients to new products." Female physicians were more likely to agree with both the "seeks medical

\* $H_2$ -blockers had not been sold at the time of the mailing.

advice" (67% vs 53%,  $P=.03$ ) and "alerts patients" (84% vs 71%,  $P=.02$ ) statements.

Respondents were more negative about the impact of DTCA on "pharmaceutical company issues." A majority (78%) disagreed with the statement that "DTCA promotes healthy competition between pharmaceutical companies," 75% agreed that "DTCA results in increased prices for drugs," and 72% agreed that "DTCA discourages the use of generics." Board-certified physicians were more likely to agree with the "increased price" question than their non-board-certified counterparts (77% vs 57%,  $P=.01$ ).

When asked about physician-related issues, more than 89% disagreed with the statement that "DTCA enhances the physician-patient relationship," and 71% agreed that "DTCA pressures physicians to use drugs they might not ordinarily use." Again, board-certified physicians were more likely to agree with the "pressures physician" question (73% vs 49%,  $P=.001$ ). Table 1 summarizes these data.

Physicians found little to differentiate print and television/radio advertisements. They reported beliefs that both print (76%) and television/radio (81%) advertisements were misleading; both media types failed to balance risks and benefits (print, 94% and television/radio, 95%); and that overall, "DTCA was not a good idea" in either form (print, 80% and television/radio, 84%).

Finally, physicians were asked to list the potential benefits or disadvantages that might result from DTCA. Physicians listed 364 potential benefits, of which 303 (83%) could

be grouped into five major categories. Table 2 summarizes the five "benefit" categories. Physicians listed 591 potential disadvantages of DTCA, of which 469 (79%) could be grouped into eight categories. Table 3 summarizes the eight "disadvantage" categories.

## DISCUSSION

Advertising prescription drugs directly to consumers is becoming more common, with more than \$350 million spent on DTCA in 1995.<sup>11</sup> One admitted goal of advertising is to promote products and increase sales. Prescription drugs differ from typical commodities, however, as these products are usually selected by health care providers rather than by consumers. By advertising directly to the public, companies circumvent

TABLE 1

### Positive Responses to Study Questions, by Sex and Board Certification

Survey Study Questions	By Sex (% agree)		By Certification (% agree)	
	Male	Female	Certified	Uncertified
<b>Patient behavior</b>				
DTCA alerts consumers to new therapies	71*	84	73	68
DTCA encourages patients to take a more active role in their health care	58	68	59	60
DTCA encourages people to seek medical advice for conditions that might otherwise go untreated	53*	67	55	59
<b>Pharmaceutical company issues</b>				
DTCA discourages the use of generic products	71	76	73	58
DTCA results in increased prices for drugs	74	77	77*	57
DTCA promotes healthy competition among pharmaceutical companies	23	19	21	32
<b>Physician behavior</b>				
DTCA pressures physicians to use drugs they might not ordinarily use	70	77	73*	49
DTCA enhances the physician-patient relationship	12	15	12	13

\*  $P<.05$ .

TABLE 2

**Physician List of Perceived Benefits of Direct-to-Consumer Advertising, Categorized by Five Most Common Statements**

Benefit Statements	No. (%) (n=364)*
Better informed patients/increased awareness	203 (56)
Patients recognize problems earlier/increased office visits	44 (12)
Patients take a more active role in health care	27 (7)
Promotes physician-patient communication	19 (5)
Better patient compliance/patient acceptance	10 (3)

\*Number does not total 364 because only 303 responses could be grouped into these five categories of benefit statements.

TABLE 3

**Physician List of Perceived Disadvantages of Direct-to-Consumer Advertising, Categorized by Eight Most Common Statements**

Disadvantage Statements	No. (%) (n= 591)*
False hope/misleading biased view	152 (26)
Increased costs for drugs	106 (18)
Creates an unnecessary/inappropriate demand	65 (11)
Creates conflict between patient and physician	44 (7)
Confuses the patient/causes anxiety	38 (6)
Promotes self-diagnosis/self-treatment	33 (5)
Promotes superficial knowledge	19 (3)
Promotes "easy answer"/"pill for everything"	12 (2)

\*Number does not total 591 because only 469 responses could be grouped into these eight categories of disadvantage statements.

this process in the hope that patients will ask their doctors to prescribe a specific drug. The finding that 95% of the survey group reported encountering patients requesting specific drugs suggests that DTCA has met its advertising goal.

A majority of the physicians surveyed (71%), however, felt that DTCA was not beneficial. These physicians believed that DTCA impaired the doctor-patient relationship and discouraged the use of comparable generic medications. The surveyed physicians estimated that over the previous 6 months, an average of seven patients had asked for specific drugs by name. Since patient requests can influence physician behavior,<sup>12</sup> advertising might influence a physician's choice of medication. Seventy-one percent of this study group agreed that DTCA pressured them to prescribe a pharmaceutical agent that they otherwise might not have chosen.

Slightly more than half of the physicians (56%) in this survey agreed that DTCA results in a better informed public and alerts patients to seek care for conditions that might otherwise go untreated. A study evaluating nicotine patches suggested that DTCA encouraged patients to seek treatment for smoking cessation,<sup>13</sup> supporting the study group's perception that DTCA influences patients to seek care.

Opponents of DTCA also contend that advertising oversimplifies complex issues. Although the FDA's "fair balance" doctrine requires DTCA to include precautions, a recent study demonstrated that test subjects were more apt to remember a drug's potential benefits than its risks.<sup>9</sup> The current study group reported "promoting a biased view of the product" as the leading concern about DTCA across both printed and electronic media.

Although the study findings indicate that physicians regard DTCA negatively, one limitation might be an inherent bias because physicians may feel threatened and thus less objective about the benefits of DTCA. Studies that directly examine patient perspectives as well as the costs and benefits are necessary to test the validity of physicians' perceptions.

Because the majority of physicians surveyed have had patient care encounters related to DTCA and view them in a negative light, we believe that our results suggest the need for further evaluation of the impact of advertising directly to consumers and for caution about its growing use by the pharmaceutical industry. Studies evaluating costs and the consumer's ability to assess the risks and benefits of DTCA will be important in confirming the

validity and ramifications of the negative perceptions reported here.

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