

# The Ethics of Therapy Selection in Dermatology

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## Abstract

Off-label use of medication is common in many areas of medicine and particularly in dermatology. Off-label use of medication, whether by prescription or use of samples, creates special ethical issues that include informed consent, patient autonomy and the fundamental adage “first, do no harm”. The choice of medication is also influenced by the patient and appropriate use ultimately depends on a thorough discussion of the risks and benefits as well as a mutually agreed treatment plan.

## Keywords

Ethical Issues, Moral Policies, Situational Ethics, Conflict of Interest, Beneficence

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## 1. Introduction

Off-label uses are common in dermatology but individual choices of off-label medications often remain controversial. The choice of a medication that is not officially sanctioned for a specific use creates special ethical obligations. These include traditional principles, such as “first, do no harm” and informed consent, and more modern principles, such as cost-benefit analyses. As the number of available medications increases the number of off-label uses also increases. The process is complicated by the availability of samples that may be used for off-label indications. The availability of samples can influence decision-making and provide economic incentives that require heightened ethical scrutiny, particularly in the setting of off-label use. A ruling by the US Court of Appeals for the second Circuit determined that appropriate advertising for off-label uses of medications by pharmaceutical representatives might, in select circumstances, fall under the First Amendment protecting free speech [1]. Previously, the FDA had restricted manufacturer’s ability to advertise unapproved uses. The ruling of the US Court of Appeals has limited applicability, both due to its geographic confines and due to the nature of ruling. The legal landscape is complex but misbranding of a medication clearly remains illegal under federal law

[2]. However, the issue of free (commercial) speech, off-label advertising and the off-label use of medications does not only create legal but also ethical issues.

## 2. Ethics of Full Information and Sample Availability

Medical ethics requires healthcare providers to be knowledgeable and informed about the treatments provided. Generally, healthcare providers are more likely to prescribe frequently used medications [3]. Elaborate advertising for new or re-branded medications compounds this problem as few dermatologists have time to familiarize themselves with the research statistics behind the studies cited by pharmaceutical representatives. The use of medication samples is arguably an important tool of education but also may contribute to the problem of information bias. The availability of samples influences decision-making but does not need to be unethical [4]. Studies have shown that the availability of drug samples induces physicians to prescribe drugs that differ from their preferred choice [5]. However, physicians' decision making also remains influenced by the effectiveness and side effects of drugs [6]. Samples have become an integral part of practice in many dermatology offices [7] and the benefits of having samples available currently appear to outweigh the cost [4]. Sample availability may also allow for comparison and thus promote gathering information [8]. However, appropriate patient selection and ethical use remain critical factors in the judicious use of samples. The use of samples increases a healthcare provider's experience with the product. Arguably, this is one of the primary objectives in the pharmaceutical industry's distribution of samples (others being brand advertising and label promotion). Conversely, a healthcare provider may be unfamiliar with certain off-label uses of medications, which have not been extensively advertised but are supported by research [9]. The ethical obligations of healthcare provider require them to stay informed about available treatments and thoroughly discuss the risks and benefits of therapy, including the provision of samples.

## 3. Mutual Respect and Ethics of Decision-Making

Healthcare providers learn not only from professional sources but also from their patients. The discovery for new therapies, such as cyclosporine for psoriasis, is not infrequently the result of chance. However, efficacy is not the only variable in therapy selection [10]. Availability and cost are other frequently considered factors [11]. Dermatology differs from many other specialties in that therapies can have a profound effect on appearance. Moreover, in the context of topical therapy, vehicle selection can influence adherence and efficacy (e.g. penetration of the active ingredient). For example, a patient may be intolerant of an ointment but happy to use a cream. Adherence to a therapeutic approach remains one of the most important challenges in medicine. This is one area where the availability of samples is useful to gauge a patient's preferences, particularly in the selection of a topical therapy. Keeping in mind the patient's best interest will lead to mutual respect in the therapeutic relationship and guide the decision-making process under the appropriate ethical principles.

## 4. Ethics of Autonomy and the Avoidance of Harm

From an ethical perspective, the patient's autonomy and right to direct her medical therapy mean that she could choose a less efficacious therapy over a more effective one. However, her autonomy and decision-making rights depend on her right to be fully informed. Autonomy introduces an element of subjectivity [12] but the ethical obligations of healthcare providers to provide full information remain the same regardless of individual variations in treatment selection or therapeutic objective [13]. This means that the available time and resources should be utilized to promote the patient's interests, while respecting his or her right to autonomy. In the context of selecting appropriate medication, this means first to do no harm. If the risks of a specific medication outweigh the benefits for a particular patient, it will have to be rejected. After inappropriate medications have been excluded, the benefits and costs of the remaining available therapies can be analyzed and compared. Any human selection process is subject to bias, including anecdotal and availability bias. However, biases are not completely irrational. Some biases may have conscious or unconscious economic implications, while anecdotal biases on the part of the patient may stimulate or strengthen the placebo effect. Nevertheless, the challenge remains to recognize these biases and address them appropriately. In the selection of appropriate therapies, like in the selection of diagnostic investigations, the patient's best interests serve as guiding principle for the ethical and effica-

cious practice of medicine.

## 5. Practical Application

To illustrate by way of example: let us assume a patient requests an off-label medication which had worked for a friend of hers but which the dermatologist is unfamiliar with. The dermatologist instead would like to use another off-label medication, which she has several samples of and which was recently advertised to her by a pharmaceutical representative.

First, regardless of the dermatologist's feelings about the medications, it is her obligation to discuss and explain the available therapies rather than to impose the physician-perceived best option. Patients may present with preconceived, occasionally misplaced, notions of efficaciousness (or safety) that are based on anecdotal evidence. Arguably, the patient may be unduly influenced by her friend's success with the medication. The dermatologist should explain that there are individual variations in treatment response and the success of the patient's friend may not have been due the medication itself but rather the natural history of the condition or other unaccounted factors. Conversely, however, the dermatologist may be unduly influenced by the recent visit of the pharmaceutical representative. Generally, therapy should be individually tailored. This is true even for tried and approved medications, which can have idiosyncratic reactions. The salient point in this example is not the selection of one medication of another but rather the selection process itself. Even the use of over-the-counter agents depends on a full discussion of the risks, benefits and alternatives. Both the patient and the dermatologist should be made aware of their potential biases and, in a complete and honest discussion, reach a mutually agreed upon treatment plan.

## 6. Conclusion

The governing ethical principles in the use of off-label medications are "first, do no harm", respecting patient autonomy and aiming for fully informed decision-making. The availability of samples can lead to biases and influence the decision-making process. However, samples are also useful tools in improving treatment adherence and may allow patients to make more fully informed decisions. Off-label use of medications, including of samples, requires heightened scrutiny to ensure fully informed decision-making and the avoidance of harm. Patient autonomy requires a mutually agreed upon treatment plan, which is of particular importance in off-label medication use. Discussion of the risks and benefits, mutual respect and aiming for the patient's best interests are the tools to select the most appropriate and ethical therapy in each individual case.

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