

Ultraviolet Radiation Toxicity in High Altitude Areas

Nilutpal Sharma Bora*

Department of Pharmaceutical Sciences, Dibrugarh University, Dibrugarh, Assam, India

***Corresponding Author:** Nilutpal Sharma Bora, Department of Pharmaceutical Sciences, Dibrugarh University, Dibrugarh, Assam, India.

Received: April 17, 2019; **Published:** June 24, 2019

High altitude areas are geographically defined as those which are situated at an elevation of 8000 feet or above from sea level. With increase in elevation, it is observed that a series of adverse effects on the human body occurs. Rise in blood pressure, breathlessness and muscle fatigue are among these effects. It is also observed that the intensity of ultra violet (UV) radiation also increases and along with it increases the risks of the skin and eyes getting exposed to the radiation. The National Oceanic and Atmospheric Administration (NOAA) has mentioned that with every 1000 feet increase in altitude, the intensity of UV radiation increases by 4 - 5%. With the presence of snow, this effect increases to more than 100% as the UV radiation gets reflected by the layer of snow.

It is imperative that persons who travel to such places are at an increase risk of damages caused due to high intensity UV radiation exposure. Individuals may seek protection by wearing protective clothing, seeking shade and using UV protective sunglasses. However, all these methods are not enough for optimum protection. Sunscreen formulations have become the most popular methods of achieving adequate sun protection and are being increasingly used nowadays by individuals of all age groups. An ideal sunscreen should be composed of approved UV filters, and should possess a minimum sun protection factor (SPF) of 15. Theoretically, an SPF 15 sunscreen should protect the skin 15 times longer than an unprotected skin. However, the action is also dependent on factors like weather, time of the day, skin type, quantity used and other individual factors. A broad spectrum, high SPF value sunscreen is expected to protect the skin from skin degradation, aging and pigmentation; along with more serious conditions like skin melanoma.

Before selecting a sunscreen product, a user must keep a few points in mind. A sunscreen with SPF value of 15 or more should be used. Sunscreens should be reapplied every 2 - 4 hours, and labels with false claim "water-proof" should be avoided as no such product exists in the market.

Volume 7 Issue 7 July 2019

©All rights reserved by Nilutpal Sharma Bora.