https://doi.org/10.47811/bhj.154

Why Planetary Health Education matters now for Bhutan and the World!

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The climate crisis has been called the most significant threat to human health and existence in the twenty-first century. It is one important element of a planetary health (PH) perspective; others include biodiversity loss, global social injustice, limits to growth and the risk of civilization collapse via nuclear conflict[1].

The Lancet publication in 2015 states that Planetary Health is the health of human civilization and the state of the natural systems on which it depends. The report further emphasizes on two critical concepts, first, the threats that our species faces are not just abstract physical risks, such as disease, climate change, ocean acidification, or chemical pollution. The risks we face lie within ourselves and the societies we have created. Second, planetary health concerns the natural systems within which our species exists—for example, the health and diversity of the biosphere. Human beings live within a safe operating space of planetary existence[2].

Effects of the climate and other environmental crises on human health can already be observed[1,3]. It's rather unfortunate that the Global South and South Asia that has contributed so little to the grave situation, and are vulnerable to the effects of climate change the most[3,4]. According to the intergovernmental challenge, tens of millions in Africa and south Asia are already feeling the negative health impacts of climate change[4].

The most significant manifestations in Sub-Saharan Africa and South Asia are malnutrition, neglected tropical diseases, diarrheal diseases, malaria, Dengue Fever, Chikungunya, meningitis and Non-communicable diseases[4-6]. The interdependence of human health, wellbeing and planetary ecosystems is at the core of the emerging concept of Planetary Health[7]. Achieving Planetary Health requires a huge transformation of all areas of human activities, for example the energy, mobility, food habits and agri-food systems. At the same time, adaptation to the already occurring (health) impacts of the changes in planetary ecosystems is required.

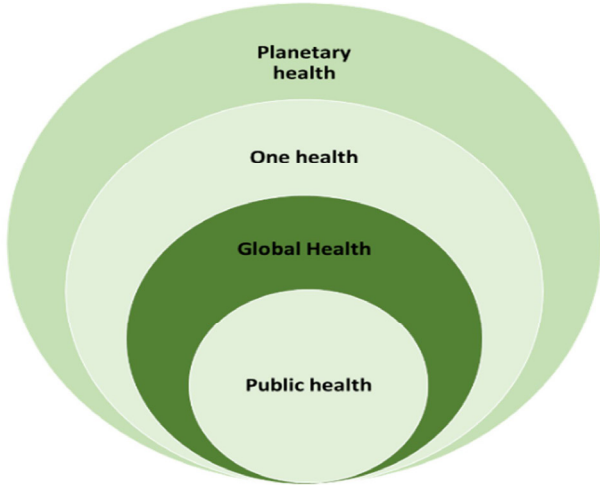

Figure 1. An overview of Public Health, Global Health, One Health and Planetary Health

In this effort, education can play a pivotal role in transferring of knowledge to raise awareness of realities, critical analysis to understand the complexities underlying these realities, and experiential exposure to connect to these realities[1]. The São Paulo Declaration on Planetary Health - a global call to action from the planetary health community supported by more than 300 signatories, urged to include planetary health education in all curricula levels, from schools to universities[7-10]. Similarly, the UN report "The Future is Now" specifically calls upon the universities and higher education institutions to support the mission of advancing sustainability. This recognizes that the education of the next generation of researchers and change makers is one of the best leverage strategies toward transformations in sustainability[11]. Recently, the 'Our Planet, Our Future" call for action-signed by a large number of Nobel laureates-requested universities and higher education institutions to urgently embed the concept of planetary stewardship in all curricula[9,12]. In consequence, there are a growing number of initiatives to transform higher education for sustainable health[9].

The Association of Medical Education in Europe (AMEE) issued a Consensus Statement on Planetary health and education for sustainable healthcare"[13] examples of learning activities, opportunities, and possible assessment modes as well as a road map and targets for implementing Planetary Health

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Education (PHE). Furthermore, the conceptual frameworks with scope and aims of PHE are the 12 Cross-cutting principles for planetary health education[14,15] were developed.

Planetary health education prepares future healthcare professionals to promote the health of the planet. This has potential benefits for the healthcare system, patients, community, and the environment. However, with a few exceptions, such as the United Kingdom[9], climate change education is generally absent in the mainstream health professional education curriculum. It is evident that health care professionals lack the knowledge and skills to recognize, prepare for, and respond to current and future climate change-related health and health system threats in a meaningful way[9]. The multidisciplinary nature of the climate crisis demonstrates the need for multiple intellectual resources, experiences and perspectives to be included in Planetary Health in health curricula[9,16,17].

Therefore, the initiative for the longitudinal integration of Planetary Health education and research into health professional curricula of undergraduate learners in Africa, Europe and South Asia; to train a new generation of academics, who understands the Planetary Health and tools to tackle issues. Specifically, this initiative aims to provide capacity development in research, education and professional development in the field of planetary health in Germany, Ethiopia and Bhutan.

REFERENCES

1. Simon J, Parisi S, Wabnitz K, Simmenroth A, Schwienhorst-Stich EM. Ten characteristics of high-quality planetary health education-Results from a qualitative study with educators, students as educators and study deans at medical schools in Germany. Front Public Health. 2023 Apr 25;11:1143751. [PubMed | Full Text | DOI]
2. The Lancet Commission. Planetary health: a new science for exceptional action. Lancet. 2015 Nov 15;386: 1921-22. [PubMed | Full Text | DOI]
3. Romanello M, Di Napoli C, Drummond P, Green C, Kennard H, Lampard P, et al. The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels. Lancet. 2022 Nov 5;400(10363):1619-1654. [PubMed | Full Text | DOI]
4. Department of Environment and Climate Change, Ministry of Energy and Natural Resources. National Adaptation plan of Kingdom of Bhutan. Department of Environment and Climate Change, Royal Government of Bhutan. 2023. [Full Text]
5. Policy and Planning Division (PPD), Ministry of Health, Royal Government of Bhutan. Annual health Bulletin, 2022. Policy and Planning Division (PPD), Ministry of Health, Royal Government of Bhutan. [Full Text]
6. de Silva A, Varghese C, Amin R, Bhagwat S, Bruni A, Bunleusin S, et al. Non-communicable diseases in South-East Asia: journeying towards the SDG target. The Lancet regional health- South East Asia. 29th Oct, 2023. [Full Text | DOI]
7. How climate change affects health in Africa(2023). [Full Text]
8. Whitmee S, Haines A, Beyrer C, Boltz F, Capon AG, de Souza Dias BF, et al. Safeguarding human health in the anthropocene epoch: report of the Rockefeller foundation–lancet commission on planetary health. Lancet. (2015) 386:1973–2028. [PubMed | Full Text | DOI]
9. O'Callaghan-Gordo C, Moreno A, Bosque-Prous M, Castro-Sanchez E, Dadvand P, Guzmán CAF, et al. Responding to the need of postgraduate education for Planetary Health: Development of an online Master's Degree. Front Public Health. 2022 Oct 26;10:969065. [PubMed | Full Text | DOI]
10. Wabnitz KJ, Guzman V, Haldane V, Ante-Testard PA, Shan Y, Blom IM. Planetary health: young academics ask universities to act. Lancet Planet Health. 2020 Jul;4(7):e257-e258. doi: 10.1016/S2542-5196(20)30142-X. PMID: 32681890; PMCID: PMC7363431. [PubMed | Full Text | DOI]
11. Independent group of Scientist. Global Sustainable Development Report 2019: The Future is Now – Science for Achieving Sustainable Development. (2019). [Full Text]
12. Nobel Prize Summit-Our Planet, Our Future. NobelPrize. org. [Full Text]
13. Shaw E, Walpole S, McLean M, Alvarez-Nieto C, Barna S, Bazin K, et al. AMEE consensus statement: planetary health and education for sustainable healthcare. Med Teach. (2021) 43:272–86. [PubMed | Full Text | DOI]
14. Stone SB, Myers SS, Golden CD. Cross-cutting principles for planetary health education. Lancet Planet Health. (2018) 2:e192–3. [PubMed | Full Text | DOI]
15. Guzmán CAF, Aguirre AA, Astle B, Barros E, Bayles B, Chimbari M, et al. A framework to guide planetary health education. Lancet Planet Health. (2021) 5:e253–5. [PubMed | Full Text | DOI]
16. Walpole SC, Barna S, Richardson J, Rother HA. Sustainable healthcare education: integrating planetary health into clinical education. Lancet Planet Health. 2019 Jan;3(1):e6-e7. [PubMed | Full Text | DOI]
17. Chase H, Hampshire K, Tun S. Improving the medical curriculum on planetary health and sustainable healthcare. BMJ. 2022 Jan 25;376:o209. [PubMed | Full Text | DOI]