Table III. Statistical significance of independent variables in regression model predicting health-related quality of life

Variable	*P* value
Sex	.03
Depression*	.0002
Anxiety*	.15
Hidradenitis suppurativa severity	<.001
Problem oriented†	.08
Avoidant†	.006
Socially supported†	.65
Emotion focused†	.63

*Assessed using the Hospital Anxiety and Depression Scale.
†Assessed using the Brief COPE Inventory.

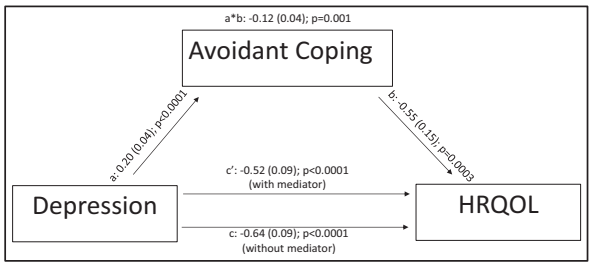

Fig 1. The parameter estimates, β (SE); *P* value, are presented for the displayed associations. The findings suggest that higher depression score has a negative direct impact on HRQOL and is associated with higher avoidant coping scores, which also has a negative impact on HRQOL. A partial mediation model was significant and indicates that avoidant coping mediates part of the effect of depression on lowering HRQOL.

assessing disease severity. It is crucial to manage both the physical and mental aspects of HS, and this study highlights the importance of recognizing coping methods and depression as being impactful on HRQOL. Future research may investigate the impact of counseling, cognitive behavioral therapy, or support group involvement on patients' coping methods, depression, and HRQOL.

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Deficiency of sun protection advertising exists in consumer magazines across demographic groups and varies by target demographic

To the Editor: Millions of Americans subscribe to a variety of consumer magazines annually. Advertisements for dermatology-related products in consumer magazines provide readers with a source of health literacy.[1] This is particularly important for dermatologic conditions, such as skin cancer, which has a prevalence greater than all other cancers combined over the past 30 years, and which can carry associated morbidity and mortality.[2]

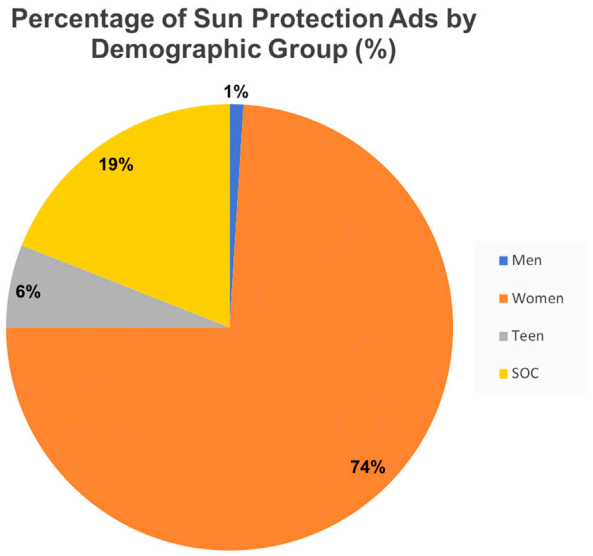

Fig 1. Percentage of sun protection ads by demographic group.

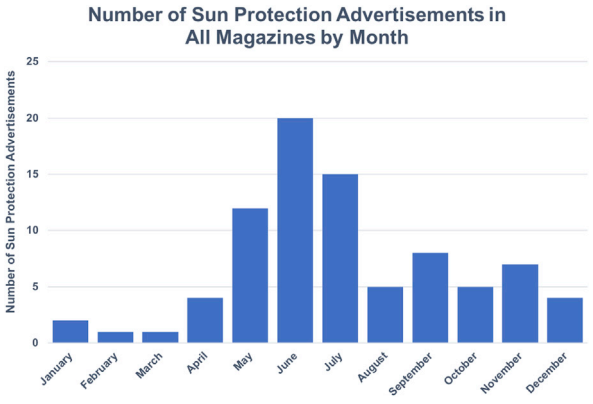

Fig 2. Prevalence of sun protection advertisements in all magazines by month.

This study evaluated dermatology-related advertisements in the most popular monthly consumer magazines in the United States among 4 major demographic groups: teens (ages 18-24), adult (>24) women, adult men, and the adult skin of color population.

Magazines were sorted by circulation data as reported by the Alliance for Audited Media.[3] Publications were excluded if readership was gender neutral, circulation was <100,000 annually, or the editorial content did not include health, fashion, or beauty. Magazine issues were obtained through the New York Public Library and the New York University interlibrary loan system. Issues unavailable in either physical or electronic form were considered inaccessible and were excluded.

In total, 16 magazines were analyzed, with every advertisement reviewed between January 2015 and December 2015. Statistical comparisons were calculated between different demographic categories using STATA statistical software (version 14.0; STATA Corp, College Station, TX). Descriptive statistics were obtained. Simple logistic regressions were used to compare the product indications and language used, and $P < .05$ was considered statistically significant.

Data were obtained from 2177 advertisements in 169 issues of 16 magazines. Less than 1% of advertisements included products related to sun protection. Women's magazines had the highest percentage of these advertisements (2.4%), while skin of color, men's, and teen magazines had almost none (Fig 1). Advertisements regarding sun protection were 3.56 times more likely to be featured in summer compared with winter issues, propagating the myth that sun protection is only necessary during the summer (odds ratio 3.56 [95% confidence interval 2.02-6.27]; $P < .000$; Fig 2). There were no advertisements for sun protective clothing in all 4 demographic categories.

This study provides insight into the lack of sun protection advertising that print media provides to the public, particularly to nonfemale audiences. This is occurring despite men being more likely than women to develop skin cancer and individuals with skin of color presenting with melanoma at later stages and having lower survival rates.[4,5] The cumulative effects of sun damage are also important for younger populations who would benefit from early sun protection. Study limitations include that certain magazines could not be included because of a lack of accessibility.

In summary, this study highlights the concerning lack of advertisements for products related to sun protection on a year-round basis and across all demographic groups, particularly nonfemale audiences. The results of this study can help inform dermatologists of deficiencies in print media regarding the sun's effects on skin cancer, aging, and dyspigmentation. Future studies might include more magazines that target different audiences and categories. In addition, dermatologists can have a powerful public health impact through partnering with media to increase awareness of the importance of sun protection and skin cancer prevention.

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Tumor necrosis factor-α inhibitors for the treatment of pyoderma gangrenosum not associated with inflammatory bowel diseases: A multicenter retrospective study

To the Editor: Pyoderma gangrenosum (PG) is a rare neutrophilic dermatosis characterized by chronic neutrophilic skin ulceration in the absence of infection.[1] An underlying systemic disease is identified in more than 50% of patients, with inflammatory bowel diseases (IBDs) being the most frequent.[2] Systemic steroids and cyclosporine are the fist-line treatments. Recently, tumor necrosis factor-α (TNF-α) inhibitors have been used for refractory PG. The efficacy of TNF-α antagonists has been well demonstrated in PG associated with IBD.[3] One study[4] has already investigated the efficacy of TNF-α antagonists in some British patients with IBD (n = 7) and without IBD (n = 6). The aim of this study was to evaluate the efficacy of TNF-α antagonists in non–IBD-associated PG.

This retrospective and multicenter study included adult patients in whom PG was diagnosed from 1995 to 2018, with confirmation of the diagnosis by clinical examination, histology, and sterile microbiologic examination. Patients with PG associated with IBD were excluded. Complete remission (CR) was defined as complete healing of ulceration(s), partial remission was defined as healing of 50% to 100% of ulceration(s), and failure was as healing of less than 50%.

A total of 10 patients with PG without IBD that was treated with a TNF-α antagonist were included (Table I). PG was idiopathic in 2 patients and associated with an underlying disease or predisposing factor in 8 patients (with ankylosing spondylitis in 3 patients; relapsing polychondritis in 1; hidradenitis suppurativa in 1; synovitis, acne, pustulosis, hyperostosis, and osteitis in 1; IgA monoclonal gammopathy in 1; levamisole consumption in 1; and surgery in 1). Infliximab was used in 8 cases and adalimumab, etanercept, and golimumab were used in 1 case each. CR was obtained in 7 of 10 cases. The median complete healing time was 3 months (range, 0.5-7). Partial remission was obtained in 2 of 10 cases. Failure was observed for 1 patient treated first with infliximab and then with etanercept for idiopathic PG. A TNF-α antagonist was generally used as a third line of treatment (range, 1-7). Among the 6 patients receiving concomitant steroid treatment, steroid weaning was obtained in 4. The median follow-up time was 33.5 months (range, 4-89). No serious infectious adverse events were observed. One limitation of our study was the use of concomitant therapy in association with TNF-α antagonists, which may not truly reflect their efficacy when used as a single agent.

A total of 58 cases of PG without IBD treated with TNF-α antagonists have been reported in the literature. Of those cases, 24 (41%) were idiopathic PG, 10 (17%) were associated with rheumatoid arthritis, 6 (10%) were postoperative or posttraumatic, 4 (7%) were associated with hidradenitis suppurativa, 2 (4%) were associated with monoclonal gammopathy, and 2 (3.5%) were associated with cocaine (levamisole) abuse. CR was achieved in 76% (31 of 41), 64% (9 of 14), 47% (9 of 19), and 100% (1 of 1) of patients treated with infliximab, adalimumab, etanercept, and certolizumab pegol, respectively. The median complete healing time was 4 months (range, 0.75-48). TNF-α antagonists were used after failure of multiple lines of treatments (range, 1-10). The response rate was similar when TNF-α antagonists were used after cyclosporine failure. The treatment was well tolerated in most cases.

The efficacy of TNF-α antagonists in idiopathic PG and in PG with an underlying disease in which TNF-α does not have a formerly demonstrated role (relapsing polychondritis and cocaine abuse) suggests a broader role of this cytokine in the