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Commentary

Dermatology Residents are Prescribing Tanning Bed Treatment

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Abstract

Although 90% of dermatologists discourage the use of tanning beds, about half of psoriasis patients report using tanning beds and most of these note improvement. The purpose of this investigation was to determine if dermatology residents are advocating the tanning bed use to their patients.

Introduction

Tanning bed use is discouraged by 80% of physicians and 90% of dermatologists [1]. However, tanning beds can be used to treat dermatoses; 53% of patients with psoriasis reported using tanning beds as a treatment, and of those, 80% reported improvement [2]. When other phototherapy approaches are not feasible, tanning bed treatment could be an option [3;4]. The risks and benefits of tanning need to be weighed on an individual basis. How often dermatologists recommend tanning as treatment is not well-characterized. Our purpose was to determine if dermatology residents prescribe tanning beds.

In an anonymous study of phototherapy training using REDCap (Research Electronic Data Capture) software, residents were surveyed about prescribing tanning beds as a form of treatment [5]. Following Institutional Review Board approval, the questionnaire was emailed in January 2015 to dermatology residency program coordinators to forward to residents. Analyses used Fisher's exact test with a Type I error rate of 5%.

Eighty-two residents (34 first-year, 23 second-year, and 25 third-year) reported on prescribing tanning bed treatment. All regions of the United States were represented; 26 from the Northeast, 22 from the Southeast, 16 from the Midwest, 4 from the Southwest, and 14 from the West.

Twenty-three percent reported prescribing tanning bed treatment, increasing by year of residency ($p=0.004$, Table 1).

Table 1. Percent of residents who have prescribed tanning beds as a form of treatment, based on residency year.

Year of dermatology residency	Percent who have prescribed tanning beds as a form of treatment
First year	6
Second year	30
Third year	40

Of the residents who had prescribed tanning beds, 63% had received didactic training for prescribing in-office phototherapy and 32% had received didactic training for prescribing home phototherapy. Thirty-five percent prescribed home phototherapy at least once and 88% had prescribed in-office phototherapy at least once. Residents who had prescribed home phototherapy at least once were more likely to have prescribed tanning bed treatment ($p<0.0001$) whereas those who had prescribed in-office phototherapy were not ($p=0.44$). There was a difference in tanning bed prescribing rates by region of training ($p=0.02$, Table 2); residents in the Southeast were more likely to prescribe tanning beds than those in the Northeast ($p=0.01$) or Midwest ($p=0.01$).

Table 2. Percent of residents who have prescribed tanning beds from each region

Region (n)	Percent of residents who have prescribed tanning beds as a form of treatment
Northeast (26)	11
Southeast (22)	45
Midwest (16)	6
Southwest (4)	25
West (14)	29

Although recreational tanning bed use is discouraged, 40% of 3rd year residents have prescribed tanning as a treatment for at least one patient. Residents who had prescribed home phototherapy, but not in-office phototherapy, were more likely to have prescribed tanning beds, perhaps reflecting that these residents are more likely to explore phototherapy options beyond in-office treatments. Limitations include the survey methodology. In addition, we did not determine for what dermatoses tanning beds were prescribed, the regimen, or follow up procedures. Additionally, the response rate is unknown since the questionnaires were distributed by residency program coordinators.

Some residents prescribe tanning bed use as a form of treatment and are more likely to prescribe it as they proceed through residency. The estimated cost of 1 in-office narrowband UVB treatment is \$140 compared to 1 tanning bed session, from \$5 to \$20 (and use at a fitness center or friend's house might be free). Whether recommending tanning as a treatment is viewed as inappropriate encouragement or as reasonably offering patients a low cost, convenient way to get UV exposure may be in the eye of the beholder.

References

1. Johnson KR, Heilig LF, Hester EJ, Francis SO, Deakyne SJ, Dellavalle RP. Indoor tanning attitudes and practices of US dermatologists compared with other medical specialists. *Arch Dermatol* 2006 Apr;142(4):465-70. PMID: 16618866.
2. Turner RJ, Farr PM, Walshaw D. Many patients with psoriasis use sunbeds. *BMJ* 1998 Aug 8;317(7155):412. PMID: 9694766.
3. Das S, Lloyd JJ, Walshaw D, Diffey BL, Farr PM. Response of psoriasis to sunbed treatment: comparison of conventional ultraviolet A lamps with new higher ultraviolet B-emitting lamps. *Br J Dermatol* 2002 Nov;147(5):966-72. PMID: 12410708.
4. Fleischer AB, Jr., Clark AR, Rapp SR, Reboussin DM, Feldman SR. Commercial tanning bed treatment is an effective psoriasis treatment: results from an uncontrolled clinical trial. *J Invest Dermatol* 1997 Aug;109(2):170-4. PMID: 9242503.
5. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)--a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform* 2009 Apr;42(2):377-81. PMID: 18929686.

Conflict of Interests

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The questionnaire study was approved by Wake Forest Baptist Medical Center Institutional