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**Online sunscreen purchasing behavior in the internet era: A cross-sectional survey**



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**Background:** Skin cancer can be prevented with regular sunscreen use, which is more commonly undertaken by women. The most frequent online purchases by Australian women are clothes, cosmetics, or jewelry. E-commerce provides easy access to international sunscreen, despite varying regulations and accepted active ingredients in sunscreen among different countries and regions.

**Methods:** A cross-sectional study of 1065 Australian female participants aged 18 and over was performed in August 2019. The current behaviors in purchasing of sunscreen containing products were evaluated utilizing an online questionnaire. Results were cross-tabulated and analyzed with the use of the chi-square test.

**Results:** Of 1065 participants, 57% have used the internet for sunscreen product recommendations, and 41% have made online purchases of local or international sunscreen products. 12% purchase international sunscreen products over the internet, and 26% purchase them when on international vacations; however, participants are more likely to check the ingredients regularly when buying them online (38%) than when purchasing them on international vacations (31%). Significant contributing factors to the frequency of internet use for sunscreen recommendations and purchasing included the level of education ( $P < .01$ ), age ( $P < .01$ ), length of time in Australia ( $P < .01$ ), and ethnicity ( $P < .01$ ). Checking listed active ingredients when purchasing international sunscreen products online was significantly affected by the level of education ( $P = .02$ ).

**Conclusions:** There is a large proportion of Australian women who use the internet to purchase sunscreen containing products or search for product recommendations. Active ingredients should be clearly listed when advertised on the internet, especially for international sunscreens.

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*Commercial disclosure: None identified.*

17876

**The frequency of topical antibiotic use following biopsy and excision procedures among dermatologists and nondermatologists, 2006-2015**



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**Background:** Several studies have suggested topical antibiotics are not helpful in reducing the risk of surgical site infection following clean cutaneous surgery. However, there is a lack of data on actual clinician prescribing practices for topical antibiotics following procedures and how this prescribing has changed over time.

**Design:** Database analysis.

**Methods:** The National Ambulatory Medical Care Survey was queried for encounters involving biopsies and excisions from 2006 to 2015. The frequency of antibiotic use associated with these procedures among dermatologists and nondermatologists was evaluated using logistic regression.

**Results:** In 2014-2015, among patients seen by dermatologists, there were an estimated 1,006,453 and 536,528 topical antibiotic prescriptions each year associated with biopsies and excisions, respectively. Among patients seen by nondermatologists in 2014-2015, there were 421,072 and 803,394 topical antibiotic prescriptions associated with biopsies and excisions, respectively. The odds of receiving a topical antibiotic use after biopsies initially fell among dermatologists, with a nadir in 2010-2011 (OR 0.20, CI 0.06-0.63), then increased back to baseline in subsequent years. A similar pattern was seen with excisions performed by dermatologists. Among nondermatologists, the odds of receiving a topical antibiotic after biopsies increased throughout the study period, peaking in 2012-2013 (OR 3.98, CI 1.07-14.82). The odds of receiving a topical antibiotic after excisions by nondermatologists increased throughout the study period, peaking in 2014-2015 (OR 5.16, CI 1.77-14.99).

**Conclusions:** Despite evidence supporting the use of petrolatum rather than topical antibiotics after cutaneous procedures, there continues to be substantial use of topical antibiotics among dermatologists and nondermatologists.

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*Commercial disclosure: None identified.*

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**Letting "Slip, Slop, Slap" slide: Current sunscreen use 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. Cancer Council Victoria began the Slip, Slop, Slap! Campaign in 1981, followed by the SunSmart program in 1988, encouraging primary prevention of melanoma in children with sun protection including sunscreen, shade-seeking, and protective clothing.

**Methods:** A cross-sectional study was performed in August 2019 to assess current sunscreen use in 1065 Australian adult female participants, utilizing an online questionnaire. Results were cross-tabulated and statistical analysis was carried out using the chi-square test.

**Results:** Of 1065 participants, only 266 (25.0%) reported using sunscreen every day, and of these, only 43.0% used a dedicated sunscreen product daily. The remainder used moisturiser, BB cream or mineral makeup containing sunscreen. The main sunscreen of choice had an SPF of less than 30 for 28.6% of this group. Of those who used a daily sunscreen with an SPF of 30 or more, 63.4% had a tertiary or higher level of education, but this was unexpectedly statistically insignificant. 49.1% of respondents reported being sunburnt at least once in the last 12 months.

**Conclusions:** Despite almost 4 decades of extensive campaigning for increasing sun protective behaviours, only 25.0% of the Australian females surveyed use sunscreen on a daily basis, with fewer than half using a dedicated sunscreen as their daily product of choice. This reflects the need to rethink methods of encouraging use of sunscreen products, and to target certain beliefs and perceptions of the benefits of sun protection.

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*Commercial disclosure: None identified.*

17881

**Characteristics of seven cases generalized pustular psoriasis with arthritis**



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**Background:** Generalized pustular psoriasis (GPP) is a rare disease, which represents under 2% of all psoriasis patients. Patients with both GPP and psoriatic arthritis (GPP+PsA) are exceedingly rare, therefore little is known about these cases.

**Methods:** We performed a retrospective analysis of 1197 psoriasis patients of St Luke's International Hospital from July 2003 to March 2018. The severity criteria of GPP were evaluated according to the guidelines for GPP by the Japanese Dermatologic Association.

**Results:** Out of 24 cases of GPP (2.2%), seven were cases of GPP+PsA (0.6%). Among the GPP+PsA group, the male-female ratio was 4:3, median onset age at psoriasis development was 31.0 years, and the median duration of psoriasis was 14.1 years. 85.7% of the GPP+PsA cases occurred following psoriasis vulgaris. No case of IL-36 RN or CARD-14 gene mutation was found. In the GPP+PsA group, the severity score during pustular lesion flare-ups was significantly lower than in the GPP-only group ( $P < .01$ ). Regarding arthritis, the most common type was polyarthritis (57.1%), followed by oligoarthritis (28.6%) and distal interphalangeal joint arthritis (14.3%). In our case-control study matching age, sex, and duration period, the GPP+PsA group had a significant occurrence of enthesitis of the Achilles tendon ( $P < .01$ ) and was highly associated with spondylitis ( $P = .076$ ) compared with the PsA-only group.

**Conclusions:** The severity score of GPP+PsA cases was relatively milder than in the GPP-only group, however, the severity of arthritis was higher than in the PsA-only group. This suggests that we should consider early and aggressive treatment for GPP+PsA patients.

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*Commercial disclosure: None identified.*