

## THE IMPACT OF GLOBAL WARMING ON ALLERGIC AND RESPIRATORY DISEASES

Prof Dr Ishaq Khan, MD (USA).MSPH (USA).FACP (USA).ScFACAAI (USA).PhD (USA)

Mediks International Hospital E11/2 Markaz Islamabad Pakistan

Junaid Ishaq Khan; MBA, MPH George Mason University

Rohail Khan; MBBS.(CN) Shifa Medical College Pakistan.

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**Address for Correspondence:** Prof Dr Ishaq Khan, Mediks International Hospital E11/2 Markaz Islamabad Pakistan

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### Introduction:

For years, scientists and medical professionals have been working hard to rule out the accurate cause behind idiopathic seasonal respiratory diseases and skin allergies as their specific root cause has never been highlighted by anyone due to lack of knowledge and resources. The purpose of this article is to develop general awareness in our society regarding the relationship between global climate change, allergic and respiratory diseases. After extensive research we have concluded that there is massive impact of weather, pollens and airborne pollutants over these allergies.

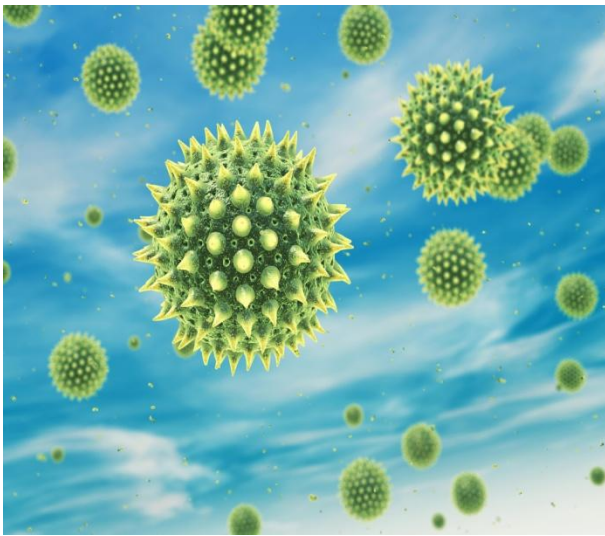
Over the past 3 decades global temperature has been rising markedly. This temperature increase has been resulted in warming ocean temperatures, rising sea levels, melting glaciers, retreating sea ice and diminished snow cover in the northern hemisphere. During the heat waves of 2003, 2012 and 2013, temperatures of above 35 degree Celsius resulted in several thousand deaths throughout Europe, most of the observed rise in global average temperatures since the mid 20<sup>th</sup> century is very likely due to the documented

rise in environmental pollution and green house gas concentrations. This aggressive climatic change is associated with respiratory and allergic disorders. The increased length and severity of the pollen season, the higher occurrence of heavy precipitation events and the increasing frequency of urban population are resulting in major environmental hazards that are lethal to human life.



In order to reduce the burden of allergic and respiratory symptoms, we must act to control environmental factors that worsen these

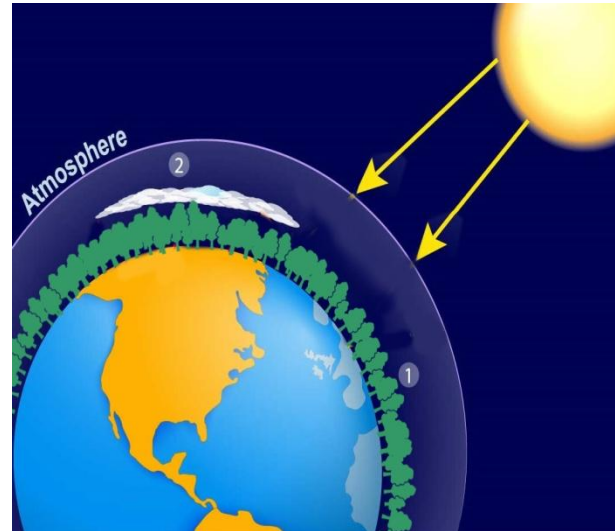
conditions. The incidence and intensity of allergic rhinitis and asthma varies with atmospheric conditions. Air pollution consisting of particulate matter i.e. (dust mite, organic dust substances, diesel exhaust and organic salts) and atmospheric pollens blunts individual's immune system that eventually results in enhancement of allergic and respiratory diseases for e.g. particulate matter resulting from the burning of fuel or organic matter increases allergen specific IgE levels that causes airway inflammation and hypersensitivity.



Global warming is another cause of these disorders as it favors flowing of pollens and enhances fruiting behavior of pollen producing plant species. It promotes advanced flowering i.e. flowering starts prior to the peak of summer heat. It also alters soil chemistry that starts favoring growth of allergen-producing plants. The air pollutants when get attached with pollens induce structural modifications in these antigen carrying agents and enhance their allergenic properties. Global warming has a tremendous economic and health care impact in the form of loss of working hours and increased need for care among privileged populations.

Thunderstorm is another environmental hazard that induces severe asthma attacks in allergy-sensitive patients, subsequent to thunderstorm pollen grains may release part of their cytoplasmic contents including inhalable allergen particles. In addition to enhanced pollen

production massive climatic change alters the amount of fungal allergens in the atmosphere.



These fungal spores cause allergic rhinitis and worsen asthmatic attack in patients. Increased carbon dioxide concentration in the atmosphere resulting from excessive production of black smoke, CCF's and coal favors production of fungal spores. These environmental pollutants are extremely hazardous to human life. Increased rainfall during extremes of weather promotes mold production both indoors and outdoors that in return worsens allergic diseases in allergy sensitive individuals.



Air-pollution related asthma exacerbation is due to climactic factors that favors the accumulation of air pollutants at soil level. The ongoing increase in air pollution encourages growth of

poison ivy which secretes urushiol, a compound that causes contact dermatitis.



This brief article has summarized the potential impacts of global warming on allergic and respiratory diseases and how it enhances pollen and fungal spore production that results in various skin allergies, respiratory diseases and seasonal allergies. It is recommended that the local stakeholders should take step to reduce environmental burden of pollutants and reduce exponentially enhancing global warming.

These skin allergies such as hives, urticaria, contact dermatitis, hay fever, and eczema is completely curable provided that we opt for reasonable and self assuring treatment options similarly respiratory diseases as in asthma is curable as well. We have been working on these diseases for many years and we have achieved maximum cure with minimum but effective medication having no side effects.

**WHAT IS THE POSSIBLE LIFE SAVING SOLUTION FOR IN EVITABLE POLLUTION?**

Please follow the importance of trees in graphics for our life, agriculture, power, environment and health.



For Correspondence, Please visit Professor Dr. Ishaq Khan at Mediks international hospital or Contact us at:

[\\_\\_ishaqkhan1@gmail.com](mailto:ishaqkhan1@gmail.com) cell# 0321-9002436, 03228505100, 03335196235

A better and secure life is just a step ahead; take that step as soon as possible. According to the environmental health philosophy versus Ozone health, excessive plantation of native plants securing deep water reservoirs is the best approach towards securing our health, and the health of upcoming generations at large.

