Use of supplements for hair loss in skin of color patients

To the Editor: Complementary and alternative medicine (CAM) describes medical customs and therapies that are practiced together with or in place of traditional medical care and are used for a variety of dermatologic conditions in the United States. Population-based surveys have shown that 49.4% of patients with skin problems use CAM, and 6% of these patients use CAM specifically for their skin condition.[1] Various alternative therapies are suggested for alopecia conditions, namely the supplementation of herbs, vitamins, and minerals. Hair loss can be detrimental to those affected, and patients are often willing to pay for any treatment that shows promise of hair growth and prevention of further hair loss. Population-based data on the use of supplements in skin of color (SOC) patients are limited.[2] All patients gave consent for their photographs and medical information to be published in print and online and with the understanding that this information may be publicly available.

We conducted a retrospective review of 384 SOC patients with alopecia who presented to a specialty clinic from 2019 to 2021. Use of supplements in SOC patients was compared to that in 1471 Caucasian patients with alopecia who presented to the clinic in the same time window. Patients were excluded if they left question(s) blank.

Among 384 SOC alopecia patients, there were 309 (80.5%) females and 75 (19.5%) males, with an average age of 43 years (range, 4-81). Of these patients, 224 (58.3%) endorsed taking herbs, vitamins, or other supplements, with 37% stating that they used these supplements specifically to treat hair loss. There were no significant differences in the age and diagnoses of patients in the supplement and no supplement groups (Table I). When compared with Caucasian patients from the same population, SOC patients were significantly more

Table I. Characteristics of SOC patients with alopecia who use supplements vs no. of supplements

	Supplements (n = 224)*	No. of supplements (n = 160)	P value
Age	43.9 ± 14.1	41.2 ± 15.8	.08
Gender			
Male	34/224 (15.2%)	41/160 (25.6%)	**.02**
Female	190/224 (84.8%)	119/160 (74.3%)	.26
Race			
Black	81/224 (36.1%)	68/160 (42.5%)	.33
Asian	107/224 (47.8%)	53/160 (33.1%)	**.03**
Hispanic	33/224 (14.7%)	35/160 (21.9%)	.10
Native American/Pacific Islander	3/224 (1.3%)	4/160 (2.5%)	.41
Diagnosis			
Alopecia areata (AA)	27/224 (12.1%)	18/160 (11.3%)	.82
Androgenetic alopecia (AGA)	66/224 (29.5%)	51/160 (31.9%)	.67
Scarring alopecia	25/224 (11.2%)	25/160 (15.6%)	.23
Telogen effluvium (TE)	25/224 (11.2%)	15/160 (9.4%)	.59
Traction alopecia	17/224 (7.6%)	8/160 (5.0%)	.33
Trichotillomania	2/224 (0.9%)	1/160 (0.6%)	.77
Folliculitis decalvans	1/224 (0.5%)	0/160 (0%)	.40
Systemic lupus erythematosus (SLE)	1/224 (0.5%)	1/160 (0.6%)	.81
Combination	54/224 (24.1%)	34/160 (21.3%)	.56
Unknown	6/224 (2.7%)	7/160 (4.4%)	.37

Bolded P-values are significant on a $P < .05$.
Information was collected on demographics, hair loss diagnosis, and supplement use via a patient intake form survey that is administered to all new patients.
SOC patients identified as Black, Asian, Hispanic, or Native American/Pacific Islander.
*Supplement use was assessed by the following questions: "Do you use any vitamins, herbs, other supplements, or do-it-yourself hair treatments?," "Please list all herbs, vitamins, other supplements, or do-it-yourself hair treatments that you use," and "Do you use this supplement and/or do-it-yourself treatment primarily for your hair loss?"

Table II. Comparison of supplement use in SOC vs non-SOC patients with alopecia

	Skin of color	Caucasian	*P* value
Supplement use			.015*
Yes	224/384 (58.3%)	957/1471 (65.1%)	.141
No	160/384 (41.7%)	514/1471 (34.9%)	.052
Hair-specific supplement use			.001*
Yes	143/388 (36.9%)	257/915 (28.1%)	.009*
No	245/388 (63.1%)	658/915 (71.9%)	.082

*Significance $P < .05$.

likely to use supplements specifically for their hair loss ($P = .009$) (Table II). When stratified by race and gender, more Asian patients endorsed taking supplements than not (47.8% vs 33.1%, $P = .03$), and males were less likely to take supplements (15.2% vs 25.6%, $P = .02$). Black, Hispanic, and Native American/Pacific Islander patients were not significantly more or less likely to use supplements (Table I).

The most used vitamins were biotin (18.3%), multivitamins (21.4%), vitamin D (23.2%), vitamin B12 (5.4%), fish oil/omega-3 (4.9%), calcium (3.6%), and iron (7.1%). Turmeric pills (2.2%), flax seed pills (1.4%), curcumin (1.4%), and collagen (3.6%) were the most commonly used herbal supplements. Hair-specific nutraceuticals were used by 8.9%.

Our study is limited by its retrospective nature and small sample size. The larger influence of CAM in SOC patients with hair loss may stem from a higher level of medical mistrust and lack of access to dermatologists.[3,4] Although supplements may offer some benefits of increased hair density and reduced hair loss, there are conflicting data on their true efficacy and high costs.[5] Hair loss conditions are largely chronic and often require long-term, continued treatment. Compared to allopathic medications, these herbs and supplements are not regulated and their risks and drug interactions are underexplored. Education of patients regarding the risks of supplement use is warranted. Large-scale, longitudinal studies on the use of supplements in SOC patients may be helpful in furthering an understanding on this topic.

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Conflicts of interest

None disclosed.

REFERENCES

1. Smith N, Shin DB, Brauer JA, Mao J, Gelfand JM. Use of complementary and alternative medicine among adults with skin disease: Results from a national survey. *J Am Acad Dermatol*. 2009;60(3):419-425. https://doi.org/10.1016/j.jaad.2008.11.905
2. Atanaskova Mesinkovska N. Complementary and alternative treatments for alopecia: A comprehensive review. *Skin Appendage Disord*. 2019;5(2):72-89. https://doi.org/10.1159/000492035
3. Bazargan M, Cobb S, Assari S. Discrimination and medical mistrust in a racially and ethnically diverse sample of California adults. *Ann Fam Med*. 2021;19(1):4-15. https://doi.org/10.1370/afm.2632
4. Buster KJ, Stevens EI, Elmets CA. Dermatologic health disparities. *Dermatol Clin*. 2012;30(1):53-59. https://doi.org/10.1016/j.det.2011.08.002. viii.
5. Drake L, Reyes-Hadsall S, Martinez J, Heinrich C, Huang K, Mostaghimi A. Evaluation of the safety and effectiveness of nutritional supplements for treating hair loss: A systematic review. *JAMA Dermatol*. 2023;159(1):79-86. https://doi.org/10.1001/jamadermatol.2022.4867

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