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The impact of a photoprotection product and the effects of seasonality on photo-aged Chinese women

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Skin aging is mainly driven by daily environmental exposure especially from UV and pollutants. Research has shown that clinical signs of aging are worsened linearly with age but at a higher rate found in sun-exposed subjects compared with those who regularly avoid sun exposure. The present study is to evaluate the ability of a daily photo-protection product, with high UVA and UVB protection reinforced with antioxidants, to allow skin better correct itself by protecting it from sun exposure over 6-months. A 6-month, single-center, randomized clinical study was conducted on 118 non-sunscreen using Chinese women aged 35-65 with mild to moderate signs of photodamaged facial skin and have been living in their respective city for at least 10 years. Subjects were randomized into the sun-protected or the control group. The sun-protected group was given the test product to be used once daily in the morning with their normal facial routine. The control group maintained their normal routine. Both cells were balanced with the numbers of sun exposed and sun avoiding subjects. Clinical evaluations were conducted, photographs and questionnaires were captured at baseline, months 3 and 6. Results Results of the clinical grading showed statistically significant improvement in hyperpigmentation, wrinkles, skin tone evenness and dark spot intensity across both cells at months 3 and 6 compared with baseline. The sun-protected group showed statistical significant outperformance over the control group on all the mentioned attributes and time points. The test product was also well regarded by the subjects.

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Allergenic ingredients in health care hand sanitizers: A practical guide for patients with occupational contact dermatitis

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Background: Health care workers with occupational contact dermatitis often attribute their symptoms to frequent use of alcohol-based hand sanitizers. Though contact allergy to hand sanitizers is relatively rare, avoidance of causative allergens is critical for affected patients. However, ingredient lists may be unobtainable and safe alternatives typically must accommodate brands utilized by a particular hospital system. This study sought to investigate allergens present within health care hand sanitizers and to provide a comprehensive product list to assist with allergen avoidance.

Methods: Five major hospitals in Minnesota and 20 hospitals across the United States were called to obtain an initial product list. The National Library of Medicine's DailyMed website was then searched to retrieve ingredients. Ingredients were subsequently compared with American Contact Dermatitis Society (ACDS) 2017 core allergens and their cross-reactors.

Results: Hand sanitizer brands and/or specific product names were obtained from 19/25 hospitals. The most common brands included Purell, Ecolab, Alcare, and Avagard. DailyMed search yielded 80 relevant products corresponding to these brands. Active ingredients most commonly consisted of ethyl alcohol (81.3%), benzalkonium chloride (10.0%), or isopropyl alcohol (3.8%). Top five allergens (encompassing cross-reactors) included tocopherol (51.3%), fragrance (41.3%), propylene glycol (27.5%), sodium benzoate (25.0%), and cetyl stearyl alcohol (12.5%). Four sanitizers were free of all ACDS allergens; 14 products contained only tocopherol or propylene glycol as allergens.

Conclusions: We identified 18 low-allergen hand sanitizers within the most common brands utilized by US hospital systems. This product list will be useful for patients with occupational contact dermatitis seeking allergen avoidance.

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18348

Variability in prescribing behavior among dermatology providers, 2006-2015

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Objective: Despite the growing number of advanced practice clinicians (APCs) within dermatology, there are few studies comparing patient outcomes and cost of care between APCs and dermatologists. Given the differences in training received, we evaluated whether dermatologists are more likely to prescribe generic medications over brand-name medications when compared with APCs.

Methods: Using data from the National Ambulatory Medical Care Survey (NAMCS) from 2006 to 2015, we looked at the number of brand-name and generic medications prescribed for a variety of dermatologic conditions (acne, actinic keratosis, dermatitis, psoriasis, rosacea, atopic dermatitis) listed as the primary diagnosis by dermatologists, nurse practitioners, and physician assistants in dermatology outpatient office visits.

Results: We identified 1076 dermatology visits (weighted 22.4 million total) by both dermatologists and APCs from 2006 to 2015. There was no difference in the proportion of dermatologists or APCs who prescribed brand-name medications for all diagnoses combined (27% vs 31%, $P = .6$). Although not significant, a greater proportion of APCs prescribed brand-name medications for acne than dermatologists (24% vs 41%, $P = .13$). There were not sufficient data to analyze differences in prescription patterns for dermatitis, psoriasis, rosacea, and atopic dermatitis, because the APC sample sizes were too low.

Conclusions: There were no demonstrated differences in prescribing behavior between APCs and dermatologists; however, our study was limited by sample size. Lack of stratification by medical complexity is another limitation as dermatologists may see more medically complex patients. The lack of large differences in prescribing practices may also indicate existing close collaboration between dermatologists and APCs.

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18366

Dark intentions: Sun exposure behaviours in Australian women in 2019

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Background: Skin cancer is prevented with regular sunscreen use, which is more commonly undertaken by females. Australia has been campaigning for primary prevention of melanoma in children with sun protection including sunscreen, shade-seeking, and protective clothing, since 1981. Despite this, "healthy" women are still depicted as tanned.

Methods: A cross-sectional study was performed in August 2019 to assess current sun exposure behaviours in 1065 Australian female participants aged 18 and over, utilising an online questionnaire. Results were cross tabulated and analyzed using the chi-square test.

Results: Of 1065 participants, 55.2% reported never intentionally tanning. Of 140 women who reported always or often intending to tan without sunscreen protection, 113 (80.7%) were 18-44 years of age. 22.3% reported their preferred tanning method as sun exposure with sunscreen protection, 9.2% preferred sun exposure with no sunscreen protection, and 2.4% opted for artificial ultraviolet radiation methods. Only 10.9% preferred sunless tanning creams. The level of education ($P = .002$), age ($P < .01$), ethnicity ($P < .01$), and length of time in Australia ($P < .01$ and $P = .003$, respectively) significantly affected the intention to tan without sunscreen protection, and tanning method of choice.

Conclusions: Despite extensive advertising to encourage sun protective behaviours, those who undertake tanning prefer sun exposure methods to achieve this. Participants aged 18-44, who were comprehensively educated on sun protection for the majority of their lifetime, were most likely to regularly tan without sunscreen protection, suggesting that a change in perception of health is required in this population, with a different approach to education and awareness.

Commercial disclosure: None identified.

