Particulate Matter-Air Pollutants and Related Risks

Hazem Mohammed Shaheen*
Professor, Department of Pharmacology and Therapeutics, Faculty of Veterinary Medicine, Damanhour University, Egypt

*Corresponding Author: Hazem Mohammed Shaheen, Professor, Department of Pharmacology and Therapeutics, Faculty of Veterinary Medicine, Damanhour University, Egypt.

Received: June 27, 2019; Published: July 23, 2019

The most important ingredients of air pollution in the developed countries were suspended solid organic particles and Nitrogen dioxides (due to burning of fossil matters as natural gas and coal).

Combustion of organic matter such as wood, was an essential origin of particulate matter outdoors in developing countries. Cigarette smoke was also an important origin of indoor and outdoor air pollution. High values of air pollution could initiate susceptible people with asthmatic or chronic obstructive pulmonary attacks. Air pollution-associated pulmonary affections elevated the danger for cardiovascular problems and subsequently lung cancer.

Individuals, who were located in high density traffic areas, were at expected harms. Most air pollutants stimulated the smooth muscles contraction in airways, decreasing the airway diameter. Long-lasting inhalation to air pollution in children could elevated respiratory disorders (as cough) and also infections due to dropped pulmonary function.

Burning of fossil matters that were rich with sulfur could cause acidic fine particles that were easily accumulated in the upper portion of airways. Such fine particles, referred to sulfur oxides, which could initiate constriction or inflammation to airways and, causing manifestations as cough, and elevated the opportunity of causing chronic bronchitis.

Particulate matter-air pollutants originated from fossil matter burning (diesel fuel) was a complex compound. The particles could make inflammation of the pulmonary airways or could influence other organs in body, such as brain or heart. Data extracted from some reports discussed that particulate matter-air pollutants elevated death values associated with lung and/or heart disorders.

The values of particulate matter pollutants in the atmospheric air differentiated according to environmental and location conditions. For example, carbon monoxide elevated during periods if there were many vehicles moved on the roads.

Volume 8 Issue 8 August 2019
©All rights reserved by Hazem Mohammed Shaheen.