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Commentary

Home ultraviolet light therapy for psoriasis: Why patients choose other options

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Abstract

Background: Psoriasis is a common inflammatory skin condition for which office-based and home phototherapy are safe and effective treatments. However, patients who are prescribed home phototherapy devices often choose other treatment options.

Objective: To determine the reasons why patients do not purchase a home phototherapy device after it has been recommended and prescribed by their physician.

Methods: Patients who were written a prescription for a home phototherapy device but did not fill the prescription were identified and contacted by the National Biological Corporation to participate in a telephone survey consisting of 4 questions regarding why they did not pursue a prescribed home ultraviolet device and how they were currently treating their psoriasis.

Results: The most common reason for not obtaining the prescribed home phototherapy device was using a biologic agent (31%). The second and third most frequently reported reasons were “cost share too high” and “insurance will not cover” (18% and 17%, respectively), together accounting for 35%.

Limitations: The reason why patients were prescribed biologics while having an unfilled home phototherapy device prescription was not obtained.

Conclusions: Out-of-pocket cost is a significant barrier to home phototherapy, even to patients who are well insured.

Keywords: psoriasis, phototherapy, prescription drug management, treatment, cost effectiveness, insurance

Introduction

Current therapies for moderate-to-severe psoriasis include oral therapies, biological agents, and phototherapy. Methotrexate and cyclosporin provide modest disease control but have potential risks including hepatotoxicity and renal toxicity. Biologic agents are highly effective and relatively safe, but they are costly. Ultraviolet (UV) phototherapy is also relatively safe and effective for moderate-to-severe psoriasis and is less costly than biologic treatment [2]. Phototherapy, when feasible, is often recommended before systemic agents [3]. However, because of inconvenience and other barriers to office-based phototherapy, phototherapy is often bypassed for systemic therapies [1].

Traditionally, phototherapy has been provided in the office setting under the supervision of a medical professional. Home phototherapy reduces the inconvenience associated with office-based phototherapy and is less costly. Physician-monitored home UV treatments can be as effective as office-based UV treatments, and patients often prefer home UV therapy because of its convenience [4]. Although many physicians are comfortable recommending tanning bed use as an alternative to office-based or home phototherapy, the National Psoriasis Foundation and the American Academy of Dermatology recently released a statement recommending against their use for the treatment of psoriasis [5]. A home light unit may therefore be the only phototherapy option for many patients that live too far from a phototherapy center or who office-based therapy is not convenient.

While home phototherapy is relatively safe, very effective and low in cost, it is not a widely used approach. Some of the barriers to home phototherapy are at the level of the physician, including lack of knowledge about this treatment. Even when physicians do prescribe home phototherapy, patients may not acquire the home UV device. The goal of this study is to determine factors which contribute to a patient's decision to not purchase a home UV device after it has been recommended and prescribed by their physician for the treatment of psoriasis.

Reasons prescribed home UV devices are not obtained

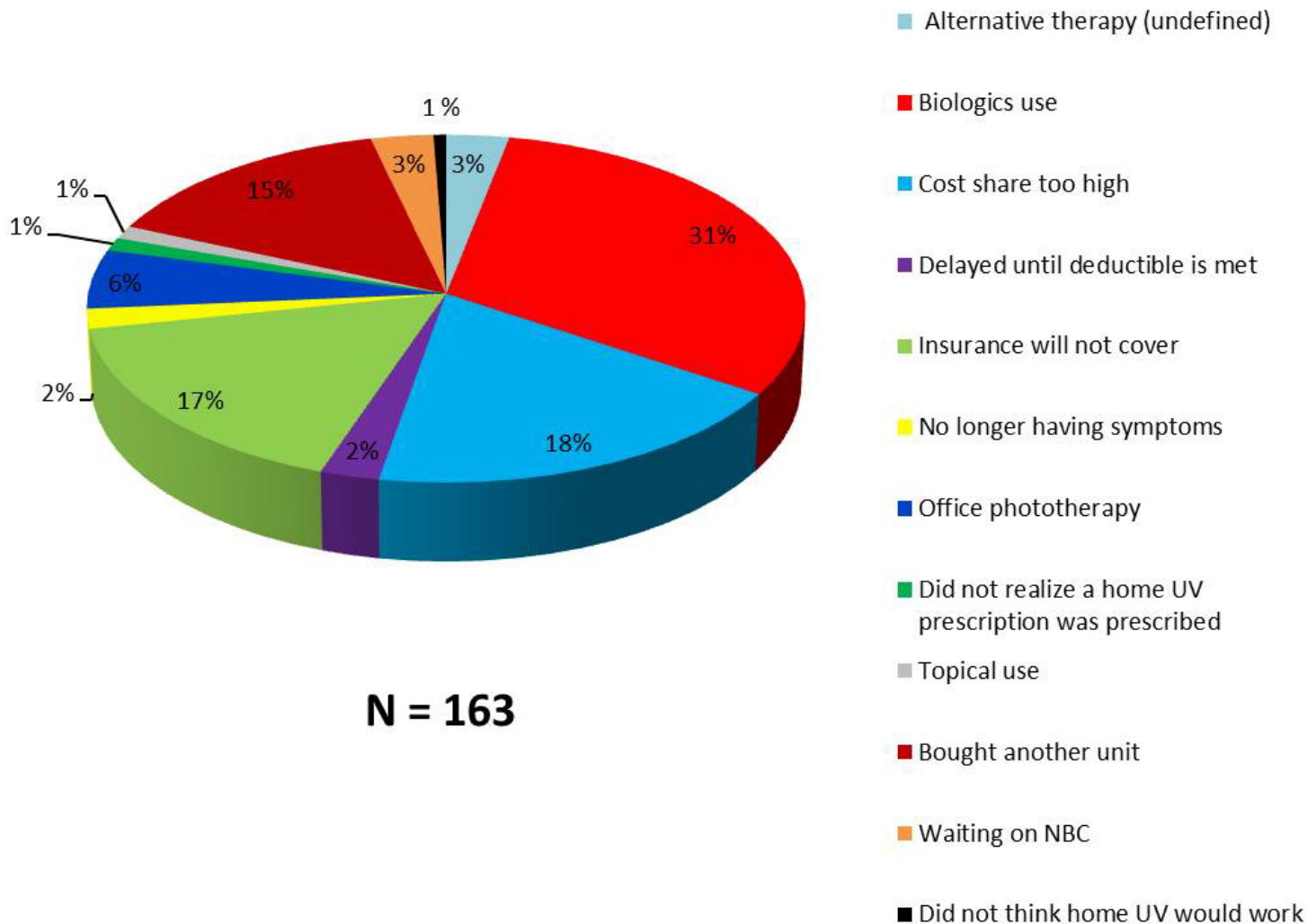


Figure 1. Reasons prescribed home UV devices are not obtained: The most commonly cited reason was biologic therapy (31%). However, if (1) cost share too high (18%), (2) insurance will not cover (17%), and (3) delayed until deductible is met (2%) are grouped together as a reason termed “cost,” this is the most common reason for not obtaining a home UV device (37%).

Methods

National Biological Corporation’s (NBC) prescription database was searched for patients meeting the following criteria: (1) a home UV device was prescribed between the years 2012 and 2013 but was not filled through NBC, (2) at the time the prescription was written, the patient possessed private health insurance, (3) the home UV device was prescribed for the diagnosis of psoriasis (ICD-9 696.1), (4) and the home UV device was of the multidirectional six foot type. Patients meeting these criteria were contacted by National Biological via telephone and asked to participate in a survey. The scripted telephone survey included 4 questions: (1) can you share with me the reason you didn’t pursue the unit; (2) what are you currently doing to treat your skin condition; (3) did you consider using biologic injections such as Enbrel, Humira, or Stelara; (4) do you still have an interest in pursuing a home UV phototherapy device? The top reason for why patients did not purchase a unit was recorded. Additional data captured included patients’ state of residence. Comments patients made in the process of answering the predetermined questions were recorded.

De-identified data were provided by National Biological Corporation and thus this study was determined to be exempt by our local IRB. Data were categorized by the reason for not obtaining a home UV device as well as by geographic regions to look for patterns of barriers to home phototherapy.

Results

Three hundred and eighty-five patients met search criteria and were contacted by NBC. Of these patients, 163 participated in the survey (42%). The most common reason reported for not obtaining the prescribed home UV device was using a biologic agent (31%). The second and third most frequently reported reasons were “cost share too high” and “insurance will not cover” (18% and 17%, respectively), together accounting for 35% of those who did not obtain the home UV device. Other less commonly cited reasons included: purchased or are still considering home phototherapy (15%), doing office-based phototherapy (6%), alternative therapy undefined (3%), delayed until deductible is met (2%), no longer having symptoms (2%), unaware a home UV device was prescribed (1%), topical use (1%), waiting on the home phototherapy device vendor (3%), and didn’t think home UV would be effective (1%). If “cost share too high,” “insurance will not cover,” and “delayed until deductible is met,” are grouped together as a reason termed “cost,” 37% percent of patients cited financial barriers to obtaining their home phototherapy device, making this the mostly commonly cited reason.

When the data were separated by United States geographic regions (Northeast, Southeast, Southwest, Midwest, and West), it largely reflected the same trend as the national pattern, with biologic therapy or cost being the most common reasons patients did not obtain their prescribed home UV device.

Common themes among patient comments involved expense and current biologic use. For example, one patient commented that their new insurance would only cover biologics. Another patient commented that their claim for a home UV device was denied after being on UV therapy successfully for 15 years. Additionally, a third patient remarked that she was currently on etanercept but was interested in speaking with a company representative if it could be guaranteed that the cost would come directly from insurance. She did not wish to front the large initial cost for a home UV device.

Discussion

Home UV therapy is a safe and effective method for treating psoriasis [4]. In addition, patients often prefer home phototherapy, and providing patients with treatment options they prefer improves adherence and ultimately improves treatment outcomes [8]. However, financial cost to patients is a formidable barrier. The majority of patients surveyed in this study cited varying cost barriers to obtaining their prescribed UV device. Either patients’ insurance refused to cover the home UV device or patients’ cost share was deemed by the patient to be too high. One could also include patients who named waiting until their deductible was met as part of the cost prohibitive group. Regardless of the specific reason, the significance of this study is in highlighting that the main obstacle to home UV therapy remains out-of-pocket cost and is the chief reason why psoriasis patients chose other modalities of treatment.

This same conclusion has been made previously in a number of studies. Yentzer et al found high out-of-pocket costs to be a major obstacle to patients as well as prescribers who chose biologics over home UV devices in their clinical practices. An analysis of thousands of home phototherapy prescriptions revealed 43% of patients never purchased their device, with 73% of those patients

citing high out-of-pocket expense as the reason. Patients can expect a cost of over \$1,000 for a home UV device with insurance assistance, and upwards of \$2,000 without insurance coverage. This expense is more than many patients can afford [6]. This is especially true relative to the zero or small out-of-pocket costs commonly available for biologics due to co-pay assistance programs.

Although cost to patients is the major obstacle to home UV therapy, home phototherapy is a very cost-effective treatment option, especially relative to biologics. In a payer-perspective cost model, home UV phototherapy was less expensive within two years of treatment initiation than all other treatment modalities including methotrexate, PUVA, acitretin, and biologic therapy [7]. If insurers covered home UV devices 100%, and patients chose home UV therapy over biologics, insurers would save between \$16,450,000 and \$65,800,000 per year per 1,000,000 insured patients [6]. This is particularly salient given that our study found biologic use was a common reason for not using home UV therapy.

One limitation of this study is that the explicit reason why patients were prescribed biologics while having an unfilled home UV device prescription was not obtained. However, some patients did comment that they opted for biologic therapy because insurance provided better coverage. Therefore, many patients may have been prescribed biologics instead of home UV therapy because of insurance coverage policies and the ubiquitous copayment assistance programs offered by pharmaceutical companies resulted in economic incentives that favored biologics over home phototherapy. The economic incentive structure may favor the use of high cost biologics over lower cost home phototherapy treatment.

Out-of-pocket cost is a significant barrier to home UV therapy, even to patients who are well insured. If insurers would modify the cost incentive structure to favor overall low cost treatment, home phototherapy may become more widely used while lowering the overall cost of managing patients with moderate-to-severe psoriasis. This study suggests systematic flaws exist in the design of coverage policies for the treatments for moderate-to-severe psoriasis. Although physicians cannot directly modify cost incentive structures in coverage policies, they can communicate to insurers the potential medical and financial benefits of prescribing home phototherapy. Until rational coverage policies that do not discourage home phototherapy are in place, it is likely that patients will continue to pass on this option, further discouraging physicians from even prescribing home phototherapy devices.

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Appendix. Survey Script

Hello my name is Katie and I'm calling from National Biological
On ____ (date) Dr. ____ wrote a prescription for you/your child for a home UV light device. I just need about 30 seconds of your time for a brief follow up as to the reasons you were not able to pursue it (for a survey that I am conducting so we can better work with insurance companies.)

1-Can you share with me the reason you didn't pursue the unit?

2-What are you currently doing to treat your skin condition?

3-Did you consider using biologic injections such as Enbrel, Humira, or Stelara?

4-Do you still have an interest in pursuing a home UV phototherapy device? Can I set you up to speak with one of our representatives?

Thank you very much for taking the time to speak with me. Enjoy the rest of your day.