

COMMENT

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Eco-bio-communitarianism: reimagining bioethics for sustainable health

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There is an urgent need for humanity to mend its broken relationship with the environment and ensure the mutual thriving of people, flora, fauna, lands, and cultures. Eco-bio-communitarianism provides an Afro-centric framework for promoting an inclusive, socially just, and ecologically sustainable approach to the well-being of all life on Earth.

Background

Global health challenges such as epidemics, climate change, antimicrobial resistance, and food insecurity demand a critical reassessment of human behaviour towards other forms of life and the environment. The interconnectedness of humans, plants, animals and microbial communities illustrates the complexity and fragility of our environment and ecosystems. However, human beings are generally self-centred, and their agency in nature often creates problems in the environment that they share with other organisms [1]. Intentional human activities and behaviours such as trophy hunting, close interaction with exotic wildlife, habitat destruction and encroachment, pollution, expansion of invasive species, eco-tourism, and intensive industrial agriculture are undoubtedly harming the health of humans, plants, animals, and the environment [2]. There is an urgent need

for humanity to mend its dangerously broken relationship with its environment to ensure a peaceful coexistence and the mutual thriving of people, flora, fauna, lands, and cultures. This may require adopting a holistic bioethics framework that accounts for the ecological and social dimensions of human behaviour and activities, including their ability to use scientific methods and innovations to study and address global health challenges.

Eco-bio-communitarianism: an Afrocentric indigenous bioethics framework

Eco-bio-communitarianism [3], rooted in an indigenous, precolonial, African worldview of the Nso of North-Western Cameroon, which equally applies to other African peoples who share similar cultural values [4–6], offers a promising bioethical framework and unique perspective for navigating the complexities of global health and environmental sustainability. Simply put, eco-bio-communitarianism is a cultural philosophy and way of life that blurs the boundaries between humans, animals, plants, and inanimate objects. It challenges the anthropocentric view common in Western bioethics, which often places humans at the centre of bioethical considerations. Instead, advocates for a more inclusive approach that recognizes the intrinsic value of all forms of life and rejects the idea of human dominance over nature. Central to eco-bio-communitarianism are the principles of cosmic humility, non-anthropocentricity, solidarity, and eco-bio-centricity, which collectively promote a balanced and respectful coexistence between human societies, plants, animals, and the natural world.

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Advancing sustainable health through the lens of eco-bio-communitarianism

The principle of cosmic humility calls for a recognition of human epistemological limitations and an acknowledgment of the interdependence of all life forms that are needed to maintain harmony within ecosystems. Cosmic humility is crucial to the pursuit of scientific and technological advancements, particularly in fields such as biotechnology and genetic engineering, where the potential for unintended consequences of human actions is significant. The eco-bio-communitarianism framework recommends that humans should approach scientific endeavours with humility, caution, and deep respect for the complex web of life that sustains all species.

Non-anthropocentricity, another key principle of eco-bio-communitarianism, rejects the notion that humans are the most important beings in the universe (except from the perspective of responsibility) and challenges the idea that humans have the right to dominate and exploit the Earth and its other inhabitants. Instead, this principle advocates for the equal consideration of the health and well-being of all living things, thereby aligning with the One Health approach [7] that integrates human, animal, and environmental health. This principle further reinforces the need for collaborative health strategies that address zoonotic diseases and environmental degradation holistically. The principle directly supports a multidisciplinary framework that emphasizes the interconnectedness of human, animal, and environmental health.

In agriculture and genetic research, eco-bio-communitarianism could provide a critical lens for evaluating the use of genetically modified organisms (GMOs). While GMOs may improve crop yields, they could also disrupt local ecosystems, harm native species, and undermine traditional agricultural practices that preserve biodiversity [8, 9]. Indigenous farming systems, passed down through generations, play an essential role in maintaining ecological balance. Thus, eco-bio-communitarianism advocates for the protection of indigenous species and farming methods, cautioning against overreliance on GMOs and unproven scientific interventions.

Incorporating eco-bio-communitarianism into the global bioethics discourse calls for a re-evaluation of the power dynamics that shape scientific research and health policy. The dominance of Western perspectives in these fields often marginalizes alternative world-views and knowledge systems, particularly those from Indigenous and non-Western cultures. What if the ethical framework and world-view with the greatest potential to save the environment and the health of its inhabitants lies not in the globally dominant Western philosophy, but in the marginalized richness of African and other

Indigenous cultures and philosophies? Embracing the principles of eco-bio-communitarianism could move us towards a more inclusive and equitable approach to bioethics, one that recognizes the diversity of knowledge systems and the importance of maintaining harmony between humans and the natural environment.

The application of eco-bio-communitarianism is not limited to theoretical discussions but has practical implications for global public health, environmental conservation, and the governance of scientific research. Public health initiatives that address zoonotic diseases can benefit from the eco-bio-communitarianism perspective. For example, the framework's focus on interconnectedness encourages integrated health surveillance systems that monitor human, animal, and environmental health simultaneously, thereby impacting overall health. Similarly, environmental policies and human behavioural practices that prioritize biodiversity conservation, habitat protection, and ecological stability align with the eco-bio-communitarian principle of cosmic humility.

Conclusions

Eco-bio-communitarianism offers a robust Afrocentric framework for addressing many bioethical quandaries in global health. By integrating this indigenous African philosophy and way of life into mainstream bioethics discourse, we can develop more holistic, inclusive, socially just, and ecologically sustainable approaches to health, science, and environmental stewardship for the well-being of all life on Earth.

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Data availability

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Declarations

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