

Global Impact of Climate Change in a Nutshell

A R Gatrad*

Consultant Paediatrician, Manor Hospital Walsall, Professor of Paediatrics and Child Health Universities of Kentucky, Birmingham and Wolverhampton, UAE

***Corresponding Author:** A R Gatrad, Consultant Paediatrician, Manor Hospital Walsall, Professor of Paediatrics and Child Health Universities of Kentucky, Birmingham and Wolverhampton, UAE.

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'Humanity is waging a suicidal war against our planet'.

- UN Secretary General.

Is it not ironic that the more our world develops, the more challenges it faces. To redress this imbalance, we need to revive our human values, not based on, greed and over consumption, but on learning about and understanding the impact of our activities on the natural world. We all should share this concern to help make our world a safer, equitable place in which to live.

A place where the eight people who control half of global wealth could dig deep into their conscience and ask themselves 'what can we individually or collectively do to mitigate this climate emergency?'

We must also remember that most countries strive, some at least in theory, for their populations to achieve their potential and be happy. Each country should work in its own way to achieve this, and rich countries should help the poor resourced ones to lessen human suffering. This will then inevitably contribute to a much happier world order. In the words of Bill Gates, one should be judged 'on how well you address deepest inequalities, and how you treat a people a world away who have nothing in common with you except their humanity'. A recent example in 2022 was being Pakistan which only contributes to 1% of global emissions and yet is disproportionately affected.

In our present Anthropogenic geological era, our greed for wanting more and more is coming to haunt us, and in the process affecting populations of poor resourced countries with catastrophic effects, for example on food security through droughts and floods affecting millions of children worldwide. In addition, there is a global threat to the ever-decreasing ground water supply for sustenance.

No religion condones destruction of our planet indiscriminately; on the contrary all religions in their own way make us, humans, custodians of this planet to ensure happiness and health.

Human health, both mental and physical is inextricably linked to the health of the earth's natural systems, which create the air we breathe, the food we eat and the water we drink. This complex set of relationships is sometimes referred to as 'planetary health', and going forwards it is increasingly recognised as a critical perspective for the health of our future generations.

The climate crisis also poses a substantial risk to the delivery of healthcare and vital services. In addition to damage to health infrastructure caused by heatwaves, flooding, wildfires and conflicts, demand for hospitalisation is already increasing due to the presence of vector borne diseases, such as malaria and dengue fever, in areas where they previously did not exist.

Over the last 100 years the sea levels have risen between 11 - 16 cms and it is estimated that they will rise by 50 cms in the next 100 years as more and more arctic glaciers melt. Many islands such as the Maldives will simply sink. This climate crisis is so complex that even the physical and mental health safety of children is in question during, for example, 'climate migration' caused by flooding, conflict, crop failures or drought.

Ever since the industrial revolution, over 150 years ago, greenhouse gas emissions have increased, particularly carbon dioxide, and indeed over the last 50 years exponentially so. In addition, human activity has removed over half the wild birds, mammals, fish, and insects from our planet. In fact, a global study of 7,1000 animal species found that 48% are declining.

Over 6 billion tons of plastic waste has reached our waters over the last 50 years. As this waste lasts hundreds of years, the original plastic that was manufactured is still on this planet! Only 10 % of global plastic is recycled. Eight percent of greenhouse gas emissions are from plastic production, the main fossil fuel being oil. Our daily consumption of single use plastics and their composites are filling our oceans; marine life is strangled and strewn across litter filled beaches, which are becoming a telling sign of humanities' failings. With pollution of our rivers and seas corals on which all marine life depends are heading for extinction too.

We presently have a global climate crisis at a possible tipping point - a point of no return with temperatures soaring inexorably. To get on track to 2°C, a 30% reduction in greenhouse gases is needed, whereas a 55% reduction is needed to achieve 1.5°C - our acceptable aim suggested by the Paris Agreement in 2015 signed by 196 nations at COP 21. But the world remains blindfolded. During the summer of 2022 the record-breaking heat resulted in over 60,000 deaths just in Europe, and in 2023 we have witnessed the hottest ever recorded global temperatures in Europe, North America and Africa. In China 53°C was recorded. These extremes of heat are getting more extreme and lasting longer with ever burning fires in many countries endangering life and limb. Some are classing this year as the start of the tipping point. Is this now 'Global Boiling'?

The impact of air pollution due to burning of fossil fuels is greatest on children whose physiology is such that their breathing and heart rates are faster. This results in more toxins being inhaled. Their immature organs, particularly the brain is more vulnerable to the particulate matter in air pollutants. With pregnant mothers being similarly affected children are therefore exposed from the womb to the grave.

These < 2.5 microns pollutants aside from causing lung problems such as asthma, escape the lungs and impact on every organ of the body affecting cognitive and other bodily functions. They are implicated in cancers, strokes, heart attacks, dementia and diabetes. According to the WHO over 95% of children globally breathe in 'toxic air'.

Children also have a relatively large body surface area per weight, compared to adults. Added to the fact that they also have an immature sweating system makes them more vulnerable to rising temperatures affecting their health, daily activities and concentration in schools.

Warnings have been issued by scientists for over 40 years in response to worldwide concerns regarding soil erosion, depletion of natural resources and habitat loss, made worse by widespread deforestation as a result of mindless actions of large farming, timber and mining companies. These warning are now a reality. If global warming continues to change faster than we can change its course, there will be an Armageddon not in some distant future, but in our lifetime; a frightening prospect for many but a reality all too close. As custodians of our planet, we have so far failed abysmally. What is more is that we are spending billions on space exploration to further exploit, whilst millions on this planet continue to starve - a prime example is India landing a lunar probe in August 2023.

Scientists invented the engine that kick started the industrial revolution and scientists in different ways can and will help save our world, but they have to act quickly as there is a global climate emergency and in this, each one of us has a part to play. We can, for example, start by eating locally grown food, decrease our beef consumption and use less fossil fuel-based transport.

Research should be the bedrock of all universities and institutions, and be supported by government grants and subsidies, be it for harnessing energy from the sun and wind to produce green hydrogen for energy through electrolysis of water, or ways of capturing carbon.

Let us appreciate and respect what we have, until it becomes what we had. Something we should never forget.

No animal could ever be so cruel as man. So artfully and artistically cruel - Fyodor Dostoevsky.

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