

Traffic related Air Pollution and Health Impacts

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ABSTRACT

Development in the field of Science and Technology has enabled man to make far reaching changes in his natural environment. Occupational environment presents potential health hazards to workers employed in a variety of positions. A large number of agents and a diversity of unhealthful work place settings are associated with occupational diseases. A decreased concentration of air pollution i.e. traffic related air pollution may reduce psychiatric disorders in children and adolescents.

Key words: Occupational health, diseases, air pollution, traffic.

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I. INTRODUCTION:

All human beings are affected in some way by exposure to environment hazards associated with lifestyle at work, at home, during recreation or while travelling in the expressway. Development in the field of Science and Technology has enabled man to make far reaching changes in his natural environment. Occupational environment presents potential health hazards to workers employed in a variety of positions. A large number of agents and a diversity of unhealthful work place settings are associated with occupational diseases. Among the major determinants of health are the environment, physical, social, personal life style factors, constitution factors such as heredity and human biology and health care dimensions such as access to and quality of medical care and methods for organization of health care systems (2).

II. REVIEW :

Among the most important cause of morbidity and early death in urban environment of developing countries are environment related disease and accidents (1). Population are often at risk from diseases and injuries associated with poor sanitation, unsafe drinking water, dangerous roads, polluted air, indoor air pollution, and toxic wastes (1)

The factors that lead to urbanization include industrialization, food availability, employment opportunities lifestyle consideration, and escape from political conflict (1). Tied to increases in urbanization are numerous adverse health impacts particular in developing countries.

In 1998 the California Air Resources Board (ARB) identified DPM as a toxic air

contaminant based on published evidence of a relationship between diesel exhaust and lung cancer and other adverse health effects. Hazardous Air Pollutants (HAPS) (3) also called toxic air pollutants or air toxics are those pollutants that cause or may cause cancer or other serious health effects such as reproductive effects or birth defects. The US EPA is required to control 188 hazardous air pollutants (4). The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled. But some deposit on the lung surface. Although particles the size of DPM can deposit throughout the lung, the largest fraction deposits in the deepest regions of the lungs where the lung is most susceptible to injury.

III. RESULT :

The present study has shown that each demographic zone has its own environmental problems reflected in specific diseases as well the health damages associated with air pollution. The study area has been divided into 3 zones namely; residential, commercial and industrial, based on livelihood patterns in order to compare the health impacts in different human activity areas resulting from various types of pollution.

The data shows an increasing trend in respiratory diseases with decreasing air quality, children and elderly are the main victims of the respiratory diseases. This may be because of the accumulation of air which needs an exclusive study to find out the root cause of the problem.

IV. CONCLUSION:

In the industrial zone, air pollution related respiratory problems is of high order. In the commercial zone cardiac and vector borne diseases related to environment hazards like waste water stagnation, dust and solid waste problems, are high and in residential zone diseases like breast cancer, cardiac problems and obesity, related to their dietary habits are reported to dominate. Poverty acts as a catalyzing agent both directly and indirectly, in all environment and related health problems. An exclusive study on the sources and sinks of pollutants its reaction mechanisms, antagonistic and synergistic effects on human health, short and long term effects etc are very essential to manage the risks associated with the degradation of environment quality, particularly in urban area.

Policy makers are often forced to extrapolate results from studies conducted in industrialized countries. These extrapolations, however, may be inappropriate for two reasons. First, it is not clear that the relationships found between pollution and health at the relatively low levels of pollution experienced in industrialized countries hold for the extremely high pollution levels witnessed in developing countries. Levels of PM for instance are often three to four times higher in developing countries than in industrialized ones. Second in developing countries, people die at younger ages and from different causes than in industrialized countries, implying that extrapolations of the impacts of air pollution on mortality may be especially misleading. The results mean that a decreased concentration of air pollution first and foremost traffic related air pollution may reduce psychiatric disorders in children and adolescents.

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