

Pakistan Environmental and Public Health Issues

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Abstract

This research paper will provide data about public health and environmental status in Pakistan. Public health means, health of a nation under discussion, the paper shows communicable non communicable and environmental related diseases in Pakistan. Environment means 'surrounding' in which people live in; it includes air, water and soil. The paper specifically mentions, Pakistan environmental issues such as water, air noise pollution and climate change and their impact on public health.

Keywords: Environment; Health; Population

Introduction

Public health

Health is a complete state of social mental and physical well being, not only the absence of disease or weakness. Whereas public health is the health of population of the country.

Environment

The surrounding around the living organisms that have an effect on them (Davis, 1989). So environment means all external physical, biological, social and cultural factors (soil, water, air, microorganisms etc) on which population health is depended.

Pakistan (country profile)

Pakistan is located in northwestern part of south Asia. It covers 88000 km² of land area out of which 25% area is cultivated, it has 1046 km coastline along Arabian sea and covers 22,820 km² of area as territorial water. Pakistan is categorized as arid and semi arid country, only 8 % of total land area receives 500 mm rainfall annually due to monsoon. Pakistan population was 158 million in 2007 whereas current population is over 180 million and it is estimated that it will reach 229 million in 2025 and 295 million in 2050. Pakistan is ranked 6th among most populated countries (Government of Pakistan 2007).

Environmental status in Pakistan

Pakistan is now facing various environmental issues such as;-

Water pollution and scarcity: In Pakistan drinking water sources i.e. surface and ground water, both are polluted with toxic metal, pesticides and coliforms due to human activities like; disposal of domestic, municipal and industrial wastes and use of agriculture agrochemicals causing surface water contamination, etc. According to 'drinking water quality survey' Pakistan is ranked 80 among 122 nations. Arsenic contamination found in Punjab, Nitrate contamination in Balochistan, iron in KPK and higher turbidity values in Sindh. Pakistan is also facing acute water scarcity. Rapid Decline in the surface and ground water table occurring due to irrigation activities in agriculture [1].

Air pollution: Air pollution is a rapidly growing environmental problem in Pakistan. The emissions from industries, vehicles and thermal power plants are the main source of air pollution in Pakistan. In Islamabad, Lahore and Rawalpindi in 2001 the suspended particulate matter concentration were four to six times higher than their standard levels, the higher levels of these matters also recorded in 2003 in Faisalabad and Gujranwala and in Quetta 2006. (Government of Pakistan 2007). Air pollutants like, Carbon monoxide, nitrogen oxide, ozone, poly-aromatic hydrocarbon, sulfur oxide, have been found in the air of Pakistan. Highly inefficient energy use, accelerated growth in vehicle number and vehicle kilometers traveled, increasing industrial activity without adequate air pollution control, and open burning of solid waste including plastic are some of the key factors for declining ambient air quality in Pakistan [2].

Climate change: The geographical properties of Pakistan makes it more vulnerable to climate change. Balochistan, low intensity Punjab areas and Sindh cotton wheat areas are more vulnerable to climate change. Climate change is primarily influenced by total stock of GHGs (greenhouse gases in the atmosphere and not by annual GHGs emissions. Historically, developed countries and economies in evolution have been responsible for about 75% total global stock of GHGs. In Pakistan, annual mean surface temperature has a consistent rising trend since the beginning of 20th century. Rise in mean temperature of 0.6 to 1.0 degree Celsius in the arid coastal areas, arid mountains and hyper arid plains, 18 to 32% increase in rainfall in monsoon zone particularly the sub-humid and humid areas is observed. There is 5% decrease in relative humidity in Balochistan, 0.5 to 0.7% increase in solar radiation in over southern half of the country [3].

Public health status in Pakistan: If the population of the country not feels healthy they are not able to perform their

responsibilities or duties efficiently therefor good health is very important for the country to progress. The government investment in the nation for the population health care can give big dividends as in future they will be mature diamonds because health significantly affect the income growth. Pakistan invest nearly about 0.8% of its GDP in public healthcare, Pakistan is ranked 154 out of 195 for quality and healthcare accessibility. In Pakistan people have 68 years average life expectancy rate, out of which man averages 65.8 years and female 67.9 years [4,5].

Communicable Diseases

The reason of communicable disease in Pakistan are poor sanitation, unsafe drinking water, overcrowded cities, low health awareness, poor socio economic conditions and poor vaccination coverage. In Pakistan acute respiratory infection are 51%, Hepatitis 7.5 %, Malaria 16%, Diarrhea 15%, Dysentery 8% and scabies 7% (WHO 2018) [6].

Non- Communicable Disease

The rate of non- communicable disease in Pakistan is 20.5%. Diabetes, cancer, mental disorder, coronary heart diseases and cardiovascular problems are non-communicable diseases by which majority of Pakistani population suffer (WHO 2018) [7].

Environmental Related Disease

There are extremely complex and varied impacts on health due to environmental risk factors. Estimation shows that environmental related health problems are high in non –OECD (organization for economic cooperation and development) Countries that is 13%, 8% in middle income OECD countries and 5% in high income OECD countries. Pakistan is the middle income OECD country. In Pakistan most of the diseases reported are due to water pollution (directly or indirectly), as nearly about 60% deaths in infants occur due to waterborne diseases. The cities such as Lahore, Karachi, Islamabad, Rawalpindi faces noise pollution which cause auditory and non-auditory effects, such as hearing loss and sleep disturbance health problems etc. In populated areas having traffic congestions, respiratory and vision problems are on a rise due to air pollution. Climate change due to environmental effect is also adversely affecting public health. Thousands of lives are lost due to severe drought and floods in different areas of country [8-11].

Conclusion

Pakistan is 6th most populace country with connecting severe environmental and public health issues. The domestic waste and need to maintain a balance for continuous supply of water for ever increasing population is not only contaminating but depleting the surface and ground water recourses. As Pakistan is ranked 80 for ‘water quality’ among 122 countries and majority of deaths occur due to water borne disease. The health problems such as respirator, auditory, vision disorders are being caused by air and noise pollution. The global warming and climate change is causing extreme floods and drought which are responsible for loss of valuable life.

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