

Is Air Pollution A Leading Risk Factor for Stroke: A Review

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Abstract : A stroke is the sudden death of brain cells in a localized area due to inadequate blood flow/oxygen supply, either due to blockage or bursting of brain artery. Sudden loss of speech, weakness, or paralysis of one side of the body can be symptoms. Stroke is believed to be the second most common cause of death worldwide. Hypertension, smoking, high cholesterol, diabetes, cardiovascular disease, obesity and age are the prominent complications of stroke. An earlier study has documented a link between cardiovascular diseases (CVD) and air pollution. But recently conducted studies have established a correlation between air pollution and stroke. Pollutants emitted from industries, household, vehicles may form complex mixture and can be hazardous to human health. Several air pollutants like carbon monoxide (CO), sulphur dioxide (SO₂), nitrogen dioxide (NO₂), ozone (O₃) and fine particulate matter (PM) are found to be the major contributors to stroke. Fine particulate matter (PM) has a major role on human wellbeing and health than any other pollutant.

Keywords: Stroke, Air pollutants, CVD, Ischemia, Particulate matter, ROS.

Shanmuga S Rajagopal *Et Al* / International Journal Of Pharmtech Research, 2016,9(9): 381-389.
