

Evidence-based answers from the
Family Physicians Inquiries Network

CLINICAL INQUIRIES

Q/ Does DTC advertising affect physician prescribing habits?

EVIDENCE-BASED ANSWER

A/ YES, BUT THE EFFECT VARIES BY CONDITION. Direct-to-consumer advertising (DTCA) is associated with both higher fidelity to minimum treatment recommendations for depression and higher prescribing levels of antidepressants for depression and adjustment disorder (strength of recommendation [SOR]: **B**, small randomized controlled trial [RCT]). DTCA is also associated with higher prescribing rates for osteoarthritis, allergies,

and hyperlipidemia (SOR: **C**, time-series analyses).

No changes in prescribing rates have been noted for hypertension and benign prostatic hyperplasia (SOR: **C**, time-series analyses).

Physicians often accommodate requests for DTCA medications (SOR: **C**, 4 surveys). In some cases, they wouldn't have considered such prescriptions for other similar patients (SOR: **C**, 3 surveys).

Evidence summary

An RCT demonstrated increased prescribing rates when unannounced, standardized patients who imitated symptoms of either major depression or adjustment disorder requested a prescription. In 298 visits, 152 family physicians and internists prescribed antidepressants at significantly different rates when patients mimicking major depression requested brand-specific (53%), general (76%), or no medication (31%) ($P < .001$). Corresponding rates for adjustment disorder were 55%, 39%, and 10% ($P < .001$). The study found no difference in prescribing rates between family physicians and internists or between male and female physicians.

For patients presenting with depression, physician fidelity to minimum recommended treatment (defined as any combination of antidepressants, mental health referral, and 2-week follow-up) was 90% for patients making a brand-specific request, 98% for those making a general request, and 56% for those making no request ($P < .001$).¹

Patients who ask for DTCA meds are more likely to get a prescription

A cross-sectional survey compared prescrib-

ing decisions by 38 US and 40 Canadian physicians for 1431 patients. Most physicians fulfilled requests for DTCA medications (US 78%, Canadian, 72%). Patients who requested a DTCA medication were far more likely to receive a new prescription (DTCA or other) than patients who didn't (odds ratio [OR]=16.9; 95% confidence interval [CI], 7.5-38.2). Although DTCA is illegal in Canada, market contamination seems likely, because the study was done in Vancouver, British Columbia.

US patients made more requests for DTCA medications (OR=2.2; 95% CI, 1.2-4.1) than Canadian patients. When patients made DTCA-related requests, physicians considered 50% of new prescriptions to be only "possible" or "unlikely" choices for other similar patients, compared with only 12.4% when patients didn't make such requests ($P < .001$).²

DTCA drugs often trump other options

A national telephone survey of 3000 adults found that 35% of respondents were prompted by DTCA to discuss the medication or related health concern at a doctor visit. Of these, 72.9% reported receiving a new prescription, and 43% of them were for the advertised drug.³

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In 1 study, patients who requested a direct-to-consumer advertising medication were far more likely to receive a new prescription (DTCA or other) than patients who didn't.

➤ **Physicians often accommodate a request for a direct-to-consumer advertising drug, despite other equally effective options.**

Another survey of 643 physicians showed that 39% of visits influenced by DTCA resulted in new prescriptions for the advertised drug. Physician stated they prescribed the DTCA medication because they wanted to:

- prescribe the most effective drug (46%),
- accommodate the request despite other equally effective options (48%), or
- accommodate the request despite more effective options (5.5%).

Medications other than the advertised drug were prescribed during 22% of DTCA-influenced visits.⁴

DTCA and prescriptions: Mixed results

A time-series analysis examined the relationship between advertising expenditures for several types of drugs and prescriptions written from 1992 to 1997.⁵

Advertising for antilipemic drugs was positively associated with prescriptions for both antilipemics in general (41 prescriptions for every \$1000 of advertising; $P=.003$) and Zocor in particular (23/\$1000; $P<.001$). Advertising for antihistamines in general and Claritin in particular were both positively associated with prescriptions for Claritin (general advertising: 24/\$1000; $P=.004$; Claritin-specific advertising: 45/\$1000; $P=.005$).

Advertising for acid-peptic disorder medications was inversely associated with Zantac prescriptions (-59 prescriptions/\$1000, $P=.004$). This finding may be related to the emergence of, and advertising for, proton pump inhibitors during this time.

No relationship between advertising and prescribing was found for antihypertensives or medications for benign prostatic hypertrophy.

More frequent advertising doesn't necessarily mean more prescriptions

Another time-series analysis examined the

relationship between the frequency of local DTCA for cyclooxygenase-2 (COX-2) inhibitors and prescriptions for COX-2 inhibitors in the corresponding months. DTCA was not significantly associated with Celebrex prescriptions, but was slightly associated with Vioxx prescriptions ($P=.04$, 10-fold increase in DTCA associated with a 0.5% increase in prescriptions; $P=.04$). Practices farther than 100 miles from a media market and those that prescribed Vioxx infrequently were excluded.⁶ (In 2004, Vioxx was withdrawn from the US and worldwide markets.)

But patient questions about a specific ad get results

A survey of 2929 patients regarding the appropriateness of COX-2 inhibitors showed that 78% of patients who asked their physician about a COX-2 advertisement received a prescription for a COX-2 inhibitor (instead of a nonsteroidal anti-inflammatory drug) compared with 43% of all other patients.⁷

Recommendations

The American Medical Association (AMA) encourages physicians approached by patients about advertised medications to initiate a dialogue in order to enhance the patient's understanding of the underlying condition. Requested medications should be prescribed only if indicated and cost effective relative to other options.

The AMA also recommends that physicians report (to the pharmaceutical company or the US Food and Drug Administration) ads that are inaccurate, incomplete, or imbalanced, and ads that don't enhance patient education or encourage patients to have a discussion with their physician.⁸

JFP

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