

Commentary

Dermatology on Pinterest

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Dermatology Online Journal 21 (1): 11

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## Abstract

**Background:** Pinterest is a social media internet service utilized by individuals, organizations, and businesses to collect and share ideas related to projects or interests.

**Objective:** The literature related to dermatology-related content on Pinterest is scarce. This study aims to investigate the presence of dermatology related content available on Pinterest.

**Methods:** Investigators searched five terms related to dermatology in the "pins" and "boards" search categories of pinterest. The first 20 results were evaluated for content and assigned to a content group of "advocacy," "informative," or "home remedies." Boards were also categorized as being posted by an MD or professional society versus others. The top ten dermatology journals were also searched for under the boards category.

**Results:** Informative pins were the most common (49%) followed by advocacy (37%) and home remedies (14%). Informative boards were the most common (53%) followed by home remedies (31%) and advocacy (16%). We identified that only 24% of boards were created by either M.D.s or advocacy organizations. The top ten dermatology journals identified by prior studies had little presence, with only one board posted by JAMA Dermatology.

**Conclusions:** Our study contributes to a growing body of data that dermatology organizations are relatively absent from new social media sites, and Pinterest represents a potential outlet for targeted intervention in high-risk groups for skin disease.

**Keywords:** dermatology, Pinterest, skin disease, Internet

## Introduction

Pinterest is a social media internet service utilized by individuals, organizations, and businesses to collect and share ideas related to projects or interests. Users create and share individual bookmarks called “pins” or larger collections called “boards” and associate them with specific search terms. Launched in 2009, Pinterest has over 70 million users, 80% of which are women. In addition, 33% of 18-29 year olds in the U.S. have a Pinterest account and 23% of users sign on at least once a day [1]. With over 30 billion pins as of April 2014, it is a powerful force in social media [1].

The presence of dermatology on other social media sites has been previously described [2,3,4,5]. However, the literature related to dermatology related content on Pinterest is scarce. This study aims to investigate the presence of dermatology related content available on Pinterest.

## Methods

Data was collected by authors JW, MH, DM, and RK on August 20, 2014. There are two different search methods available on Pinterest to search subjects of interest: searching under categories “pins” or “boards.” The following five terms were searched under the pins section: “dermatology,” “skin cancer awareness,” “skin conditions,” “skin cancer,” and “sun protection.” Researchers independently searched terms with two researchers verifying each search term. Pinterest does not filter results by popularity. The algorithm for determining search results has not been described. However, it is a complicated process taking into account time, user’s previous pins, and relevance. Therefore, the first 20 pins for each search term were analyzed as a random sample. The number of times each pin was repinned (shared by another user) and the content of the pin were evaluated. Each pin was grouped into one of three categories: “advocacy,” “home remedy,” or “informative.”

In evaluating the boards category, the same five search terms described above were used and the first 20 boards (once again disregarding popularity) were analyzed. In particular, the number of repins, the number of followers, and the content of each board was evaluated. The boards were similarly grouped into one of the three categories described above. It was determined if the creator of each board was an M.D. or belonged to a professional organization versus an individual.

The top ten dermatology journals and their social media impact that have been previously studied [5] were searched for under the boards category.

## Results

The results are displayed in the accompanying figures (Tables 1 and 2). Informative pins were the most common (49%) followed by advocacy (37%) and home remedies (14%). The total number of repins was 12,926. Sun protection had the most pins with 4015 (31.1%), followed by dermatology 3464 (26.8%), skin cancer awareness 1835 (14.2%), skin conditions 1823 (14.1%), and skin cancer 1789 (13.8%).

Informative boards were the most common (53%) followed by home remedies (31%) and advocacy (16%). Of the 100 boards examined, 24% were posted by either an M.D. or an advocacy/professional organization. All other boards were created by companies or individuals. The sample of boards had 113,210 followers total, with 5884 total pins. Skin cancer had the most pins for the boards examined with 1559 (26.5%), followed by dermatology with 1421 (24.2%), skin cancer awareness 1068 (18.2%), sun protection 979 (16.6%), and skin conditions 857 (14.6%). Skin conditions boards had the most followers with 47,489 (41.9%), followed by sun protection with 32,300 (28.5%), skin cancer 16,823 (14.9%), dermatology 11,483 (10.1%), and skin cancer awareness 5,115 (4.5%). The top ten dermatology journals returned no results, except for JAMA Dermatology. Searching for JAMA Dermatology under the boards section yielded one board categorized as informative.

**Table 1.**

Category	Total Pins	Advocacy	Home Remedy	Informative
<b>Dermatology</b>	3,464	2	3	15
<b>Skin Cancer Awareness</b>	1,835	10	0	10
<b>Skin Conditions</b>	1,823	18	0	2
<b>Skin Cancer</b>	1,789	6	3	12
<b>Sun Protection</b>	4,015	1	8	11
Total	12,926	37	14	49
Percents		37%	14%	49%

**Table 2.**

Category	Total Pins	Total Followers	Made by MD or Org	Advocacy	Home Remedy	Informative
<b>Dermatology</b>	1,421	11,483	7	0	3	17
<b>Skin Cancer Awareness</b>	1,068	5,115	7	11	0	9
<b>Skin Conditions</b>	857	47,489	4	0	12	8
<b>Skin Cancer</b>	1,559	16,823	4	4	1	15
<b>Sun Protection</b>	979	32,300	2	1	15	4
Total	5,884	113,210	24	16	31	53

## Discussion

Dermatologic search terms return a large volume of pins and boards on Pinterest. For both pins and boards, informative pins were the most common in our sample. This could represent a desire by Pinterest users to have access to quick, easy to read infographics, or short summaries on common dermatologic concerns such as skin cancer and tanning.

Boards were more likely to contain home remedy posts for common dermatologic conditions than were pins. This may demonstrate that there is a group of Pinterest users who have dedicated entire boards to finding, using, and sharing skin condition related home remedies.

Advocacy was represented in almost one-third of pins that we searched. The greatest number of advocacy pins was of Skin Conditions. In comparison, only 16% of boards, or half the number of pins, were dedicated to advocacy.

Overall, these results suggest an interest in dermatology and important skin diseases among Pinterest users. Despite this strong interest by the public, the top 10 dermatology journals have minimal presence on Pinterest with only six posts from JAMA Dermatology. We identified that only 24% of boards were created by either M.D.s or advocacy organizations. The population of Pinterest users are mostly (80%) female, and 33% of 18-29 year olds in the United States have a Pinterest account [1]. Recently, the Surgeon General declared a call to action to prevent skin cancer [6]. These users represent an excellent target demographic for populations that can be educated on preventative medicine focusing on sun exposure precautions, as well as prevention of unsafe UV exposure, such as the dangers of tanning bed use [6].

Our study has several limitations. Pinterest does not display results based on popularity, and therefore, it is difficult to assess how popular the dermatology search terms are in comparison to other search terms on Pinterest. Additionally, the used search terms were chosen by the investigators based on terms used in previous studies. Other search terms related to dermatology that we did not select may have generated a greater or lesser number of pins than those that were selected and discussed above. Finally, each post was categorized at the investigators' discretion, and although each post was sorted as accurately as possible, it is challenging to categorize boards with numerous posts containing a variety of topics into a single category.

Our study contributes to a growing body of data that dermatology organizations are relatively absent from new social media sites. These sites, such as Pinterest, offer an opportunity to target a group of users that is primarily young females. This is a missed opportunity for targeted efforts to inform a particularly high risk population on a multitude of skin related disease, some of which is largely preventable.

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