Pollution, the health scourge of the 21st century

Richard Fuller, Philip J. Landrigan and Alexander S. Preker

As described in the article by Richard Fuller, Philip J. Landrigan and Alexander S. Preker, environmental pollution is now the largest cause of deaths in low and middle-income countries (LMICs), having thus become the scourge of the 21st Century. No one is spared. The rich and poor in both developed and developing countries are all vulnerable.

Despite this, pollution as a major public health threat continues to receive less attention by the international public health community and development/financial agencies than other conditions that have dominated during the past three decades.

Household air and water pollution, the forms of pollution associated with deep poverty and traditional lifestyles in low- and middle-income countries, are slowly declining, but ambient air pollution, chemical pollution and soil pollution—the forms of pollution produced by industrial emissions, automotive exhausts and toxic chemical releases—are all on the rise and the largest increases are seen in rapidly developing low- and middle-income countries. Non-communicable diseases—heart disease, stroke, chronic obstructive lung disease, diabetes and cancer in adults, and asthma, cancer, neurodevelopmental disorders and birth defects in children—are the major health consequences, while the rates of these diseases are rising globally. The forces responsible for increases in industrial, automotive, and chemical pollution include poorly controlled urbanization, increasing demand for energy, growth of polluting industries, proliferation of toxic chemicals and pesticides and the growing global use of cars, trucks, and buses. In the absence of aggressive intervention, the contribution of ambient air pollution to premature death is projected to increase significantly by 2050.

Pollution also has complex economic repercussions through both direct or indirect costs, including the loss in labor market productivity associated with illness and increase in pollution-related health expenditure. Depending on the methodology used, the authors of the paper estimate that annual expenditures range from US$660 billion (upper bound) to US$240 billion (lower bound), or approximately three to nine percent of global health care spending in 2013 (the reference year for the analysis). In low and middle-income countries, the relative share of spending for pollution-related illnesses is substantial.

The International Hospital Federation (IHF) and its members remain committed to a strong action plan to combat pollution-related health problems—both the pollution caused by the health sector itself, like medical waste, and the broader societal causes of pollution. This special issue of the Journal provides an opportunity for the IHF to raise the awareness of policy makers, health care providers and others of the analysis and recommendations for a strong action plan by the recent Lancet Commission on Pollution and Health1.

1 https://www.thelancet.com/commissions/pollution-and-health. Register for free to access the full text in English. Full text translation available in French; executive summaries available in Spanish and Chinese.