Asian Journal of Research in Social Sciences and Humanities

ISSN: 2249-7315 Vol. 11, Issue 11, November 2021 SJIF 2021 = 8.037 A peer reviewed journal

A REVIEW STUDY ON EFFECTS OF AIR POLLUTION ON THE SKIN

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DOI: 10.5958/2249-7315.2021.00258.6

ABSTRACT

The extension of air pollution has had major effects on the human skin over time. UVradiation, polycyclic aromatic hydrocarbons, volatile organic chemicals, oxides, particulate matter, ozone, and cigarette smoke all have an impact on the skin, which is the body's outermost barrier. By causing oxidative stress, air contaminants harm the skin. Although human skin serves as a biological barrier against prooxidative chemicals and physical air pollutants, long-term or repeated exposure to excessive amounts of these pollutants may have serious consequences for the skin. Extrinsic skin aging and skin malignancies have been linked to UV radiation exposure. Cigarette smoke causes accelerated aging as well as a rise in the prevalence of psoriasis, acne, and skin malignancies. It's also linked to allergic skin disorders including eczema and atopic dermatitis. Extrinsic skin aging, pigmentation, malignancies, and acneiform eruptions are all linked to polyromantic hydrocarbons. Atopic dermatitis has been linked to volatile organic chemicals. Given the rising levels of air pollution and its negative effects on the skin, it is prudent to use air pollution reduction measures.

KEYWORDS: Ozone, Pollution, Polycyclic Aromatic Hydrocarbons, Skin, Ultraviolet Radiation.

REFERENCES:

- **1.** Puri P, Nandar SK, Kathuria S, Ramesh V. Effects of air pollution on the skin: A review. Indian Journal of Dermatology, Venereology and Leprology. 2017.
- **2.** Krutmann J, Liu W, Li L, Pan X, Crawford M, Sore G, et al. Pollution and skin: From epidemiological and mechanistic studies to clinical implications. Journal of Dermatological Science. 2014.
- **3.** Koohgoli R, Hudson L, Naidoo K, Wilkinson S, Chavan B, Birch-Machin MA. Bad air gets under your skin. Exp Dermatol. 2017;
- **4.** Ghofranian A, Maibach HI. Effects of Air Pollution on Skin. In: Cosmetic Science and Technology. 2017.
- **5.** Isha, Rana P, Saini R. Performance of different bit loading algorithms for OFDM at PLC channel. In: Proceedings 2012 2nd International Conference on Advanced Computing and Communication Technologies, ACCT 2012. 2012.
- **6.** Singla N, Singla S, Thind PS, Singh S, Chohan JS, Kumar R, et al. Assessing the Applicability of Photocatalytic-Concrete Blocks in Reducing the Concentration of Ambient NO2of Chandigarh, India, Using Box-Behnken Response Surface Design Technique: A Holistic Sustainable Development Approach. J Chem. 2021;
- 7. Vierkötter* A, Hüls A, Stolz S, Sugiri D, Krämer U, Raulf M, et al. Is the effect of air pollution on premature skin aging mediated by a local inflammation response in the lung? ISEE Conf Abstr. 2016;

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- **8.** Zegarska B, Pietkun K, Zegarski W, Bolibok P, Wisniewski M, Roszek K, et al. Air pollution, UV irradiation and skin carcinogenesis: What we know, where we stand and what is likely to happen in the future? Postepy Dermatologii i Alergologii. 2017.
- **9.** Sharma PK, Srivastava R, Munshi A, Chomal M, Saini G, Garg M, et al. Comparison of the gross tumor volume in end-expiration/end-inspiration (2 Phase) and summated all phase volume captured in four-dimensional computed tomography in carcinoma lung patients. J Cancer Res Ther. 2016;
- **10.** Talwar R, Chatterjee AK. Estimation of power dissipation of a 4H-SiC schottky barrier diode with a linearly graded doping profile in the drift region. Maejo Int J Sci Technol. 2009;
- 11. Rihan A, Quaisarperween, Gaurav K, Jayanand, Durg VR. Effect of butylated hydroxyanisole on hydrogen peroxide induced oxidative stress on cerebral glioma cell line. Asian J Pharm Clin Res. 2014;
- **12.** Jin SP, Li Z, Choi EK, Lee S, Kim YK, Seo EY, et al. Urban particulate matter in air pollution penetrates into the barrier-disrupted skin and produces ROS-dependent cutaneous inflammatory response in vivo. J Dermatol Sci. 2018;
- **13.** Hashim D, Boffetta P. Occupational and environmental exposures and cancers in developing countries. Annals of Global Health. 2014.
- **14.** Zaheer A, Naveen M, Santosh MK, Imran K. Solubility enhancement of poorly water soluble drugs: A review. International Journal of Pharmacy and Technology. 2011.
- **15.** Jain RK, Kumar A, Singh BK. Track etch parameters and annealing kinetics assessment of protons of low energy in CR-39 detector. Nucl Instruments Methods Phys Res Sect B Beam Interact with Mater Atoms. 2012;
- **16.** Goyal MK, Rai D V., Kehwar TS, Manjhi J, Heintz BH, Shide KL, et al. Anatomy-based definition of point A utilizing three-dimensional volumetric imaging approach for high-doserate (HDR) intracavitary brachytherapy dose prescription when treating cervical cancer using limited resources. J Appl Clin Med Phys. 2016;
- **17.** Drakaki E, Dessinioti C, Antoniou C V. Air pollution and the skin. Frontiers in Environmental Science. 2014.
- **18.** Goel AR, Ranjan A, Wajid M. VLSI architecture and implementation of statistical multiplexer. In: Proceedings of the International Conference on Innovative Applications of Computational Intelligence on Power, Energy and Controls with Their Impact on Humanity, CIPECH 2014. 2014.
- **19.** Nursan C, Sevin A, Muge AT, Cemile D, Pinar T. Parent's knowledge and perceptions of the health effects of environmental hazards in Sakarya, Turkey. J Pak Med Assoc. 2014;
- **20.** Cha SH, Son JH, Jamal Y, Zafar M, Park HS. Characterization of polyhydroxyalkanoates extracted from wastewater sludge under different environmental conditions. Biochem Eng J. 2016;