

Complementary and alternative medicine use among adults with eczema: A population-based study



To the Editor: Atopic dermatitis (AD), or eczema, is a chronic, inflammatory skin disease affecting 10.2% of adults in the United States.¹ Some patients with AD use complementary and alternative medicine (CAM) for the adjuvant treatment of their disease.² Although many studies have demonstrated a promising role of certain CAM modalities in the management of AD, others have shown limited efficacy and negative side effects of various CAM therapies.³ Given the inconclusive evidence for the efficacy of various CAM therapies, it is important to determine the extent of CAM use among adults with AD. This study aims to describe CAM use among adults with eczema and to compare CAM use in adults with and without eczema.

We conducted a cross-sectional analysis using the National Health Interview Survey from 2012 to determine the extent of CAM use among adults with eczema.⁴ Respondents were classified as having a history of eczema if they responded “yes” to having eczema or any type of skin allergy within the last 12 months. Respondents identified up to 3 “top CAM modalities” most important for their health and answered a series of follow-up questions about the CAM therapies, including conditions for which the CAM was used.

Among the 7,513,156 weighted respondents with eczema, 265,350 (43.5%) reported using at least 1 CAM modality. Among those using CAM specifically for eczema, herbal supplements ($n = 18,441$) and special diets ($n = 13,635$) were the most common (Table I). Patients with eczema had 69% higher odds of using CAM than those without eczema when controlling for sex, race, Hispanic origin, annual household income, and education attainment (adjusted odds ratio [95% CI], 1.69 [1.50-1.91]) (Table II).

There are several reasons why patients might want to turn to CAM for the treatment of their AD. Frustration with the chronic and relapsing nature of eczema leads patients to turn to CAM.² Furthermore, dissatisfaction with conventional treatment causes some patients with AD to use CAM.² For example, the daily application of topical agents can be inconvenient and time-consuming. Finally, the fear

Table I. Most important CAM modalities used for health in the last 12 months among adults with eczema in 2012

CAM modality	Used specifically for the treatment of eczema, <i>n</i>	Most important CAM used in the past 12 mo, <i>n</i> ¹
Herbal supplement*	18,441	1,813,395
Special diets [†]	13,635	329,777
Traditional healers [‡]	3740	55,261
Homeopathy	2970	201,594
Energy healing	986	48,965
Chiropractic manipulation	0	770,954
Massage	0	746,626
Acupuncture	0	182,996
Naturopathy	0	31,372
Hypnosis	0	29,346
Biofeedback	0	41,877
Craniosacral therapy	0	22,669
Yoga, tai chi, or qi gong	0	860,988
Relaxation techniques [§]	0	717,502
Movement or exercise techniques	0	199,569

CAM, Complementary and alternative medicine.

*Herbal supplements included in the National Health Interview Survey includes acai, probiotics, cranberry, digestive enzymes, echinacea, fish oil, garlic, ginseng, ginkgo, glucosamine, green tea, melatonin, milk thistle, methylsulfonylmethane, S-adenosyl-L-methionine, saw palmetto, and valerian.

[†]Special diets include Atkins, macrobiotic, Ornish, Pritikin, vegetarian, and/or vegan diet.

[‡]Traditional healers include Native American healer/medicine man, Curandero, Machi, Parchero, Yerbero, Sobador, and Huesero.

[§]Relaxation techniques include mantra meditation, mindfulness meditation, spiritual meditation, guided imagery, and progressive relaxation.

^{||}Movement or exercise techniques include Alexander technique, Feldenkrais method, pilates, and Trager integration.

¹Ayurveda, chelation therapy, vitamins, and minerals were excluded from the “most important” CAM by the National Health Interview Survey because of very high or very low prevalence of use.

of side effects from topical steroids can also drive patients with AD to seek out more “natural” alternative therapies.²

Although some CAM modalities may aid in the management of AD, others may lead to adverse dermatologic effects. For example, homeopathic therapies can cause irritant contact dermatitis.⁵ Thus, dermatologists should be aware of the effect of commonly used CAM modalities in eczema and be prepared to discuss the role of CAM in the overall therapeutic approach to eczema.

This study was limited by the National Health Interview Survey questionnaire, which did not

Table II. Multivariable logistic regression analyses of the association between CAM and adult eczema

Independent variable	Dependent variable: CAM use*		
	OR (95% CI)	aOR (95% CI)	P value
Eczema			
No	1 (Reference)	1 (Reference)	-
Yes	1.83 (1.66-2.02)	1.69 (1.50-1.91)	<.001
Age	1.00 (0.996-1.00)	1.00 (0.997-1.00)	.904
Sex, n (%)			
Male	1 (Reference)	1 (Reference)	-
Female	1.48 (1.40-1.56)	1.41 (1.31-1.51)	<.001
Race, n (%)			
White	1 (Reference)	1 (Reference)	-
Black/African American	0.44 (0.40-0.48)	0.44 (0.39-0.50)	<.001
American Indian/Alaskan native	0.80 (0.58-1.09)	1.14 (0.81-1.59)	.455
Asian	1.00 (0.89-1.12)	0.83 (0.69-1.01)	.059
Multiple race	1.40 (1.13-1.72)	1.39 (1.07-1.80)	.012
Hispanic origin, n (%)			
No	1 (Reference)	1 (Reference)	-
Yes	0.53 (0.49-0.58)	0.67 (0.61-0.74)	<.001
Annual household income			
\$0-\$49,999	1 (Reference)	1 (Reference)	-
\$50,000-\$99,999	1.58 (1.47-1.70)	1.26 (1.15-1.39)	<.001
>\$100,000	2.10 (1.93-2.29)	1.52 (1.35-1.71)	<.001
Education, n (%)			
Less than HS	1 (Reference)	1 (Reference)	-
HS diploma or GED	1.84 (1.65-2.05)	1.60 (1.43-1.80)	<.001
More than HS	3.17 (2.86-3.50)	2.64 (2.34-3.00)	<.001

aOR, Adjusted odds ratio; CAM, complementary and alternative medicine; GED, general education development; HS, high school; OR, odds ratio.
*Estimates are adjusted for survey sampling weights.

include vitamins or minerals among the top CAM modalities for health because of high prevalence. As a result, those who exclusively used vitamins or minerals to manage their AD were excluded from the responses. Furthermore, as with any large database study, the misclassification of case definition may exist. Although CAM use for general health purposes is prevalent and of great interest to patients with AD, a minority of CAM modalities were used to specifically treat eczema.

Future studies can focus on characterizing the efficacy and side effects of CAM modalities through randomized control trials are warranted.

Sabrina Khan, BS,^a Caterina Zagana-Prizio, BS,^b Danielle Yee, MD,^a Rasika Reddy, BA,^c Manan Mehta, BS,^a Nicole Maynard, BS,^a Samiya Khan, BS,^d and April W. Armstrong, MD, MPH^a

From the Department of Dermatology, Keck School of Medicine, University of Southern California, Los Angeles, California^a; University of Colorado School of Medicine, Aurora, Colorado^b; University of Texas Southwestern Medical Center, Dallas, Texas^c; and Long School of Medicine, San Antonio, Texas.^d

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Correspondence to: April W. Armstrong, MD, MPH, Keck School of Medicine, USC Office of the Dean 1975 Zonal Ave, Los Angeles, CA 90089

E-mail: armstrongpublication@gmail.com

Conflicts of interest

Dr Armstrong has served as a research investigator and/or scientific advisor to AbbVie, Ammirall, Arcutis, ASLAN, Beiersdorf, BI, BMS, EPI, Incyte, Leo, UCB, Janssen, Lilly, Nimbus, Novartis, Ortho Dermatologics, Sun, Dermavant, Dermira, Sanofi, Regeneron, Pfizer, and Modmed. Authors Khan, Zagana-Prizio, Reddy, Mehta, Maynard, and Khan and Dr Yee have no conflicts of interest to declare.

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