

Reddit Analysis Reveals Information Needs of Atopic Dermatitis Patients

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Background
<ul style="list-style-type: none">Reddit, the seventh most visited website in the United States with approximately 430 million monthly active users, has become an exceedingly popular platform for patients to source medical information and discuss chronic conditions.^{1,2}While Reddit remains a relatively unstudied platform in dermatology, other specialties have exploited discussions on Reddit to learn about public health trends and the information needs of patients.³With over 41,000 subscribers, the “eczema” subreddit (i.e., discussion board) has become a central hub for atopic dermatitis patients to discuss the disease and seek medical guidance.⁴

Objective
<ul style="list-style-type: none">To uncover patient questions regarding atopic dermatitis, as physicians can use this knowledge to better address patient concerns and more comprehensively educate patients.

Methods
<ul style="list-style-type: none">The authors analyzed 1,000 questions posted on the “Hot” section of the “eczema” subreddit between August and October 2020. Each question was then separated into categories and subcategories for analysis.

Results
<ul style="list-style-type: none">1,000 questions from 881 posts were analyzed.The highest proportion of questions (29.5%) were non-pharmacologic management focused, with patients inquiring about diet, over-the-counter skincare products, personal hygiene practices, clothing, and supplements.Non-specific management questions (19.1%) consisted of patients seeking therapeutic advice for flares, specific symptoms such as itching and dyschromia, and specific anatomic locations of eczema such as eyelid and nipple eczema.14.6% of questions were classified as uncertainty about symptoms, with patients most commonly requesting a diagnosis.Regarding medications (14.3%), patients most frequently inquired about steroids, tacrolimus, methotrexate, and dupilumab. Questions regarding side effects, usage instructions, safety, and efficacy were common.10.3% of posts were inquiries about causes and triggers.6.9% of posts were mental-health-focused, with patients seeking social support and requesting dialogue about the social struggles associated with the condition. 7 individuals in this category expressed suicidal thoughts or behavior.Less frequently, individuals inquired about experiences with dermatologists and general practitioners, laboratory testing, and helpful information sources.A total of 6,228 comments were analyzed. None were posted by verified healthcare providers.

Table 1. Example posts

Category	Post
Non-pharmacologic management	Looking for eczema-friendly deodorant and/or anti-perspirant recommendations. What are some good brands you use that don't irritate your eczema?
Non-specific management	Hyperpigmentation from eczema- any suggestions on how to get rid of this?
Uncertainty about symptoms	Going to a dermatologist in 2 weeks. Just getting opinions. Is this eczema?
Medications	Prescribed triamcinolone acetonide ointment 0.1%. They didn't give me any instructions on how long to take it. They just said follow up in 2 months. Is it safe to apply this every day for 2 months?
Cause and triggers	I've only been dealing with dyshidrotic eczema for a few months now, and it's only on my fingers and palms. Any ideas what the triggers could be?
Mental Health	I've recently realized just how much worse my mental health has gotten and was wondering if anyone would like to be a part of a mental health mutual support group? Via zoom or something.

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Table 2. Proportion of questions by category

Category	No. (%), n=1000
Non-pharmacologic management	295 (29.5)
Non-specific management	191 (19.1)
Uncertainty about symptoms	146 (14.6)
Medications	143 (14.3)
Cause and triggers	103 (10.3)
Mental Health	69 (6.9)
Miscellaneous	27 (2.7)
Doctor-patient relationship	18 (1.8)
Laboratory tests	8 (0.8)

Conclusions

- Our Reddit analysis uncovered valuable insight into atopic dermatitis patient perspectives, gaps in knowledge, and dissatisfactions with disease management.
- Patients most frequently have questions regarding non-pharmacologic management and would thus benefit from greater discussions of lifestyle management strategies, including recommendations for skincare products, non-irritant clothing, proper bathing practices, and gentle personal hygiene products.
- Patients require more comprehensive review of proper medication usage, range of symptoms, trigger avoidance, and mental health resources.
- With none of the 6,228 comments being posted by verified healthcare providers, it is likely that inaccurate medical information is regularly disseminated through Reddit.
- It may be prudent for physicians to become more active on Reddit, fielding questions, clarifying medical inaccuracies, and directing individuals to seek clinic visits when warranted.