

Editorial

Sunscreens are essential in Hong Kong

In Hong Kong, we have on average, quite a sunny climate especially during the summer and autumn seasons. We have approximately a 50% chance of bright sunshine during the period from July to December and the average daily global solar radiation is highest between May and October each year.¹ With the overwhelming evidence of ultraviolet (UV) radiation causing skin cancers, photoageing and cataracts, and in order to arouse the public awareness of the harmful effects of excess UV exposure, since 1999, the Hong Kong Observatory has installed an instrument for UV radiation and started the UV index Advisory Service. As a result, it should be easier for the public to plan for protective measures against UV radiation. However, the average person in Hong Kong is still not aware of the importance of sun protection, albeit younger generations are paying more attention because of cosmetic concerns. This may be largely due to the low incidence of skin cancers locally and the relative lack of education and publicity on the harmful effects of UV radiation by the government. From an economical point of view, sunscreen products are in fact quite expensive to the average person and not regarded as essential or medical products either.

In this issue, apart from a comprehensive review of UV protection and properties of sunscreens, Dr. M. Rademaker points out several interesting issues including the fact that although skin cancer is a well-known and major concern in Western countries, there is still underuse or misuse of sunscreen products, most obvious of

which is the under-application of less than 2 mg/cm² and failure to reapply regularly during outdoor exposure or after water immersion. The teaspoon rule for sunscreen application is proposed,² and should be stressed in patient education. The concern about vitamin D deficiency is not substantiated as the normal use of sunscreen has not resulted in any deficiency.³

Dermatologists in Hong Kong encounter problems arising from photoageing (such as actinic keratosis, seborrhoeic keratosis, solar lentigo, solar elastosis) much more often than skin cancers. With our ageing population, the demand for treating these conditions should rise significantly. In addition, with increasing outdoor activities in the younger generation, the harmful consequences of UV radiation exposure are expected to increase if we do not educate the public adequately about the importance of UV protection. As the skin is most vulnerable during childhood and teenage years, it is important to start the education of UV protection from childhood. Proper use of sunscreen products to prevent photoageing and photocarcinogenesis should be stressed in patient education by dermatologists and general practitioners. However, the fact that these are all commercial products and not listed as medical consumables, it is going to be an uphill task for the professional to tackle.

References

1. Monthly means of cloud amount observed at the Observatory and sunshine duration and daily global solar radiation recorded at King's Park between 1981-2010. http://www.weather.gov.hk/cis/normal/1981_2010/normals_e.htm#table6
2. Isedeh P, Osterwalder U, Lim HW. Teaspoon rule revisited: proper amount of sunscreen application. *Photodermatol Photoimmunol Photomed* 2013;29:55-6.
3. Norval M, Wulf HC. Does chronic sunscreen use reduce vitamin D production to insufficient levels? *Br J Dermatol* 2009;161:732-6.