What Do We Know About Direct-To-Consumer Advertising Of Prescription Drugs?

The emerging evidence on DTC advertising is consistent with a larger pattern in which marketing has been found to increase consumer welfare.

by John E. Calfee

ABSTRACT: Two papers, by Joel Weissman and colleagues and by Robert Dubois, add to our limited knowledge of the effects of direct-to-consumer (DTC) advertising of prescription drugs. Their results reinforce the largely positive findings from consumer surveys, while adding valuable new data and insights. These suggest that DTC ads probably improve patients' health outcomes and do not tend to lead to inappropriate prescribing. DTC advertising is emerging as a positive force in health care markets, consistent with what is known about the effects of advertising in many other markets.

We do not know a lot about the effects of direct-to-consumer (DTC) advertising of prescription drugs, not even the answers to such basic questions as whether it increases pharmaceutical sales or usage within specific therapeutic categories.

This level of ignorance is typical of markets generally. Theory provides little guidance on the total market effects of advertising. Empirical answers are not easily obtained, mainly because advertising is typically a weak force in comparison to other factors. Individual firms have little reason to look beyond the brand-level effects of their own advertising. Most scholarly research on advertising's total market effects has therefore explored controversial products such as tobacco and alcohol, in both of which advertising appears to exert little or no effect on total demand.

Research On DTC Advertising

DTC advertising poses special challenges to researchers. The requirement that patients obtain a prescription impedes quick returns from advertising and brings into play powerful forces including a physician's assessment of whether the targeted consumer needs the advertised product. When diagnostic testing and alternative treatments are involved, even a strong influence from advertising is necessarily delayed and consequently difficult to measure. These difficulties are reflected in the mixed results of the few available econometric studies of DTC advertising.

Existing research. Much of what we do know about DTC advertising comes from a series of consumer surveys, especially those by the U.S. Food and Drug Administration (FDA) and Prevention magazine. These show that consumers are almost all aware of DTC advertising; use many information sources in addi-
tion to advertising; often talk to their doctors about advertised drugs and frequently obtain prescriptions for them; often receive prescriptions for other drugs, recommendations for over-the-counter (OTC) drugs, and lifestyle advice; frequently talk to their doctors about conditions not previously discussed; sometimes receive unexpected diagnoses; are reminded to refill and take prescriptions; and find DTC advertising useful. Some of these effects constitute spillover benefits to patients and other parties besides advertisers.

**New research.** But these surveys fall far short of permitting a confident determination of whether DTC ads improve consumers’ health or, as critics believe, induce unwise or even harmful prescribing. Two Web-exclusive papers, by Joel Weissman and colleagues and by Robert Dubois, provide valuable additions to research on the effects of DTC advertising.

Dubois exploits a simple but powerful idea to generate an interesting implication about pharmaceutical promotion. He begins with recent research showing inappropriately large geographical disparities in standard medical procedures. This suggests that many patients have suffered from the failure of evidence-based practice guidelines to achieve widespread awareness and adherence in our decentralized body of medical practitioners, a result that is consistent with numerous published studies of the highly imperfect influence of these guidelines. Dubois then notes that physicians are much more likely to adhere to consensus standards for pharmaceutical usage. He suggests that one important reason for the superior record in drug therapy lies in the fact that brand-name pharmaceutical manufacturers have strong financial incentives to disseminate up-to-date prescribing recommendations, to remind physicians to follow them, and to alert consumers of new drug therapies. No such incentive exists for medical procedures, which are largely unpatentable. Dubois also reviews data indicating that large increases in advertising for lipid-lowering drugs have not been associated with adverse trends in prescribing standards. He concludes that at least for therapeutic categories characterized by underdiagnosis and undertreatment, DTC advertising probably confers substantial benefit and little if any harm. He also thinks that attempts to restrict DTC advertising to therapeutic categories in which its benefits have already been demonstrated would be infeasible or counterproductive.

Weissman and colleagues report the results of a large, ambitious, and carefully executed consumer survey. Many of their results reinforce the robustness of the survey findings described earlier, which are largely replicated with valuable new details on health status and other correlates. But their study went further than previous survey research, using an elaborate questionnaire structure to learn what happened after patients talked to their physicians about advertised drugs. The authors found that overwhelming majorities of patients felt better, encountered reduced symptoms, and obtained improved diagnostic test results. Comparing situations with greater or lesser DTC influence, Weissman and colleagues found no evidence to associate DTC advertising with inappropriate prescribing or worsened outcomes. Subject to the methodological limitations of survey research (described in some detail), the authors concluded that DTC advertising probably improves patient outcomes and (consistent with earlier survey research) confers positive market spillovers in the form of lifestyle advice and recommendations to take non-advertised drugs.

**DTC Advertising Research In Context**

DTC advertising is but a relatively small portion of drug marketing, and the debate over its effects is part of a broader debate over drug marketing generally. This in turn is another chapter in decades of scholarly and popular
dispute over advertising’s role in modern markets. On the whole, advertising has come to be seen as a procompetitive force, sufficiently so that the Federal Trade Commission (FTC) attacks restrictions on advertising, notably including advertising in health care markets, in which the FTC regulates virtually all advertising except that for prescription drugs. Especially important in the present context is research over the past three decades on advertising’s benefits in terms of improved consumer information and downstream effects such as lower prices, improved choices, and improved products. Intuition and anecdotal evidence also suggest that pharmaceutical markets exhibit a feedback process in which successful marketing increases incentives for research and development. The U.S. Supreme Court cited some of this advertising research in a series of decisions expanding First Amendment protection for commercial speech. These protections have recently come to include FDA regulation of food and drugs, leading the FDA to reassess its advertising regulations.10

The emerging evidence on DTC advertising is therefore consistent with a larger pattern in which marketing has been found to improve markets and increase consumer welfare. Overly stringent regulation can dampen or eliminate these benefits, as has been shown in a series of FTC staff reports and journal articles on health claims for foods. The fact that advertising appears to work well in markets for medical devices, hospitals, and physicians, all of which are regulated according to the FTC’s empirically based deception standards rather than the FDA’s far stricter per se rules for prescription drugs, suggests that fears of large-scale consumer deception by DTC advertising are probably groundless.

DTC advertising may eventually be viewed by health care analysts not as an exception to the benefits of advertising but as a striking example of those benefits. But, again, we have not begun to plumb the depths of the workings of DTC advertising. This form of promotion may remain largely an adjunct to more traditional methods, especially physician detailing. The strongest impact of DTC advertising may prove to be not the initiation of prescriptions but the improvement of drug therapy compliance, an extraordinarily costly problem that has eluded all efforts to assuage it.12 DTC advertising is a natural tool for improving compliance. If it is shown to do so to a substantial degree, health professionals could eventually support DTC advertising as an essential part of health care markets, along the lines of what the National Health Council cautiously suggested in its 2002 consensus report.11

NOTES

6. This history is summarized in Callee, *Fear of Persuasion*.


12. H. McDonald, A. Garg, and R. Haynes, “Interventions to Enhance Patient Adherence to Medication Prescriptions,” *Journal of the American Medical Association* 288, no. 22 (2002): 2868–2879 (“Current methods of improving medication adherence for chronic health problems are mostly complex, labor-intensive, and not predictably effective. The full benefits of medications cannot be realized at currently achievable levels of adherence: therefore, more studies of innovative approaches to assist patients to follow prescriptions for medications are needed”).