Drug samples in dermatology: Special considerations and recommendations for the future

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Background: The use of drug samples is a controversial issue in medicine.

Objective: We sought to determine the pros and cons of drug sampling, and how drug sampling in general medicine differs from dermatology.

Methods: Literature searches were conducted on PubMed, Google, and Yahoo!. Articles were found pertaining to drug sampling in general, and for dermatology specifically.

Results: Numerous pros and cons for drug sampling were found in the literature search. We divided these by cost-related issues, such as the industry-wide cost of sampling and the use of sampling to assist the underinsured and poor, and quality of care issues, such as adherence, patient education, and safety considerations. Articles also suggested that dermatology may differ from general medicine as topical treatments have fewer side effects, are more complicated to use, and come in different vehicles.

Limitations: We identified few studies specifically focused on issues relevant to sampling in dermatology.

Conclusion: There are strong arguments for and against drug sampling involving both cost and quality of care issues. Dermatology-specific medications clearly differ from oral medications in several regards. We ultimately conclude that the benefits of drug sampling outweigh the risks, but give recommendations on how drug sampling can be done ethically and effectively, including limiting personal use, not selling samples, properly documenting sample release, teaching patients about proper use, teaching students and residents ethical use of samples, working with pharmaceutical representatives in an ethical manner, prescribing the drug that is best for the patient, and securing samples appropriately to prevent theft and misuse. (J Am Acad Dermatol 2010;62:1053-61.)

Key words: drugs; industry; pharmaceuticals; samples; sampling.

The provision of medical care involves interactions among major stakeholders including patients, physicians, pharmaceutical supply companies, and insurers. Pharmaceutical Research and Manufacturing Association (PhRMA) guidelines passed in early 2009 helped establish guidelines

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Abbreviations used:

AMA:	American Medical Association
CMI:	consumer medical insert
MeSH:	Medical Subject Headings
PhRMA:	Pharmaceutical Research and Manufacturing Association

for ethical interactions among physicians and pharmaceutical companies. Sampling is permitted by these guidelines, but remains one of the controversial facets of patient-physician-pharmaceutical interactions.[1] There are a number of university-based medical centers in the United States that have banned sampling based on ethical considerations,[2] yet most private practice dermatologists still sample—the root of this disconnect warrants further examination.

A considerable body of research in the general medical setting has focused on whether sampling is an overall benefit or detriment to patient care. Most importantly, there is evidence that sampling leads physicians to prescribe higher-cost brand-name products and that eliminating education at the pharmacy increases the possibility of unrecognized drug side effects. These arguments must be balanced by the fact that some brand-name products are arguably better than their generic counterparts and dermatologic drugs, especially topical medications that deliver drug directly to the skin and have less systemic toxicity. In addition, although there is considerable variability in patient-to-patient response for medications of all types, dermatologic treatment outcomes and adverse reactions are often detectable by simple inspection by the patient and do not require laboratory testing to assess progress. In other words, a patient provided with two sample tubes of medication, perhaps in different vehicles, can often determine which is more effective and easier to use. This becomes critical because patient preference influences adherence.[3] Thus, special considerations suggest that drug sampling programs in dermatology may be qualitatively and quantitatively different than they are in other specialties. Perhaps most importantly, the target organ of dermatologic treatment is "worn" on the outside of the body where patients can see the effects and drugs while they immediately sense the presence or absence of itching, stinging, and pain. This allows the patient to compare effects of medications in a way that cannot be easily duplicated with many internal medicine drugs, such as those that control blood pressure. The literature on drug sampling is reviewed in this article to define its role in clinical dermatology and produce practical recommendations grounded in sound ethical practice.

METHODS

We conducted a PubMed search for dates ranging from 1879 until April 13, 2009, using a combination of major Medical Subject Headings (MeSH) and key words to find literature on drug sampling in general medicine. This was repeated narrowing the search to the field of dermatology. Because little research has been published on dermatologic sampling, our MeSH were then broadened.

Our research for general medicine sample articles began with a search for major MeSH "drug prescriptions" AND "physician practice" AND the key word "samples" in the title. There were 12 results, 10 of which were relevant. The next string of key words used "drug prescriptions" AND all forms of the root word "sampl-" in the title. All of these results were further filtered by an "English & humans" requirement. Of the 64 results, 10 pertained to our topic. Another search for major MeSH "pharmaceutical preparations" AND title with "samples" resulted in 163 articles, including an additional 15 that were relevant.

The dermatology-limited search found sparse results. Using major MeSH terms "drug industry, pharmaceutical preparations OR drug prescriptions" AND key words "samples" AND "dermatology OR dermatologist," along with a search cross-referencing the MeSH term "ethics" with "drug industry" AND "dermatology OR dermatologist" we identified 14 articles, of which 6 were relevant.

Yahoo! and Google searches were also performed, retrieving relevant articles that were already found on the initial PubMed searches, but no new sources.

ISSUES

The role of pharmaceutical industry in drug sampling is complex. Pharmaceutical company representatives can provide details related to the use of their products in clinical settings while providing samples. These samples can help subsidize the cost of medications for the underinsured poor and reduce payers' costs if products are tested before prescriptions are filled. On the other hand, samples have the potential to influence physician prescribing behavior in a negative manner. Skewed representation based on marketing objectives of pharmaceutical representatives could lead to the overprescription of expensive drugs.[4] We organized the analysis of the role of sample into two major themes, cost and quality of care, assessing both advantages and disadvantages of the use of samples in dermatology clinics (Table I).

1. Cost

Industry-wide cost of sampling. Pharmaceutical companies spent an estimated $15.4 billion on drug