Climate change and skin cancer: urgent call for action

Cases of skin cancer in the UK are at a record high, according to a Cancer Research UK (London, UK) report published on July 7, 2023. Approximately 17 500 people are diagnosed with skin cancer every year, and this number is expected to increase by 50% over the next 20 years. The rise is sharper among people older than 55 years of age, which some speculate is linked to the boom in cheap travel to hot weather destinations in the 1960s and 1970s, when people were less aware of the risks of sun exposure. Damage to the skin from UV radiation can last months, and builds up over time and with age to increase cancer risk. The increase in cases of skin cancer in the UK, and beyond, signals an urgent need to reassess the factors contributing to this public health crisis.

It would be remiss to talk about skin cancer without mentioning climate change. Rising temperatures, depletion of the ozone layer, and increased sun exposure are among the growing number of threats to human health and wellbeing. Extreme heatwaves as a result of climate change have become a major risk factor for skin cancer among the albino community in Malawi. One in every 150 people in Malawi has albinism—a congenital condition characterised by partial or complete absence of melanin in the skin, hair, and eyes—causing increased susceptibility to sun damage. According to local activists, skin cancer causes 90% of all deaths in this community, and climate change is worsening the situation by increasing the risk of skin cancer mortality and causing even earlier premature deaths. The average life expectancy in Malawi is 65 years; however, 70% of people with albinism will not live beyond the age of 30 due to skin cancer. Critical shortages of sunscreen, coupled with insufficient access to early screening and treatment, are leaving this community vulnerable to a largely preventable disease. The existential threat faced by Malawians with albinism underscores the broader, global clinical implications of climate change, and highlights that more needs to be done to mitigate its impact on vulnerable populations.

Although skin pigmentation is a key photoprotective factor for skin cancer, with melanin acting as a UV absorbent and conferring a degree of natural protection, the disease does not just affect White people and people with albinism. People with darker

skin get skin cancer at a much lower rate, but with a far worse prognosis because it is often diagnosed at a later stage. Black people with melanoma have an estimated 5-year survival rate of 70%, compared to 94% for White people in the USA. Thus, as countries in the northern hemisphere head into another summer and look forward to making the most of the sunshine, it is paramount to increase awareness about the importance of sun protection for everyone. As summers become hotter every year because of climate change, initiatives to ensure affordable access to sunscreen products must be prioritised. Dermatologists in the UK have voiced concerns about the high cost of sunscreen, which may deter individuals from using it—especially those from a lower socioeconomic background-placing them at a higher risk of developing skin cancer. The UK Government, for example, should follow the lead of other nations such as the USA and Australia, and remove tax on sunscreen to increase affordability and use.

On June 15, 2023, UN Secretary-General António Guterres said that the world is racing toward a climate change disaster, but that the current global response is far from adequate. Deforestation and environmental destruction directly contribute to climate change and the loss of natural resources that provide protection against harmful UV radiation. Presidents Gustavo Petro of Colombia and Luiz Inácio Lula da Silva of Brazil convened at the Leticia Summit (Leticia, Colombia) on July 8, 2023, ahead of an Amazon Rainforest Alliance summit in Belém, Brazil (Aug 8-9, 2023), to discuss regional coordination to fight deforestation and protect natural resources. The two presidents agreed that one of the greatest challenges facing the Amazon countries is the strengthening of the Amazon Cooperation Treaty Organization, as well as the construction of a joint sustainable development policy for this region.

Measures such as those taken by the presidents of Colombia and Brazil are an example to the world of what we can do to answer Guterres' call. They are vital not only for the world's biodiversity, but also for combating rising global temperatures and their consequences on human health. By implementing robust public health policies now, the growing health crises exacerbated by climate change can be abated.

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For more on the Cancer Research UK report see https://news. cancerresearchuk. org/2023/07/07/soaring-skincancer-cases-hit-a-record-high/

For more on rising melanoma rates globally see https:// jamanetwork.com/journals/ jamadermatology/ fullarticle/2790344

For more on skin cancer in people with albinism in Malawi see https://www.
thenationalnews.com/world/
africa/2023/07/03/climatechange-posing-existential-threatto-malawians-with-albinism/

For more on **melanoma in Black people** see https://www. washingtonpost.com/climateenvironment/2023/05/27/ sunscreen-melanoma-skin-

For more on the American Cancer Society Facts & Figures 2023 see https://www.cancer. org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2023/2023-cancer-facts-and-figures/pdf

For more on the **high cost of sunscreen** see https://www. theguardian.com/business/2023/ jun/17/sunscreen-costdermatologists-uk

For more on the **call to remove tax on sunscreen** see https://www.theguardian.com/society/2023/may/15/charities-call-for-scrapping-of-vat-on-sunscreen-amid-skin-cancer-

For more on **Guterres' speech** see https://media.un.org/en/ asset/k1n/k1n4wutrw2

For more on the **presidents meeting at the Leticia Summit** see https://en.mercopress.com/2023/07/10/petro-and-lula-discuss-amazon-crisis