

only by the issue's table of contents. Furthermore, only Scimago-indexed dermatology journals were considered, whereas many other metrics exist for evaluating journal influence.³ Nevertheless, our study provides valuable insight into a wide spectrum of dermatology article types as well as the types favored for publication by particular journals, laying the groundwork for future analysis as new journal editors have opportunities to shape dermatology research and discourse.

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REFERENCES

1. Arndt KA. Information excess in medicine. Overview, relevance to dermatology, and strategies for coping. *Arch Dermatol*. 1992; 128(9):1249-1256.
2. SJR: Scientific Journal Rankings. Scimago Journal & Country Rank. Available at: <https://www.scimagojr.com/journalrank.php>. Accessed January 28, 2020.
3. Saha S, Saint S, Christakis DA. Impact factor: a valid measure of journal quality? *J Med Libr Assoc*. 2003;91(1):42-46.

Factors associated with leaving against medical advice among patients hospitalized for dermatologic conditions



To the Editor: Despite the substantial burden of skin disease in hospitalized patients and the association of leaving against medical advice (AMA) with worse outcomes, little is known regarding leaving AMA among patients hospitalized for dermatologic conditions.^{1,2} Our objective was to determine factors associated with leaving AMA in patients hospitalized for dermatologic conditions.

In this retrospective case-control study of the National Inpatient Sample (2009-2015), patients hospitalized for dermatologic conditions were identified using primary International Classification of Diseases, Ninth Revision—Clinical Modification code/clinical classification software. Rao-Scott chi-square test, *t* test, and analysis of variance were used for unadjusted comparisons by discharge status and trends over time. Weighted multivariable logistic regression was used to determine factors associated with leaving AMA. Variables significant on univariate analysis were initially included in the multivariable model; the Akaike information criterion was used to determine variable inclusion for collinear covariates comparing independent multivariable models. Analyses were performed in SAS 9.4 (SAS Institute, Cary, NC) using survey procedures/weighting for nationally representative estimates.

A total of 4,523,930 patients were hospitalized for dermatologic conditions, and 66,091 (1.46%) left AMA. The rate of leaving AMA increased from 2009 (1.44%) to 2015 (2.22%; *P* < .001) (Supplemental Table I; available via Mendeley at <https://doi.org/10.17632/7wn6m5n5kj.1>). Skin/subcutaneous infections were the most common diagnoses (Table I). In multivariable analysis, young adult (adjusted odds ratio [aOR], 1.41; 95% confidence interval [CI], 1.33-1.50) men (aOR, 1.56; 95% CI, 1.50-1.63) with insurance status of uninsured (aOR, 1.91; 95% CI, 1.74-2.09) or Medicaid (aOR, 1.77; 95% CI, 1.66-1.90) were most likely to leave AMA (Table II). Patients with lower income (aOR, 1.28; 95% CI, 1.16-1.41) and those admitted emergently (aOR, 1.79; 95% CI, 1.59-2.01) had greater odds of leaving AMA. Patients undergoing a major procedure (aOR, 0.38; 95% CI, 0.35-0.40) were less likely to leave AMA. Patients in urban teaching (aOR, 1.51; 95% CI, 1.34-1.70) and nonteaching (aOR, 1.70; 95% CI, 1.52-1.91) hospitals were more likely to leave AMA

Table I. Sociodemographic, clinical, and hospital characteristics of patients hospitalized for dermatologic conditions

Patient characteristics	AMA inpatients, % (95% CI) (n = 66,091)	Routinely discharged inpatients, % (95% CI) (n = 4,457,839)
Sex		
Male	66.03 (65.06-66.99)	50.62 (50.35-50.89)
Female	33.97 (33.01-34.94)	49.38 (49.11-49.65)
Age		
Average, y, (95% CI)	45.03 (44.60-45.46)	56.61 (56.09-57.14)
0-17	0.76 (0.59-0.92)	6.65 (5.88-7.41)
18-39	37.45 (36.15-38.75)	14.94 (14.61-15.27)
40-59	45.58 (44.48-46.68)	30.13 (29.66-30.59)
60-79	13.49 (12.70-14.28)	30.28 (29.88-30.67)
≥80	2.73 (2.39-3.06)	18.01 (17.51-18.51)
Race		
White	62.05 (59.04-65.05)	69.69 (68.13-71.26)
Black	19.37 (17.64-21.11)	14.74 (13.68-15.79)
Hispanic	12.88 (11.07-14.70)	10.44 (9.36-11.53)
Asian/Pacific Islander	0.87 (0.62-1.13)	1.45 (1.25-1.65)
Native American	0.83 (0.58-1.08)	0.82 (0.61-1.02)
Other	4.00 (2.73-5.27)	2.86 (2.39-3.34)
Quartile of income, percentile		
0-25th	39.26 (36.61-41.91)	30.97 (29.48-32.45)
26th-50th	25.69 (23.66-27.73)	25.45 (24.36-26.53)
51st-75th	20.86 (19.44-22.29)	23.70 (22.73-24.66)
76th-100th	14.18 (12.67-15.70)	19.89 (18.24-21.55)
Primary payer		
Medicare	24.99 (23.93-26.05)	46.34 (45.55-47.14)
Medicaid	32.21 (30.12-34.30)	16.41 (15.70-17.12)
Private insurance	12.42 (11.46-13.39)	25.52 (24.84-26.20)
Self-pay	23.69 (21.93-25.45)	7.45 (6.97-7.92)
No charge	2.02 (1.46-2.57)	0.81 (0.61-1.00)
Other	4.67 (3.96-5.38)	3.48 (3.16-3.79)
Type of admission		
Emergent	94.19 (93.48-94.91)	84.15 (83.44-84.86)
Elective	5.81 (5.09-6.52)	15.85 (15.15-16.56)
Dermatologic condition		
Melanoma	0.14 (0.07-0.21)	0.51 (0.45-0.57)
Other nonepithelial skin cancer	0.33 (0.23-0.42)	1.18 (1.08-1.29)
Skin/subcutaneous infection	75.90 (74.90-76.90)	61.70 (61.06-62.35)
Inflammatory skin condition	2.33 (2.07-2.60)	3.61 (3.50-3.73)
Chronic skin ulcer	17.81 (16.91-18.71)	26.87 (26.24-27.49)
Other skin disorder	3.49 (3.14-3.84)	6.13 (5.88-6.38)
Weekend admission		
No	74.50 (73.74-75.26)	79.68 (79.52-79.85)
Yes	25.50 (24.74-26.26)	20.32 (20.15-20.48)
Underwent major surgical procedure		
No	91.07 (90.46-91.67)	77.09 (76.68-77.50)
Yes	8.93 (8.33-9.54)	22.91 (22.50-23.32)
Number of chronic conditions		
0-1	20.28 (19.26-21.29)	20.35 (19.70-21.00)
2-4	44.05 (42.99-45.10)	30.19 (29.73-30.65)
5 or more	35.68 (34.47-36.89)	49.46 (48.68-50.25)
Number of diagnoses		
0-1	2.74 (2.34-3.13)	1.78 (1.62-1.95)
2-4	22.21 (21.14-23.28)	17.50 (16.95-18.04)
5 or more	75.05 (73.79-76.31)	80.82 (80.06-81.38)

Continued

Table I. Cont'd

Patient characteristics	AMA inpatients, % (95% CI) (n = 66,091)	Routinely discharged inpatients, % (95% CI) (n = 4,457,839)
Number of procedures		
0-1	82.76 (81.14-84.37)	69.57 (68.83-70.31)
2-5	14.83 (13.60-16.06)	24.71 (24.22-25.20)
5 or more	2.41 (1.91-2.91)	5.72 (5.41-6.03)
Hospital characteristics		
Bed size		
Small (1-249 beds)	11.01 (9.31-12.70)	13.26 (12.42-14.09)
Medium (250-424 beds)	28.70 (25.62-31.79)	25.16 (23.87-26.45)
Large (>424 beds)	60.29 (56.96-63.62)	61.58 (60.05-63.11)
Hospital type		
Rural	9.37 (8.27-10.48)	13.19 (12.34-14.04)
Urban nonteaching	44.28 (40.85-47.71)	41.66 (39.97-43.35)
Urban teaching	46.35 (42.75-49.95)	45.15 (43.40-46.89)

AMA, Against medical advice; CI, confidence interval.

than those in rural hospitals. Diagnoses, chronic conditions, and procedures per age group are provided in Supplemental Table II (available via Mendeley at <https://doi.org/10.17632/7wn6m5n5kj.1>).

The rate of AMA discharge among patients hospitalized with skin disease (1.46%) is similar to that of all hospitalized patients (1.44%).³ As for other conditions, patients who were either uninsured or insured by Medicaid were more likely to leave AMA.^{1,3} Patients often cite financial reasons for leaving AMA; education regarding the financial implications of leaving AMA is important in improving rates of safe discharge.⁴

Fewer diagnoses, chronic conditions, and procedures in young adults may increase rates of leaving AMA. Possible explanations for the increased likelihood of leaving AMA in urban hospitals include more options for dermatologic care, differing patient populations, and differences in provided services. Study limitations include inability to evaluate disease severity, reliance on National Inpatient Sample coding, and lack of information regarding the reasons/consequences of leaving AMA. This study is a broad description of leaving AMA for skin disease, and disease-specific studies are needed to identify targeted strategies.

Patients leaving AMA have increased risk of 30-day mortality and disproportionately taxing hospital readmissions, and patients hospitalized for dermatologic conditions have substantial readmission rates.^{1,5} Understanding contributors to

leaving AMA is critical in developing interventions to limit early termination of treatment and improve health care service use.

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Table II. Multivariable logistic regression model for leaving against medical advice in patients hospitalized for dermatologic conditions

Patient demographics	Adjusted odds ratio (95% CI)	P value
Sex		
Male	1.56 (1.50-1.63)	<.001
Female	Reference	—
Age, y		
0-17	0.06 (0.04-0.07)	<.001
18-39	1.41 (1.33-1.50)	<.001
40-59	Reference	—
60-79	0.37 (0.34-0.39)	<.001
≥80	0.13 (0.11-0.15)	<.001
Race		
Non-Hispanic White	Reference	—
Black	0.995 (0.918-1.079)	.910
Hispanic	0.91 (0.81-1.02)	.089
Asian/Pacific Islander	0.77 (0.60-0.97)	.029
Native American	1.03 (0.81-1.31)	.836
Other	1.16 (0.99-1.36)	.066
Quartile of income, percentile		
0-25th	1.28 (1.16-1.41)	<.001
26th-50th	1.15 (1.03-1.27)	.0102
51st-75th	1.05 (0.97-1.13)	.211
76th-100th	Reference	—
Primary payer		
Medicare	Reference	—
Medicaid	1.77 (1.66-1.90)	<.001
Private insurance	0.48 (0.44-0.52)	<.001
Self-pay	1.91 (1.74-2.09)	<.001
No charge	1.43 (1.20-1.71)	<.001
Other	0.97 (0.85-1.10)	.607
Admission type		
Emergent	1.79 (1.59-2.01)	<.001
Elective	Reference	—
Dermatologic condition		
Melanoma	0.73 (0.42-1.26)	.255
Other nonepithelial skin cancer	0.74 (0.52-1.04)	.078
Skin/subcutaneous infection	1.19 (1.12-1.27)	<.001
Inflammatory skin condition	0.81 (0.71-0.93)	.003
Chronic skin ulcer	Reference	—
Other skin disorder	0.89 (0.79-1.02)	.086
Hospitalization details		
Underwent major surgical procedure		
No	Reference	—
Yes	0.38 (0.35-0.40)	<.001
Number of chronic conditions		
0-1	Reference	—
2-4	1.33 (1.24-1.42)	<.001
5 or more	1.04 (0.96-1.13)	.336

Continued

Table II. Cont'd

Patient demographics	Adjusted odds ratio (95% CI)	P value
Hospital type		
Rural	Reference	—
Urban nonteaching	1.70 (1.52-1.91)	<.001
Urban teaching	1.51 (1.34-1.70)	<.001

CI, Confidence interval.

REFERENCES

1. Glasgow JM, Vaughn-Sarrazin M, Kaboli PJ. Leaving against medical advice (AMA): risk of 30-day mortality and hospital readmission. *J Gen Intern Med.* 2010;25(9):926-929.
2. Arnold JD, Yoon SJ, Kirkorian AY. The national burden of inpatient dermatology in adults. *J Am Acad Dermatol.* 2019;80(2):425-432.
3. Ibrahim SA, Kwok CK, Krishnan E. Factors associated with patients who leave acute-care hospitals against medical advice. *Am J Public Health.* 2007;97(12):2204-2208.
4. Schaefer GR, Matus H, Schumann JH, et al. Financial responsibility of hospitalized patients who left against medical advice: medical urban legend? *J Gen Intern Med.* 2012;27(7):825-830.
5. Zhang M, Markova A, Harp J, Dusza S, Rosenbach M, Kaffenberger BH. Dermatology-specific and all-cause 30-day and calendar-year readmissions and costs for dermatologic diseases from 2010 to 2014. *J Am Acad Dermatol.* 2019;81(3):740-748.

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Characterization of real-world patients with psoriasis and without a history of depression: The Corrona Psoriasis Registry



To the Editor: Patients with psoriasis are 1.5-times more likely to have concomitant depression (odds ratio, 1.57; 95% confidence interval, 1.40-1.76)¹ than individuals without psoriasis. There are limited real-world data describing the characteristics of patients with psoriasis with depression vs those without depression, and no available data regarding antidepressant use in these cohorts. The main objective of this cross-sectional study was to explore these gaps.

Data were derived from the Corrona Psoriasis Registry—a prospective, multicenter, observational, disease-based registry.² Our analysis included enrollment data on 5835 patients starting from the launch of the registry in April 2015 through September 2018. Patients were stratified by the presence or absence of a self-reported history of depression (yes/no). Patients were also classified into 3 groups: (1) no history of depression, (2) history of depression and taking antidepressants,