Healthy People, Healthy Ecosystems

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Improvements to human health and well-being over the last 50 years have been extraordinary. Life expectancy has nearly doubled. Infant mortality has plummeted. Many of the ancient infectious diseases have been quelled. We are surrounded by myriad devices and conveniences that make our lives easier than those of any previous generation. But these great gains have come at an enormous cost, a cost that we are only beginning to comprehend. To achieve these gains, we have been unsustainably stripping the earth of its resources, degrading the planet’s ecosystems, and destroying our life support systems. The overconsumption, environmental destruction, and pollution of recent decades have driven us to a state where we are now consuming more than our planet can sustainably provide. To enhance our comfort, we are mortgaging the health and wellbeing of our children and our children’s children.1

This is a dangerous trajectory and one if unchecked will undo all the gains in health that we have achieved. And it is the world’s poorest, people often already living in marginal conditions, who will suffer the most from our unsustainable choices through starvation, disease, conflict and forced migration.

The fundamental challenge of our times is how to meet the needs of a global population expected to reach 9.6 billion by 2050 without killing the planet.

At best, this problem is receiving only modest attention. At worst, some governments, notably the United States federal government, are doing harm. Defunding the Environmental Protection Agency, the National Institutes of Health, the Centers for Disease Control and Prevention, and the National Oceanographic and Atmospheric Administration; rolling back hard-won rules and regulations vital to human health; and weakening efforts to address climate change and pollution will damage human health, undercut America’s prosperity, and diminish our ability to compete globally. Some of the greatest threats to our planet and our health include:

- Climate change — an existential threat that affects every aspect of our lives from extreme weather events to food insecurity and disease prevalence.2
- Pollution — the world’s leading and most neglected environmental risk factor, it contributes to the death of 9 million people per year.3
- Deforestation — after a recent lull, we are now seeing a significant increase in the rate at which the Earth’s lungs, the Amazon and Congo Basins are being destroyed. A 29% increase in deforestation in Amazonia over the last year alone.4
- Freshwater security — essential for life, finite, representing only 3.5% of the planet’s water, is being massively over utilized and polluted. Stanford University’s Global Freshwater Initiative estimates that 1.8 Billion people will face water scarcity by 2025.5
- Ocean Health — as the oceans go, so too do we. Increasing ocean temperatures, overfishing, pollution, and acidification are a deadly combination that is upending ocean ecosystems.

WHAT CAN BE DONE?

The World Health Organization’s Millennium Assessment stated that over the next 50 years we can reverse the degradation of our planet’s natural capital and protect human health. However, this will take policy changes that must be substantial and must occur now.6 But this isn’t happening and will not occur unless all of us, scientists in particular, act. We must mobilize and become politically active, engaging in a relentless effort to educate policymakers and more importantly the public, to implement evidence-based solutions that

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move societies away from a pattern of unsustainable consumption.

This advocacy should capitalize on an underrecognized yet glaringly obvious fact: that the health of our planet and that of people are indivisible. They are ‘two halves of the same whole’. Traditionally, health care professionals and environmental scientists, their associations, and their NGOs have been isolated from one other. They do their science, they study their ecosystems, they care for their patients, they engage in advocacy, but they do not talk to each other. This must change. Working together, advocating with one voice and demonstrating synergistic benefits between environmental protection and public health will strengthen our impact and create a whole that is greater than the sum of our parts. A call for protection of the environment becomes much more powerful when it is linked with a plea for the preservation of human health. Areas that call for joint action include the following:

- Supporting good governance across multiple sectors - environment, health, finance and justice — to protect the environment and preserve human health.
- Supporting the rule of law and a competent, independent, non-corrupt judiciary that can be relied upon to act consistently in the interest of the public. The rule of law and an independent judiciary are necessary pillars of a stable society and reflect the reality that the private sector is never going to regulate, police or adjudicate itself.
- Supporting effective environmental rules and regulations that protect the environment and also protect the health of the public.
- Protecting ecosystems. Ecosystems, utilized sustainably, can be a powerful mechanism to generate public goods that address the social determinants of health.6
- Integrating ecosystem services valuations into land use decisions.6
- Information sharing. Good practices aggregated and shared widely across many sectors - agriculture, water, land use, waste reduction, energy, and public health — can provide knowledge that underpins good public policies.
- Supporting every woman and man’s access to modern birth control. According to the Guttmacher Institute, 225 million women in developing nations were unable to access the contraception they wanted in 2014.7 Birth control is an extremely cost-effective way to empower women, improve their lives and reduce the environmental stresses where they live.

None of this will occur of course without the leadership, engagement and involvement of a broad swath of society. Academia has an enormous opportunity to lead in this engagement. No group is better versed in the science or more knowledgeable about the solutions. What is needed is the will to communicate our knowledge to policy-makers and the public. We need to move out of our universities and beyond our comfort zone and explain to broad audiences why health and environmental policies are important, and why these policies are not a burden but rather a source of national strength. We need to communicate in a way that cuts through information overload and impacts peoples’ brains and even more importantly their hearts. The latter is a more potent lever to effect change.

The theme of CUGH’s 8th annual conference, Healthy People, Healthy Ecosystems was chosen to highlight the threats our planet faces, the impacts of planetary change on human health, and most importantly, what we can do about it. This edition of the Annals of Global Health contains approximately 500 poster abstracts shown at the meeting that cover the conference’s six sub-themes. The abstracts were selected from nearly 1100 received from researchers around the world.

CUGH was honored this year when the Annals of Global Health became a partner journal of the Consortium reflecting the collaboration that allows these abstracts to be published and future endeavors that will provide new opportunities for publication and impact.

REFERENCES