Saniya Shaikh, DO, Payal M. Patel, MD, Eric S. Armbrecht, PhD, and M. Yadira Hurley, MD

From the Department of Dermatology, Saint Louis University, Saint Louis, Missouri.

Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: The Saint Louis University Institutional Review Board approved the study.

Correspondence and reprint requests to: Saniya Shaikh, DO, Department of Dermatology, Saint Louis University, 1755 S Grand Blvd, Saint Louis, MO 63104

E-mail: saniya.shaikh@health.slu.edu

REFERENCES

- Raju S, Hollis K, Neglen P. Use of compression stockings in chronic venous disease: patient compliance and efficacy. *Ann Vasc Surg.* 2007;21(6):790-795.
- Weng QY, Raff AB, Cohen JM, et al. Costs and consequences associated with misdiagnosed lower extremity cellulitis. JAMA Dermatol. 2017;153(2):141-146.

https://doi.org/10.1016/j.jaad.2020.06.1030

Integrating colocated behavioral health care into a dermatology clinic: A prospective randomized controlled treatment pilot study in patients with alopecia areata



To the Editor: Alopecia areata (AA) is a medical disease with substantial psychosocial burden.¹ Because of a recognized absence in care addressing such burdens, researchers, dermatologists, and

patients are calling for increased clinical attentiveness to this issue.^{2,3} This call has generally been unanswered, and little research addressing and treating AA psychosocial disease burden exists.

To address this, we developed an AA-specific colocated behavioral health (CLBH) treatment protocol. CLBH involves brief mental health treatment integrated into a medical clinic. It focuses on a patient's condition-related psychosocial factors, with the goal of enhanced patient functioning. Established in primary care, CLBH has resulted in improved physical and psychosocial outcomes.^{4,5}

institutional review board-approved, randomized, controlled pilot study investigated the feasibility of integrating the CLBH protocol into busy disease dermatology clinics, perspectives on CLBH provision, immediate perceived benefits of CLBH, and impact on psychosocial functioning 1 month later. Adult patients with AA participated. Twenty patients received up to 2, 30-minute sessions of the AA-specific protocol, providing emotional social support and identifying plans for living better with AA. The first session was held immediately after their dermatology appointment in an adjacent conference room. Control individuals (n = 10) received no behavioral health care.

Participants completed psychosocial outcome measures at study enrollment and 1 month later. Standardized measures were available for depression, demoralization, and appearance shame. For AA-specific emotional social support, coping, negative emotions, and social avoidance, unstandardized measures were developed and pilot tested with patients with AA. After each session, treatment participants answered questions on the perceived

Table I. Treatment participants' (N = 20) level of agreement with statements of perceived benefit immediately after CLBH session 1*

Item: Today's behavioral health								
appointment	Mean	SD						
Provided me emotional support.	4.75	0.55						
Helped me feel less alone.	4.35	0.98						
Increased my understanding of AA impacts.	4.4	0.68						
Helped me feel normal in how I am responding to my AA.	4.65	0.59						
Resulted in me feeling understood.	4.7	0.47						
Helped me feel accepted.	4.3	1.17						
Helped me feel less trapped.	4.0	1.2						
Increased my self-confidence for helping myself live better with AA.	3.9	1.2						
Increased my ability to cope with my AA.	3.75	1.12						
Overall left me satisfied.	4.6	0.5						
Overall helped me.	4.35	0.67						
Overall increased my satisfaction with the care I received from the dermatology clinic.	4.75	0.44						

AA, Alopecia areata; CLBH, colocated behavioral health; SD, standard deviation.

^{*1:} strongly disagree; 2: disagree; 3: neither agree nor disagree; 4: agree; 5: strongly agree.

Table II. Outcome constructs of interest, measures used, and 1-month follow-up group comparisons

Construct	Measure	Measure validation status	Treatment condition, mean (SD), n	Control condition, mean (SD), n	t value (df)	P value	Effect size (Cohen's D)*	95% CI of the difference	,	Width of CI,
Depression screen	Patient Health Questionnaire [‡]	Standardized	2.4 (2.4), 18	2.0 (2.0), 10	.50 (26)	.62	0	-1.4 to 2.3	+: 2.3 -: 1.4	0.3 0.2
Demoralization	Demoralization Scale Revised:	Standardized	18.3 (3.4), 15	18.0 (2.3), 9	.21 (22)	.84	0.10	-2.4 to 3.0	+ 3.0 -: 2.4	0.2 0.2 0.2
Life meaning and purpose	Demoralization Scale Revised subscale: Meaning and Purpose		8.3 (1.0), 15	8.6 (1.0), 10	64 (23)	.53	0.27	-1.1 to .60	+.6 -: 1.1	0.1 0.1
	Demoralization Scale Revised subscale: Distress and Coping		10.2 (2.7), 17	9.6 (1.8), 9	63 (24)	.54	0.26	-1.4 to 2.7	+: 2.7 -: 1.4	0.3 0.2
Appearance shame	Shame Scale Revised	Standardized	16.4 (5.4), 17	19.6 (6.4), 10	-1.39 (25)	.18	0.54	-7.9 to 1.5	+ 1.5 -: 7.9	0.2 1.0
Activity avoidance	Alopecia Areata Patient-Reported QOL: Activity Avoidance	Unstandardized	7.1 (3.3), 16	9.2 (4.1), 10	-1.41 (24)	.17	0.56	-5.1 to 1.0	+: 1.0 -: 5.1	0.3 1.3
Negative emotions	Alopecia Areata Patient-Reported QOL: Negative Emotions [#]		9.9 (3.6), 16	12.5 (4.7), 10	-1.56 (24)	.13	0.62	-5.9 to 0.8	+: 0.8 -: 5.9	0.2 1.2
Emotional social support	Alopecia Areata Impact Measure: Emotional Social Support [¶]	Unstandardized	13.2 (2.9), 17	11.9 (3.0), 10	1.13 (25)	.27	0.44	-1.1 to 3.8	+: 3.8 -: 1.1	1.0 0.3
Coping	Alopecia Areata Impact Measure: Coping [#]		7.0 (1.2), 17	6.2 (1.3), 10	1.60 (25)	.12	0.64	-0.2 to 1.8	+: 1.8 -: 0.2	0.9 0.1

CI, Confidence interval; QOL, quality of life; SD, standard deviation.

^{*}Effect size calculator available at https://www.socscistatistics.com/effectsize/default3.aspx.

[†]Calculated by dividing the width of the confidence interval for the full scale by the number of items in the scale. Values in bold indicate outcomes meeting, or nearly meeting, the operational definition of a clinically meaningful difference.

[‡]Score consisted of 9 items.

[§]Score consisted of 16 items.

^{II}Score consisted of 8 items.

[¶]Score consisted of 4 items.

^{*}Score consisted of 2 items.

benefits of the CLBH received. Medical records provided patient demographics and AA history. Participants self-reported AA severity.

Participation and 1-month follow-up rates were 68% and 90%, respectively. Participants were predominantly female (83.3%), white, middle aged (mean age, 48.1 y), and married (60%); the mean time since AA diagnosis was 12.6 years, and the median number of dermatology clinic appointments was 6.5. In terms of AA scalp hair involvement, 6.7% reported full scalp hair; 43.3%, patchy but able to cover bald spots; 33.3%, patchy and not able to cover spots; 10%, almost totalis; and 6.7%, totalis. Groups did not differ on pretreatment outcomes, AA condition, or demographics.

Integrating CLBH was highly feasible. No clinic disruption occurred and 90% of treatment participants completed treatment in 1 session. CLBH was overwhelmingly perceived as beneficial (Table I); 100% reported increased dermatology care satisfaction, and 90% of participants endorsed as important addressing psychosocial issues during dermatology visits.

At follow-up, when controlling for AA severity, noteworthy nonsignificant trends were seen (Table II). For most outcomes, the treatment group reported better psychosocial functioning than the control group, with predominately medium effects sizes. Confidence intervals encompassed clinically meaningful differences, defined as an average item change of 1 step in the desired direction on the measure's response scale (eg, from 4 [quite a bit of embarrassment] to 3 [somewhat]).

To our knowledge, no prior research exists regarding CLBH in AA dermatology care. We found CLBH and the AA-specific protocol feasible, relevant, and promising for enhancing adult AA patients' psychosocial functioning. Although limited by 1 clinic site and CLBH provider (who herself has AA), unstandardized measures, and low power, these findings, if confirmed in future research, suggest that CLBH holds potential as a best practice in AA dermatology care.

The research team would like to recognize Shelley Novotny for arranging research room availability adjacent to the dermatology clinic, Dr C.J. Peek for consultation during development of the AA-specific behavioral health protocol, and Dr Jerica Berge for providing clinical behavioral health supervision.

Kristina Gorbatenko-Roth, PhD, LP, a,b James S. Hodges, PhD, Dayna Lifson, MS, Maribeth Golm, MS,b Dory Kranz, MA,e Denise Windenburg, MHA,b and Maria Hordinsky, MD

From the University of Wisconsin-Stout, Department of Psychology, Menomonie, Wisconsin^a; University of Minnesota, Department of Dermatology, Minneapolis, Minnesota^b; Division of Biostatistics, University of Minnesota, Minneapolis, Minnesota^c; M Health Fairview, Minneapolis, Minnesota^d; and National Alopecia Areata Foundation, San Rafael, California.^e

Funding sources: Supported by research awards from the National Alopecia Areata Foundation and the University of Wisconsin—Stout.

Conflicts of interest: None disclosed.

IRB approval status: Reviewed and approved by University of Minnesota—Twin Cities IRB (approval no. STUDY00004840) and University of Wisconsin—Stout IRB (approval no. 2018-11-45).

Reprint requests: Kristina Gorbatenko-Roth, PhD, LP, 470E Harvey Hall, Department of Psychology, University of Wisconsin—Stout, Menomonie, WI 54751

E-mail: gorbatenkok@uwstout.edu

REFERENCES

- Korta DZ, Christiano AM, Bergfeld W, et al. Alopecia areata is a medical disease. J Am Acad Dermatol. 2018;78(4):832-834.
- Liu LY, King BA, Craiglow BG. Alopecia areata is associated with impaired health-related quality of life: a survey of affected adults and children and their families. J Am Acad Dermatol. 2018;79(3):556-558.e1.
- Christensen TS, Yang JS, Castelo-Soccio L. Bullying and quality of life in pediatric alopecia areata. Skin Appendage Disord. 2017;3(3):115-118.
- Introduction to integrated physical and mental health care. American Psychiatric Nurses Association. Accessed September 2, 2020. Available at: https://www.apna.org/i4a/pages/index. cfm?pageid=4837#3.
- Asarnow JR, Rozenman M, Wiblin J, Zeltzer L. Integrated medical-behavioral care compared with usual primary care for child and adolescent behavioral health: a meta-analysis. *JAMA Pediatr.* 2015;169(10):929-937.

https://doi.org/10.1016/j.jaad.2020.07.070

Diagnostic yield of skin biopsies of cutaneous red nodules in hospitalized immunocompromised children: A retrospective review from a single institution



To the Editor: Inpatient dermatology consultation is often requested for acute erythematous nodules in immunocompromised children. The differential diagnosis typically includes infection, drug toxicity, and inflammatory conditions, all of which may present similarly. ¹⁻³ The purpose of this study was