

RESEARCH LETTERS

Parental Response to Written Eczema Action Plans in Children With Eczema

The treatment of eczema in the pediatric population can be a complex and dynamic process. A typical care plan may include over-the-counter and prescription topical agents, oral medications, as well as bathing and dietary recommendations. Inevitable disease fluctuations demand treatment modification, and thus parental and patient confusion can easily occur. Not surprisingly, adherence in eczema management is poor and has been reported to be as low as 32% with simple regimens.¹

Similar to eczema, asthma is a fluctuating disease with evolving treatment plans. To address this, written asthma action plans provide an educational framework for disease self-management and are effective at improving adherence and decreasing exacerbations.^{2,3} Previous studies have suggested that an individualized written eczema action plan (EAP) has the potential to serve as a specific treatment guideline that addresses each patient's fluctuating treatment regimen.^{4,5} In this quality-improvement study, we hypothesize that EAPs would be well received by parents and would improve their treatment confidence, particularly when managing eczema flares.

Methods. During clinic appointments at our tertiary allergy program, children with eczema treatment regimens requiring multiple topical and/or oral medications were approached by their providers to participate in the study and were given an individualized EAP (Figure) similar to a previously published eczema action plan.⁵ Parents completed a baseline survey addressing parents' perceived severity of their child's eczema, treatment comfort level, and whether they had previously received a written eczema care plan. Parents were contacted via telephone between 3 and 12 months later to complete a follow-up survey regarding the severity of their child's eczema and the utility of the EAP, specifically if it clarified which medications to use during an eczema flare. This study was approved by the Children's Hospital, Boston investigational review board (committee on clinical investigation). Descriptive statistics were used to explore the characteristics of the study population, and statistical significance was determined by the McNemar test for paired data.

Results. Thirty-five children with a diagnosis of eczema were included in the study; all 35 (100%) completed baseline and follow-up surveys. The subjects' ages ranged from 4 months to 17 years; 63% (22 of 35) were boys (Table).

At baseline, 80% of parents (28 of 35) reported having never received a written, individualized eczema care plan. Of the 35 subjects, 51% of parents (18 of 35) self-rated their

Children's Hospital Boston
Eczema Action Plan

Doctor/NP: _____
To contact Doctor/PA/NP: (617) 355-6117
To contact Doctor on call: (617) 355-6369

Name: _____
DOB: _____
MIM: _____
TODAY'S DATE: _____

DAILY SKIN CARE ROUTINE

- BATH 10-20 minutes: Daily Every other day
 - Cleanser: _____
- MOISTURIZER: _____ twice daily and more often as needed
- Antihistamine: _____

GREEN ZONE (Skin with very mild redness/irritation)

- Continue Daily Skin Care Routine

YELLOW ZONE (Skin starting to FLARE with mild to moderate redness/itching)

- Continue Daily Skin Care Routine
- Apply topical steroid: _____ twice daily to **FACE** for maximum ____ days
- Apply topical steroid: _____ twice daily to **BODY** for maximum ____ days

RED ZONE (Skin with SEVERE redness/itching/oozing)

- Continue Daily Skin Care Routine with any changes made in Yellow Zone
- Apply topical steroid: _____ twice daily to **FACE** for maximum ____ days
- Apply topical steroid: _____ twice daily to **BODY** for maximum ____ days
- Call (617) 355-6117 or Doctor on call (617) 355-6369 if there is no improvement in 3-5 days

Figure. Children's Hospital Boston blank eczema action plan (EAP). Each child received a personalized EAP at the baseline visit.

child's skin as severe, and 46% (16 of 35) as moderate. All subjects completed a follow-up survey via telephone between 3 and 12 months after the clinic encounter (median follow-up time, 3.9 months). At the time of follow-up, 80% of the parents (28 of 35) rated their child's eczema on a lower severity scale: 57% mild (20 of 35); 40% moderate (14 of 35); and 3% severe (1 of 35). Parental comfort level of skin care improved from a baseline 57% (20 of 35) to 86% (30 of 35) after receiving the EAP ($P = .02$).

Survey questions specifically addressing the EAP revealed that 80% of parents (28 of 35) reported currently having the EAP. Parents found the EAP helpful 86% of the time (30 of 35), and 86% (30 of 35) believed it was helpful in clarifying which medications to use when their children had an exacerbation. Of children whose eczema improved in severity, 68% of parents (19 of 28) attributed the EAP as a contributing factor.

Comment. The results of this study add to the growing body of literature supporting the use of action plans in eczema management. Parents overwhelmingly reported that the EAP was helpful and thought it clarified which medications to use during a flare (86%; 30 of 35). While this study design cannot establish whether the EAP directly contributed to improving eczema, we note that 68% of parents whose child's eczema improved attributed the EAP as a contributing factor (19 of 28).

Limitations to the study include small population size, sampling bias, and that self-report is not a validated measuring instrument. It would be crucial for future studies to evaluate a larger and more clinically diverse group of

Table. Demographics of Study Population

Characteristic	Study Children, No. (%) (n = 35)
Age, y	
<1	12 (34)
1-4	14 (40)
5-9	4 (12)
>9	5 (14)
Sex	
Male	22 (63)
Female	13 (37)
Race ^a	
White	17 (49)
Black	6 (17)
Hispanic	3 (9)
Asian	3 (9)
Other	3 (9)
No response	3 (9)

^aRace was self-reported.

children not limited to children with treatment regimens requiring multiple medications. A randomized-controlled study with objective measurement of eczema at baseline and follow-up by using a score system such as the Eczema Area and Severity Index (EASI) would further clarify the effectiveness of EAPs in treating eczema.⁶

In conclusion, our study provides preliminary evidence that EAPs may have clinical utility in managing eczema in the pediatric population. Simple organization helps clarify medications for parents and improves confidence when treating their children.

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Medical Students' Perceptions of Skin Cancer: Confusion and Disregard for Warnings and the Need for New Preventive Strategies

Although skin cancer is one of the most preventable and easily detected forms of cancer, it is the most prevalent cancer in the world and its incidence is increasing annually, more than all other cancers combined, making it one of the most expensive cancers to treat.¹⁻³ Given the cost of treatment, potentially deadly consequences, and the well-known causal relationship between UV light and skin cancer, it is unclear why many people ignore warnings and do not protect themselves from the sun.

Methods. To understand the perceptions of skin cancer and to gather information that could be used as baseline information for future research or educational campaigns, we conducted 4 focus group interviews of approximately 30 minutes each with 20 medical students from the University of Texas Health Science Center in San Antonio. The students discussed what they understood about skin cancer, how to avoid it, the extent to which they engaged in sun-protective behaviors, risk perceptions, adherence to warnings, and the effectiveness of various channels used to communicate information about skin cancer. The interviews were audiotaped and transcribed, and all 3 of us used content analysis to identify several themes.⁴ The study was approved by the University of Texas Health Science Center institutional review board.

Results. Findings showed that respondents understood the causes of skin cancer but were confused