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HEALTH AND HEALTHCARE IN THE TIME OF GLOBAL CLIMATE CRISIS

Prof. Seethalakshmi

Former Principal, Sri Ramakrishna College of Nursing, Coimbatore.

Climate change is the single biggest health threat facing humanity and health professionals worldwide. The Climate Change Conference (COP 27) of the United Nations (UN) from 6-20 November 2022 at Sharm el-Sheikh, Egypt, brought together countries in order to take action towards achieving the world's collective climate goals as agreed under the Paris Agreement and the Convention. Over 45,000 participants assembled to share ideas, solutions, and build partnerships and coalitions. Indigenous peoples, local communities, cities and civil society, including youth and children, showcased how they are addressing climate change. They shared how it impacts their lives. The next conference is to be held in Dubai 2023.

COP 27 agreed to provide “loss and damage” funding for vulnerable countries hit hard by climate disasters even as it reaffirmed their commitment to limit global temperature rise to 1.5 degrees Celsius above pre-industrial levels. New pledges, totalling over US \$ 230 million, were made to the Adaptation Fund to help more vulnerable communities adapt to climate change through concrete adaptation solutions. The Sharm el-Sheikh Implementation Plan pointed out that a global transformation to a low-carbon economy is expected to require investments of at least US \$ 4-6 trillion a year. But the reality is also that the goal of developed countries to mobilise US \$ 100 billion per year by 2020 has also not yet been met. So too, the targets set to tackle climate change has not been met, leading instead to the world speeding to a catastrophic climate disaster.

The reports of the Inter-governmental Panel on Climate Change (IPCC), an intergovernmental body of the United Nations, assesses the science related to climate change. The April 2022 IPCC report, written and agreed to by the world's scientists, told us that global emissions need to start a downward trajectory by 2025. That's only two years away.

The IPCC also told us to cut emissions by nearly half by 2030. That's only seven years away. It also stated that all of society must be supported to move away from fossil fuels, including coal, oil and gas, and that the world must limit temperature rise to 1.5°C to avert catastrophic health impacts and prevent millions of climate change-related deaths.

India, the seventh largest country, with a geographical area of 328.73 million hectares, constituting 2.4% of the global land area, is ranked 29 out of 191 countries with very high exposure to flooding and tropical cyclones and droughts. It also ranks 44th in the vulnerability ranking due to its high levels of socioeconomic deprivation. It was also the 7th most affected country in 2019 with floods leading to 1,800 deaths across 14 states, displacing 1.8 million people, affecting 11.8 million people, with an economic loss of US \$10 billion.

Much of what is talked about as climate change issues includes fossil fuel usage, deforestation, biodiversity, urbanisation, farming practices, air and water pollution, climatic extremes as floods, forest fires, melting ice caps, rising sea levels, drought, loss of plant and animal habitats and food and water insecurity. Health issues have a lower profile, despite the World Health Organization (WHO) having highlighted in 2015 that climate change is the greatest threat to global health in the 21st century.

According to WHO, climate crisis threatens to undo the last fifty years of progress in global health and poverty reduction, further widening existing health inequalities between and within populations. It severely jeopardises the realisation of Universal Health Coverage (UHC) in various ways—including by compounding the existing burden of disease and by exacerbating existing barriers to accessing health services, often at the times when they are most needed. With the poorest people largely uninsured, healthcare costs already (currently) push around 100 million into poverty every year, with climate change impacts worsening this trend.

According to WHO, the 'key facts' are -

- Climate change affects the social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter.
- Between 2030 and 2050, climate change is expected to cause approximately 2,50,000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress.

- The direct damage costs to health (i.e. excluding costs in health-determining sectors such as agriculture and, water and sanitation), is estimated to be between USD 2-4 billion/year by 2030.
- Areas with weak health infrastructure – mostly in developing countries – will be the least able to cope without assistance to prepare and respond.
- Reducing emissions of greenhouse gases through better transport, food and energy-use choices can result in improved health, particularly through reduced air pollution.

Worldwide, over 5 million deaths per year are linked to abnormally hot and cold temperatures, new or exacerbated chronic conditions like cardiovascular or respiratory illness, increase in low birth weight babies and miscarriages, impaired lung growth due to air pollution, inflammatory skin disease, cancer etc. At least 1.8 million died globally in 2019 due to fine particulate matter in the atmosphere. Extremely hot weather and heat waves can lead to heat stroke and exhaustion and worsen chronic health conditions.

Homelessness, hunger, and disruptions to education and the economy have profound negative impact on health with long-term implications for entire populations. Weather-related events force over 20 million to move out. Besides the toll on physical health, trauma and loss impacts mental health acutely. Elevated levels of anxiety, depression, and posttraumatic stress disorder, mood and anxiety disorders that lead to suicide, higher interpersonal violence and aggression are the result. Grief, emotional pain, and disorientation lead to poor work performance, lower self-esteem, weakened social cohesion and cause harm to interpersonal relationships.

Healthcare costs shoot up. Climate change affects people differentially. It deepens pre-existing inequities increasing the vulnerability and reduced ability to adapt to climate change. Low-income people, religious, linguistic and racial minorities; lower castes and Adivasis; workers in certain hazardous occupations; people with pre-existing health conditions the elderly, children and people with disabilities; and the homeless are the worst hit.

Disruption of power, telecommunication, transportation, potable water, healthcare services, supply chains etc. makes life chaotic and threatening. Climate change not only

disrupts the lives of healthcare providers but also makes their jobs more challenging, risky and stretched beyond endurance.

The COVID pandemic vividly demonstrated to us how society and specifically, the State apparatus, the health industry, health institutions and healthcare providers responded to a global health crisis. We saw the exceptional selfless service of all kinds of people in organising and deploying all possible human and material resources to mitigate human sufferings. We also saw the hideous and repulsive manner in which a section of people swooped on the victims of the pandemic, either to dump them or sweep down on them to extract a killing in profits, and the State stood as a mute spectator, if not an active collaborator. The health sector, needless to say, stood vindicated and accused as well. Yet, the pandemic does indeed provide invaluable lessons on how one could better deal with the waves of disasters that climate crisis is causing now and will cause in the future.

