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Climate change, global health and the post-COVID world. Comments on Benatar (S Afr J Sci. 2022;118(11/12))

Significance:

Our world is facing an environmental crisis with major consequences for health. From a health perspective, the choice between development and the environment is a false dichotomy. Humanity can only flourish between a solid social foundation and an ecological ceiling. We are struggling with both objectives. Renewed commitment to the primary health care approach is one sign of hope and the emergence of both Planetary Health and One Health. We need a stronger health voice in the conversation, alongside others, such as our youth and faith communities. The sustainable development goals need inner development goals across the whole of society.

The author of 'COVID-19, global health and climate change: Causes and convergences' and 'Health in a post-COVID-19 world' accurately paints a picture of a world in crisis, at a kairos moment of decision-making. Climate change is the 'canary in the coal mine' that has hopefully got our attention, but heralds a more complex and greater potential catastrophe. The environmental crisis is multifaceted, and in addition to climate change, includes a mass extinction of species, pollution of air, ocean acidification, chemical pollution, land conversion, freshwater withdrawals, nitrogen and phosphorus loading, as well as ozone layer depletion.3 In Africa, countries must continue the quest to improve the social foundation of society, while not developing on a trajectory that further exceeds these planetary environmental limits.3

Commentators in South Africa continue to juxtapose the decision-making as a choice between development and the environment. For example, a recent opinion editorial stated "poverty, inequality, and unemployment are what we need to solve first. Environmentalists' needs can't always be above our needs."4 The environmental crisis, however, is already increasing poverty, inequality and unemployment on the African continent. In the horn of Africa, climate change is causing prolonged drought, locust invasions, loss of livelihoods amongst pastoralists and farmers, and widespread hunger and malnutrition.⁵ In Mozambique, cities such as Beira, are recovering from the onslaught of cyclones that have destroyed much of the city.6 We need to simultaneously build our social foundations at the same time as protecting the planetary boundaries and finding a safe space for humanity to flourish in-between.3

The articles^{1,2} make for depressing reading. We recently held COP27 in Africa and, as the name suggests, the governments of the world have been meeting to tackle climate change for 27 years. Despite this, the concentration of CO, in the atmosphere has risen progressively, and so far there has been little substantial change in the global use of fossil fuels relative to alternative sources of energy8. These meetings, under the auspices of the United Nations, require a global consensus to make decisions, and governmental delegations are increasingly tainted by lobbyists from the oil and gas industry.9 While we know that the environmental crisis is reaching irreversible tipping points¹⁰, and that societal collapse is historically possible¹¹, we continue to pursue what Greta Thunberg has referred to as "blah, blah, blah"12. At the same time as we seem unable to tackle the environmental crisis, we continue to struggle with improving the social foundation. Over the last 2 years, "the richest 1% of people have accumulated close to two-thirds of all new wealth created around the world... a billionaire gained roughly \$1.7 million for every \$1 of new global wealth earned by a person in the bottom 90 percent"13.

Are there any 'glimmers of hope' as Benatar puts it? His article1 refers to emerging insights into the crisis, human ingenuity and the development of new worldviews based on cooperation, the common good and changing power dynamics as signs of hope. In the health sector, I see the renewed commitment to primary health care as a sign of hope. 14 Primary health care is ultimately a worldview that embraces social justice, solidarity, equity, and responsiveness to communities. The latest thinking also includes the concept of resilience¹⁵, particularly in relation to challenges such as COVID-19 and climate change, and responsibility for the environmental impact of the health sector16. The vision, however, while representing a much needed alternative paradigm, continues to be contested and poorly implemented. In Africa we struggle with multisectoral policy and action as well as community empowerment as part of the primary health care approach.¹⁷ In South Africa, complementary policies such as national health insurance are contested by the private healthcare sector and undermined by concerns about government corruption and capacity.18 These new worldviews are, however, also highlighted by the emergence of new disciplines such as Planetary Health and One Health. Planetary Health explores the relationship between the environmental crisis and human health19, while One Health explores the interdependence of human health with that of the other species that share our planet²⁰.

The health voice has not been a loud one in the environmental crisis, but can bridge the false dichotomy between development and the environment. A failure to build the social foundation of society and a transgression of the planetary boundaries both threaten health, and the factors are interdependent not mutually exclusive. For example, in South Africa, particulate matter in the air is four times the safe level, largely due to the burning of fossil fuels and biomass.21 This is a major risk factor for non-communicable diseases that impact on working-age adults in poor communities, further increasing poverty. The National Strategic Plan for non-communicable diseases explicitly recognises that environmental protection, economic development and social equity are all required. 21 Society's concern for the health of its people can help us understand that it is not a choice between development and the environment.

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There is also increasing hope emerging from our youth, who embrace different worldviews and are motivated by the existential crisis facing their own futures. Younger people are showing leadership and taking action. Faith communities are also an important source of direction and hope in Africa and many traditions have now included a season of creation in their liturgical calendar to address the need to care for all creation and not just humans. Many high-income countries are more secular, but even there one can see the emergence of new spiritual capital through movements such as the inner development goals to mirror the outer Sustainable Development Goals. The inner development goals suggest that "we lack the inner capacity to deal with our increasingly complex environment and challenges" but can develop the skills and abilities needed. They focus on abilities related to the self, thinking, relating, collaborating and acting.

Even within our existing paradigm we see change happening as business recognises that fossil fuels are a cul-de-sac and there is a risk of stranded assets by continuing to invest. Renewable energy is becoming a cheaper and more sustainable investment. Our energy crisis in South Africa is an interesting microcosm of the paradigmatic tensions. We need energy for development and need to transform our reliance on coal as a source of such energy. Is this a choice between development or the environment, or an opportunity for development in a way that fosters new jobs, new sources of energy and a more sustainable future?

Ultimately our hope is not in intergovernmental agreements, politicians or climate scientists, but in the collective action of people, civil society and communities. Prof. Katharine Hayhoe²⁶ has expressed this well²⁷:

I don't find hope in the science of climate change – where nearly every time a new study comes out, it shows that climate is changing faster or to a greater extent than we thought. I don't find hope in politics, either – where arguments over the arrangement of deck chairs continue as the Titanic tilts at an ever more dangerous angle.

I find hope in recognising that I am not alone; that the giant boulder of climate action isn't sitting at the bottom of a very steep hill with only a few hands on it. In reality, that boulder is already at the top of the hill. It's already rolling down the hill in the right direction. There are millions of hands on it, alongside mine. With more hands, we can make it go faster. And the more of us there are pushing it, the greater the possibility of a better future for us all. That's what gives me hope.

References

- Benatar SR. COVID-19, global health and climate change: Causes and convergences. S Afr J Sci. 2022;118(11/12), Art. #13165. https://doi. org/10.17159/sajs.2022/13165
- Benatar SR. Health in a post-COVID-19 world. S Afr J Sci. 2022;118(11/12), Art. #14995. https://doi.org/10.17159/sajs.2022/14995
- Raworth K. Doughnut economics: Seven ways to think like a 21st-century economist. London: Cornerstone Digital; 2017.
- Moorkroft N. Equal access to reliable electricity supply a must. Cape Times. 12 January 2023.
- Sheriff M, Mash R. Climate change and primary health care in Chakama. Afr J Prim Heal Care Fam Med. 2022;14(1), Art. #3670. https://doi.org/10.4102/ phcfm.v14i1.3670
- Lokotola CL, Uyttersprot T, Felimone P, Scheerens C. How did primary health care in Beira experience Cyclone Idai? African J Prim Heal Care Fam Med. 2022;14(1), Art. #3626. https://doi.org/10.4102/phcfm.v14i1.3626
- NOAA Climate.gov. Climate change: Atmospheric carbon dioxide [webpage on the Internet]. c2022 [cited 2023 Jan 21]. Available from: https:// www.climate.gov/news-features/understanding-climate/climate-changeatmospheric-carbon-dioxide

- Ritchie H, Roser M, Rosado R. Overview of global energy [webpage on the Internet]. c2022 [cited 2023 Jan 21]. Available from: https://ourworldindata. org/energy-overview
- Michaelson R. 'Explosion' in number of fossil fuel lobbyists at Cop27 climate summit. The Guardian. 10 November 2022. Available from: https://www. theguardian.com/environment/2022/nov/10/big-rise-in-number-of-fossilfuel-lobbyists-at-cop27-climate-summit
- Rockstrom J. Tipping points and feedback loops. In: Thunberg G, editor. The climate book. London: Penguin Random House; 2022. p. 32–40.
- Diamond J. Collapse: How societies choose to fail or survive. London: Penguin Books; 2013.
- Carrington D. 'Blah, blah, blah': Greta Thunberg lambasts leaders over climate crisis. The Guardian. 28 September 2021. Available from: https://www. theguardian.com/environment/2021/sep/28/blah-greta-thunberg-leadersclimate-crisis-co2-emissions
- 13. Oxfam International. Richest 1% bag nearly twice as much wealth as the rest of the world put together over the past two years [media release on the Internet]. 16 January 2023 [cited 2023 Jan 21]. Available from: https://www.oxfam.org/en/press-releases/richest-1-bag-nearly-twice-much-wealth-rest-world-put-together-over-past-two-years
- World Health Organization. Astana Declaration on Primary Health Care [webpage on the Internet]. c2018 [cited 2018 Dec 18]. Available from: https://www.who.int/primary-health/conference-phc/declaration.
- World Health Organization. Primary health care measurement framework and indicators: Monitoring health systems through a primary health care lens [webpage on the Internet]. c2022 [cited 2022 Mar 13]. Available from: https://www.who.int/publications/i/item/9789240044210
- Global Green and Healthy Hospitals [homepage on the Internet]. No date [cited 2020 Jun 09]. Available from: https://www.greenhospitals.net/
- Mash B, Ray S, Essuman A, Burgueño E. Community-orientated primary care: A scoping review of different models, and their effectiveness and feasibility in sub-Saharan Africa. BMJ Glob Heal. 2019;4, e001489. https:// doi.org/10.1136/bmjgh-2019-001489
- Mathew S, Mash R. Exploring the beliefs and attitudes of private general practitioners towards national health insurance in Cape Town, South Africa. Afr J Prim Heal Care Fam Med. 2019;11(1), Art. #2189. https://doi. org/10.4102/phcfm.v11i1.2189
- Myers S, Frumkin H. Planetary Health: Protecting nature to protect ourselves. Washington DC: Island Press; 2020. https://doi.org/10.5822/978-1-61091-966-1
- World Health Organization. One Health [webpage on the Internet]. No date [cited 2023 Jan 21]. Available from: https://www.who.int/health-topics/one-health#tab=tab 1
- South African National Department of Health (DoH). National strategic plan for the prevention and control of non-communicable diseases, 2022–2027. Pretoria: DoH; 2022. Available from: https://www.sancda.org.za/wp-content/ uploads/2022/06/NCD-NSP-Final-For-Circulation_June-2022.pdf
- Thunberg G. The most effective way to get out of this mess is to educate ourselves. In: Thunberg G, editor. The climate book. London: Penguin Random House: 2022. p. 324–327.
- 2022 Season of creation: 'Listen to the Voice of Creation' [webpage on the Internet]. c2022 [cited 2023 Jan 21]. Available from: https://seasonofcreation. org/2022/04/04/2022-season-of-creation-listen-to-the-voice-of-creation/
- Zohar D, Marshall I. Spiritual capital: Wealth we can live by. Oakland, CA: Berrett-Koehler Publishers; 2004.
- Inner Development Goals [homepage on the Internet]. No date [cited 2023 Jan 21]. Available from: https://www.innerdevelopmentgoals.org/
- Hayhoe K. Saving us: A climate scientist's case for hope and healing in a divided world. New York: Atria/One Signal Publishers; 2021.
- Dunne D. World Environment Day: What reasons do we have to stay hopeful about our planet's future? Independent. 5 June 2021. Available from: https:// www.independent.co.uk/climate-change/news/world-environment-day-2021-positive-future-b1859929.html