Shading in the Sun

Photographs supplied by Taskeen Parker and Aslam Parker

Let's think of our ideal travel activity. Most of the time it revolves around the outdoors. Dream of lounging around the pool of a five star hotel sipping your favourite cocktails, think of parents joining the kids splashing around in the beach's waves, and of course, for the health freaks amongst us, the hikes and walking trips really gets the adrenaline pumping. The vast majority leave our relatively indoor lifestyle for a few days or weeks and suddenly expose ourselves to the effects of the galactic fireball that our planet revolves around. We are then exposed to different ultraviolet radiation (UVR) levels and all other types of cosmic radiation that either, at the one extreme, gently embrace us with a stunning skin tan, or roasts us with severe sunburn at the other end of the spectrum.

The electromagnetic spectrum ranges from cosmic rays, then the invisible UVR, through visible light and infrared, then microwaves and finally radiowaves. UVR has three components:

1. UVC: ultrashort wavelength rays 200–290 nm that do not reach the earth's surface.
2. UVB: short wavelength rays 290–320 nm that cause sunburn and tan.
3. UVA: longer wavelength rays 320–400 nm that cause tanning and also suppress immune reactions in the skin.

Both UVA rays and UVB rays are carcinogenic. UVA rays are present throughout the day but more at midday and can pass through window glass but are blocked by densely woven fabrics. It is present throughout the year but more so in summer. UVA rays cause premature aging of the skin and are primarily responsible for drug-related phototoxicity and photoallergic reactions. UVB rays are most intense from 10 am to 4 pm, are blocked by window glass, and are most responsible for sunburn. UVA is of lower energy than UVB, thus photon for photon, UVA is less damaging than UVB to DNA in skin cells. However UVA is 100 times more prevalent than UVB at the surface of the earth and can penetrate through the epidermis into the dermis,

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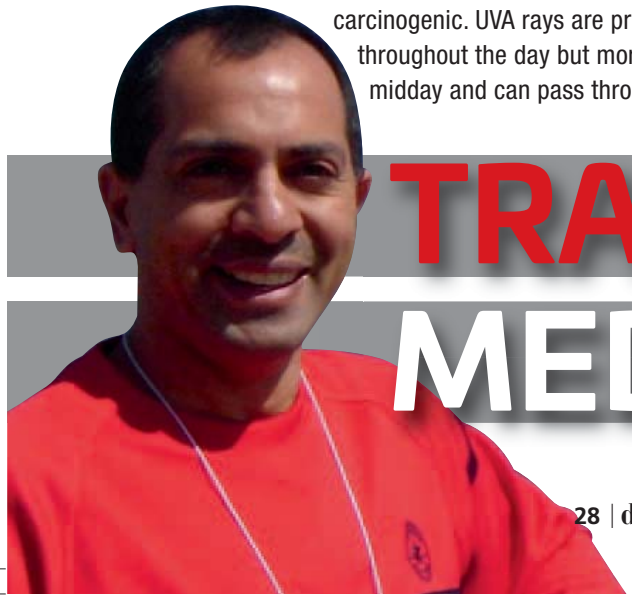
Even when hiking in shaded areas, children especially should wear hats or caps.



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thus causing deeper damage. Patients can be sensitive to one kind of sunlight (i.e. only to UVB, UVA or visible light) or to a wider range of radiation.

Travellers often are not aware that sun exposure is not necessarily confined to hot tropical and scorching desserts. Most are aware that increased exposure to UV radiation occurs near the equator, during summer months, at high elevation, and between 10 in the morning and 4 in the afternoon. Not all bear in mind that reflection from snow, sand and water increases exposure. It is possible to get sunburn even on cloudy days! Activities such as snow skiing, beach activities, long drives with sun exposures even through rolled up car windows, swimming, and sailing ultimately increases the risk of the effects of prolonged radiation if not probably managed. When on travel, there is frequently a more blasé attitude towards environmental hazards. This may be exacerbated by alcohol consumption which can lead to a carefree attitude towards possibly prolonged hazardous sun exposure.

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A number of different measures such as gazebos can be used as shade on the beach.

We can get completely engrossed with our outdoor activities and forget to protect ourselves against the ultraviolet rays.

Even the best sunscreens wear off within 90 minutes in water and then need to be reapplied.

Certain medical conditions are associated with increased sun sensitivity. These include connective tissue diseases, polymorphous light eruption, rosacea, and vitiligo. Other conditions are exacerbated by sun exposure. These include lupus erythematosus, dermatomyositis, Darier disease, rosacea, pemphigus vulgaris, pemphigus foliaceus, atopic dermatitis, psoriasis. Certain drugs such acetazolamide, amiodarone, antibiotics (fluoroquinolones, sulphonamides, and tetracyclines), diuretics (furosemide, hydrochlorothiazide), nonsteroidal anti-inflammatory drugs (celecoxib, ibuprofen, ketoprofen, naproxen, piroxicam) and sulfonylureas also predisposes to sun sensitivity.

Skin damage can occur in as

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little as 15 minutes in the vulnerable after exposure. Serious burns are painful resulting in red, tender, swollen, and blistered skin. Fever, headache, itchy skin and malaise may accompany such a severe episode. It is well known that long term exposure leads to premature skin aging. This is characterised by skin wrinkling and age spots. There is an increased risk of skin cancer, including basal cell carcinoma, squamous cell carcinoma, and melanoma. Repeated exposure to sunlight in the eyes can also result in ocular pterygium formation, cataracts, and macular degeneration. A number of steps can be taken to prevent these short and long term effects and ensure a great holiday.

Shade

Most holidays involve outdoor activities but it is relatively easy to ensure some form of shade whether it involves an umbrella or using natural elements such as sitting under trees. Hikes can be planned along routes that have minimal direct sun exposure, especially during 10am till 4 pm.

Clothing

Long-sleeved shirts and long pants and skirts may provide protection from UV rays and should be worn when practical when exposed to the sun. Clothes made from tightly woven fabric offer the best protection. A wet T-shirt offers much less UV protection than a dry one, and darker colours may offer more protection than lighter ones. Some clothing certified under international standards comes with information on its ultraviolet protection factor. A hat with a brim all the way around that shades the face, ears, and the back of your neck is best. Ideally it should be made of a tightly woven fabric such as canvas. Avoid straw hats with holes as it lets sunlight through. A darker hat may offer more UV protection. A baseball cap does not cover the ears and the back of the neck.

Sunglasses

Sunglasses protect the eyes from UV rays and reduce the risk of cataracts. They also protect the vulnerable skin around the eyes. Sunglasses that block 100% of both UVA and UVB rays offer the best protection. Wrap-around sunglasses are ideal as they block UV rays from entering from the side.

Meditating outdoors even on cloudy days requires some sun prevention measures.

Slip on shirt, slop on sunscreen and slap on a hat!

A waterproof or water-resistant product should ideally be used for beach holidays as it confers approximately 80 minutes of protection in the water. It should hence be reapplied thereafter.

Sunscreens

Sun protection factor (SPF) is the term used for the extra protection against UVB rays that a person receives by using a sunscreen. The protection with a higher SPF does not increase linearly. Thus a SPF 60 sunscreen does not offer four times the protection of SPF 15. Sunscreens with at least an SPF of 15 and that are labelled 'broad-spectrum SPF' (indicating both UVA and UVB protection) are recommended for the best protection. A waterproof or water-resistant product should ideally be used for beach holidays as it confers approximately 80 minutes of protection in the water. It should hence be reapplied thereafter.

The outdoors is there not to soak up the sun but to rather screen against possible damage by using adequate protection. To the old adage of 'slip on a shirt, slop on sunscreen and slap on a hat' we can add 'seek the shade and shield against the sun.'