



Fig 1. Pediatric cutaneous leishmaniasis. Large ulcer on the upper lip of a 7.5-year-old boy with significant swelling (A) before and (B) after a series of six intralesional sodium stibogluconate injections, leaving a nearly unnoticeable scar after treatment.

Nevertheless, this is the largest cohort evaluating the efficacy and safety of IL SGG under anesthesia in children. Our results are promising, and controlled clinical trials are needed to further evaluate IL SSG under anesthesia by inhaled sevoflurane in children with CL.

We thank the patient photographed in Fig 1 and his parents for their permission to publish clinical photographs.

Yael Renert-Yuval, MD,^a Claes D. Enk, MD,^a Sari Murad, MD,^a Valerie Yofe, MD,^b David Gozal, MD,^b and Vered Molho-Pessach, MD^a

From the Department of Dermatology^a and the Division of Anesthesiology and Critical Care Medicine,^b Hadassah-Hebrew University Medical Center, Jerusalem, Israel

Reprint requests: Vered Molho-Pessach, MD, Department of Dermatology, Hadassah-Hebrew University Medical Center, Kiryat Hadassah, POB 12000, Jerusalem 90836, Israel

E-mail: rverem@hadassah.org.il

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<https://doi.org/10.1016/j.jaad.2019.01.083>

Skin cancer risk factors and screening among sexual minority and heterosexual women



To the Editor: Sexual minority persons—including lesbian, gay, and bisexual persons—face unequal cancer risks and are a National Institutes of Health—designated health disparity population.¹ Although multiple studies have demonstrated higher prevalence of skin cancer and associated risk factors in gay and bisexual men,²⁻⁴ 2 studies have shown that sexual minority women (SMW) had a lower prevalence of indoor tanning and skin cancers compared with heterosexual women.^{4,5} Scant data exist on additional skin cancer risk behaviors among SMW.

To address this critical knowledge gap, our study examined the prevalence of multiple skin cancer risk factors and screening in SMW using the 2015 National Health Interview Survey, a cross-sectional survey representative of the United States civilian population. Emory University institutional review exemption was obtained.

We restricted the analysis to adult women aged ≥ 18 years self-identifying as “lesbian or gay” or “bisexual” (SMW) and as “straight, that is, not lesbian or gay” (heterosexual women). Prevalence of ≥ 1 sunburns, indoor tanning device use, and skin cancer screening examination within the past 12 months were compared between SMW and heterosexual women using Rao-Scott χ^2 tests and benchmarked against Healthy People 2020 targets. Survey sample weights were applied and all estimates met a priori reliability standards. Multivariable logistic regression adjusted for significant socio-demographic confounders. Two-sided tests with Bonferroni-corrected $P < .005$ were considered significant for 9 outcomes. Stata 12.1 software (StataCorp LLC, Collage Station, TX) was used.

Among 18,601 women respondents, 464 SMW (2.5%), comprising 263 gay or lesbian (1.4%) and 201 bisexual (1.1%) women, and 17,340 heterosexual

Table I. Sociodemographic characteristics of sexual minority and heterosexual women

Variable	Sexual minority women, no. (%) [*]	Heterosexual women, no. (%) [*]	P
	(n = 464)	(n = 17,340)	
Age, y			
18-39	263 (59.8)	5618 (36.6)	<.001
40-64	158 (32.4)	7054 (42.5)	
≥65	43 (7.8)	4668 (20.9)	
Race/ethnicity			
Non-Hispanic white	307 (67.6)	10,645 (65.2)	.048
Non-Hispanic black	77 (16.0)	2576 (12.6)	
Hispanic	56 (10.5)	2944 (15.2)	
Other	24 (5.9)	1175 (7.0)	
Educational attainment			
Below high school	48 (9.5)	2365 (12.1)	.15
High school or equivalent	83 (19.4)	4199 (23.9)	
Some college	161 (36.1)	5606 (32.3)	
College graduate or above	172 (35.1)	5096 (31.7)	
Family income level			
≥200% federal poverty level	247 (57.9)	9661 (61.8)	<.001
<200% federal poverty level	205 (39.9)	6541 (31.1)	
Missing	12 (2.2)	1138 (7.1)	
Geographic region			
Northeast	78 (14.1)	2925 (17.9)	.47
Midwest	87 (22.4)	3568 (21.8)	
South	167 (38.5)	6179 (38.1)	
West	132 (25.0)	4668 (22.2)	
Smoking status			
Never smoker [†]	238 (55.8)	11,429 (67.7)	.001
Former smoker	111 (19.8)	2436 (13.4)	
Current smoker	114 (24.4)	3450 (18.9)	
Heavy alcohol use [‡]	176 (35.3)	2887 (17.1)	<.001
Body mass index			
Underweight/normal	159 (36.4)	6631 (42.2)	.003
Overweight	118 (23.4)	4826 (28.5)	
Obese	179 (40.2)	5173 (29.3)	
Has health insurance	411 (89.9)	15,692 (90.5)	.70
History of skin cancer			
Personal	11 (2.2)	496 (2.7)	.54
Family	41 (9.4)	1346 (7.6)	.36

*The percentage indicates the weight prevalence.

[†]Defined as smoking <100 cigarettes in lifetime.

[‡]Defined as reporting any day with ≥5 drinks in the past year.

(93.2%) women were identified. SMW were more likely than heterosexual women to report younger age, non-Hispanic ethnicity, obesity, current or former smoker, heavy alcohol use, and lower income level (Table I). No significant difference was found in geographic region, educational attainment, health insurance status, and personal or family history of skin cancers. Although SMW reported more sunburns on univariate analysis, the difference in reported sunburns after adjustment for socio-demographic differences was not statistically significant (Table II). No differences in indoor tanning, skin cancer screening examinations, and

frequent sun-protective behaviors were noted by sexual minority status. Healthy People 2020 prevalence targets were met for sunburns (33.8%) in heterosexual women but not in SMW; targets for indoor tanning (3.6%) and sun-protective behaviors (73.7%) remained unmet for both groups.

In contrast with prior indoor tanning data,⁴ the prevalence of skin cancer risk behaviors among SMW was not significantly different from that of heterosexual women in 2015. This result may be due to additional adjustments made for income, smoking, and alcohol use as potential confounders. Decreasing trends of indoor tanning use seen in

Table II. Prevalence of sunburns, indoor tanning, skin cancer screening, and frequent sun-protective behaviors among sexual minority and heterosexual women

Outcomes*	Sexual minority women	Heterosexual women	P	HP 2020 target†
	(n = 464)	(n = 17,340)		
Sunburn in the past 12 months				
Prevalence, % (95% CI)	43.3 (37.2-49.7)	33.2 (32.1-34.4)	.001	33.9
aOR (95% CI)‡	1.08 (0.80-1.48)	1 [Reference]	.61	
Indoor tanning in the past 12 months				
Prevalence, % (95% CI)	6.6 (4.1-10.3)	5.2 (4.7-5.8)	.34	3.6
aOR (95% CI)	0.88 (0.52-1.48)	1 [Reference]	.63	
Skin cancer screening exam in the past 12 months				
Prevalence, % (95% CI)	12.5 (9.0-16.9)	11.6 (11.0-12.3)	.68	N/A
aOR (95% CI)	1.51 (1.03-2.20)	1 [Reference]	.03	
Frequent sun-protective behaviors§				
Prevalence, % (95% CI)	70.3 (64.5-75.4)	70.1 (69.1-71.1)	.97	73.7
aOR (95% CI)	1.18 (0.89-1.56)	1 [Reference]	.26	
1. Seeking shade				
Prevalence, % (95% CI)	41.4 (35.6-47.5)	43.2 (42.2-44.3)	.57	N/A
aOR (95% CI)	1.03 (0.79-1.33)	1 [Reference]	.85	
2. Long sleeves				
Prevalence, % (95% CI)	8.6 (5.7-12.8)	11.5 (10.8-12.2)	.16	N/A
aOR (95% CI)	1.06 (0.66-1.68)	1 [Reference]	.82	
3. Long pants				
Prevalence, % (95% CI)	25.1 (20.0-31.0)	22.7 (21.8-23.6)	.38	N/A
aOR (95% CI)	1.41 (1.03-1.94)	1 [Reference]	.03	
4. Wide-brimmed hat				
Prevalence, % (95% CI)	12.6 (9.1-17.2)	14.1 (13.3-14.9)	.50	N/A
aOR (95% CI)	1.19 (0.8-1.76)	1 [Reference]	.39	
5. SPF ≥15 sunscreen use				
Prevalence, % (95% CI)	39.7 (33.3-46.5)	39.7 (38.6-40.9)	.99	N/A
aOR (95% CI)	1.07 (0.80-1.42)	1 [Reference]	.66	

aOR, Adjusted prevalence odds ratio; CI, confidence interval; HP 2020, Healthy People 2020; N/A, not available; SPF, sun protection factor. *Complete case analysis excluded up to 1498 participants (8.4%) with missing outcomes (4.7%) or covariates (4.2%). Missing data were less common in sexual minority women (5.2% vs 8.5%, $P = .01$).

†HP 2020 targets are federal public health goals for year 2020, aimed to reduce the prevalence of sunburns and indoor tanning in the past 12 months and to increase frequent sun-protective behaviors. Skin cancer–related HP 2020 targets are measured by the questions in the National Health Interview Survey. HP 2020 targets have not been set for skin cancer screen or individual sun-protective behaviors.

‡Multivariable logistic regression models were adjusted for age group, race/ethnicity, income level, smoking status, heavy alcohol use, and body mass index. First-order interaction terms between race/ethnicity and sexual minority status were not significant and not included in the final model.

§Composite measure defined as “always” or “most of the time” use of staying in the shade, wearing a long-sleeved shirt, long pants, wide-brimmed hat, SPF ≥15 sunscreen, or a combination of these, when going outside on a warm sunny day for >1 hour. Respondents who reported they “do not go out into the sun” were not considered to engage in frequent sun-protective behaviors according to the HP 2020 target definitions.

heterosexual women may also differ in SMW. Despite the large study sample size, it did not allow further subanalyses comparing lesbian and bisexual women. Self-reported survey outcomes were subject to information bias. Our results highlighted current unmet targets for skin cancer prevention among SMW and heterosexual women. Future studies are needed to evaluate ongoing public health interventions to reduce indoor tanning and promote sun-protective behaviors in SMW to achieve national skin cancer prevention goals in all women.

Howa Yeung, MD,^a Marissa L. H. Baranowski, BS,^a and Suephy C. Chen, MD, MS^{a,b}

Department of Dermatology, Emory University School of Medicine, Atlanta, Georgia^a; and Regional Telehealth Services, VA Southeast Network VISN 7, Decatur, Georgia^b

Funding sources: Supported in part by the Dermatology Foundation and the National Center for Advancing Translational Sciences of the National Institutes of Health under award number

UL1-TR-002378 and KL2-TR-002381 (H.Y.). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Conflicts of interest: Dr Yeung received honorarium from InVentiv Health. Dr Chen received honorarium from EB Research Partnership and Leo Pharma and royalties from Unilever, BiopharmX, Trevi, Dermecular, and Phoenix Repair. Ms Baranowski had no potential conflicts of interest to disclose.

The abstract was presented in part at the International Investigative Dermatology 2018 meeting in Orlando, Florida, on May 16-19, 2018.

Reprints not available from the authors.

Correspondence to: Howa Yeung, MD, Department of Dermatology, Emory University School of Medicine, 1525 Clifton Rd NE, Atlanta, GA 30322

E-mail: howa.yeung@emory.edu

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<https://doi.org/10.1016/j.jaad.2019.02.024>

Limitations of generalizability and reproducibility of systematic reviews in dermatology



To the Editor: High-quality systematic reviews (SRs) are needed to synthesize the results of multiple studies and inform evidence-based practice. SRs must critically evaluate studies and highlight knowledge gaps to advance dermatology. High-quality SRs are required to avoid the problem of “garbage in...garbage out.” Literature searches are arguably the most fundamental and often overlooked components of SRs. Comprehensive and globally representative search strategies are essential.

Atopic dermatitis (AD) and other inflammatory skin diseases are heterogeneous. Variable presentations by

region and race/ethnicity may be attributable to genetic, environmental, and behavioral factors, or a combination of these. Yet, the most commonly reported literature searches in SRs are limited to English language and Western literature.¹ This may exclude foreign language publications from studies conducted in Asia and other global regions,¹ thereby limiting the generalizability and validity of SR results. Some studies suggested that MEDLINE searches are sufficiently complete.² Others indicated that many other search engines are needed.^{3,4}

We sought to illustrate the impact of incomplete literature searches in dermatology using a post hoc analysis of an SR and meta-analysis that showed considerable regional and age-related differences of AD clinical characteristics.⁵ We used an exhaustive search strategy across multiple languages and search engines with broad global reach, yielding 101 studies. Had we not done so, the results would have been vastly different and arguably incorrect. MEDLINE yielded 32 studies, Embase yielded 22 more studies, and MEDLINE, Embase, Cochrane, Scopus, and LILACS yielded 87 studies, of which 58.7% were prospective and 63.6% high quality (≥ 3 stars for Newcastle-Ottawa Scale study design score). Asian language databases (China National Knowledge Infrastructure, Taiwan Electronic Periodical Services, and CiNii [Scholarly and Academic Information Navigator]) yielded another 9 studies, of which 88.9% were prospective and were high quality. We identified 5 studies from references of included articles.

We repeated the meta-analysis using search results from various combinations of databases. Some characteristics (eg, pruritus, xerosis) showed similar results regardless of the search engines used. Most other characteristics showed considerably different results, and some would have been entirely missed, depending on the search engines used (Fig 1; full results are available in Supplemental Fig 1, available at <https://data.mendeley.com/datasets/5vc2xrfjtp/1>). These results highlight the importance of using comprehensive and globally representative search strategies to reduce bias and improve accuracy of results.

Much of the current dogma about AD is driven by Western literature and may not reflect AD in diverse populations. Our findings have important clinical ramifications given population diversification in the United States and other regions. We are seeing increasingly more ethnically diverse patients, and clinicians need to properly assess AD in diverse populations. These results also have important ramifications for assessing therapeutic efficacy. Most