GLOBAL HEALTH IN FOCUS: TERMINOLOGICAL, DOMAIN–SPECIFIC AND EDUCATIONAL PERSPECTIVES

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Abstract. Global health (GH) has attracted a lot of interest of various stakeholders: healthcare and educational institutions, researchers, governments and policymakers. The domain engages traditional and new actors in a range of initiatives including research and development, training, program implementation, and policy development. Nevertheless, there is no universal understanding of GH basic concepts and agreement on the GH domain structure. The paper presents a review on various GH definitions and ideas on GH interdisciplinary and multidimensional domain. International experience of GH education by medical schools is analysed. The spectrum of suggested GH competences for GH practitioners is described.

Key words: global health, interdisciplinary domain, physicians, global health competences, multi-professional skills, cultural sensitivity.

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Introduction

The introduction of the term *Global Health* (GH) can be related to the popularization of the globalization ideas in various spheres of human life including health care and health education. Globalization has involved health tourism, healthcare workforce travel, oversees medical education, health information, health research and communication, etc. Cross-border "microbe travel" resulting in health risks, disease transfer and even the Covid-19 pandemic have become a unified reality and have to be addressed globally.

GH has gained a lot of interest of various stakeholders: healthcare and educational institutions, researchers, governments and policymakers, the domain engaging traditional and new actors in a range of initiatives including research and development, training, program implementation, and policy development.

A number of scientific publications and discussion papers addressing various GH issues, such as health services delivery, health economics, social determinants of health, equity in health, among others have increased as well. Numerous publications on GH issues reveal several broad areas of interest in the scientific community: GH research capacity building in the sphere of human resources development for effective research targeted at key priorities; GH governance and strengthening national health research systems; new strategies and action networks for disease control supported by academic organizations, international partnerships, and the WHO. Thus, there is an increased interest in the implementation of research bringing new strategies and interventions to practice [1].

GH transnational practices, particularly in the field of medicine, facilitate the emergence of new specialties and educational programs involving structured international experiences and skills (cultural sensitivity toward foreigners, awareness of social determinants of health, and readiness to provide care in the setting of limited resources) [2].

Thus, commonly seen as a sophisticated conceptual construct GH is mainly referred to as a field of practice and study, area of research, being interdisciplinary and multidimensional. These facts add to the importance of clear understanding of GH basic concepts and agreement on the GH domain structure for the purpose of practice, research and education as well as building relevant terminology for effective communication among stakeholders.

Global health interdisciplinary domain

GH has become commonly associated with many disciplines. It covers diseases with old history and new ones, embraces epidemiology, biomedicine, public health, economics, political science, philosophy, law, informatics, etc. Several aspects have been accentuated within the framework of the GH domain: the right to the highest standard of health care, health equity, social justice, health risks, and global burden of diseases, health systems, health diplomacy and others [3]. Thus, three topical clusters describing the content of GH were identified: (1) health and disease, (2) society and environment, (3) politics and healthcare systems [4].

Being specified as "broad, sprawling, undisciplined, irritable, fractious, chaotic, divided, competitive and sometimes maddening..." GH can be seen as a field of science and medicine [3]; the term GH being ubiquitous and covering "a large heterogeneous, and rapidly growing set of activities". GH unites individuals, groups and institutions concerned with medical, political, financial and scientific issues who come together for specific purposes of GH [5]. These common goals provide coherence to a heterogeneous GH subject area, "global burden of diseases" making the core of the GH domain with multiple links to the peripheral areas.

Global health definition

About 11 relevant definitions of the term GH have been suggested, which were presented in the publications that aim to provide a definition of the term. However, reflecting expert opinion GH definitions are largely inconsistent with one another and with the empirical publications in the field [6].

The GH concept has been defined in various ways, yet there is no common understanding of the term GH itself and related domain structure. There is a lot of confusion on how to measure GH progress: whether in survival, age (life extension), health, freedom, pleasure, productivity or some other qualities [3].

A commonly referred to GH definition by Koplan et al describes GH as "an area for study, research and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants and solutions; involves many disciplines within and beyond the health sciences and promotes inter-disciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care" [7]. The authors emphasize the need for a clear definition not just for the sake of semantics but for an effective collaboration between the actors (physicians, researchers, funders, the media, and general public) and for the sake of an agreement in achieving common goals, and acquiring necessary skills using resources. Koplan et al accentuate the interdisciplinary scope of GH due to the contribution of professionals from different spheres: clinical medicine, social and behavioural sciences, biomedical and environmental sciences, law economics history engineering, etc.

According to Kickbush's definition GH involves "those health issues that transcend national boundaries and governments and call for actions on the global forces that determine the health of people". It requires new forms of governance at national and international levels that seek to include a wide range of actors [8]. This definition sounds very broad lacking the need for collaboration and research.

Another proposed definition determines GH as "collaborative transnational research and action for promoting health for all". It is based on Koplan's definition and according to the authors' opinion "has the advantage of being shorter and sharper, emphasizes the critical need for collaboration, and is action orientated" [9].

There is widespread confusion and overlap among the terms GH, international health (IH) and public health PH. Several authors disagree on how to distinguish between the fields and use IH as a synonym for GH. Fried and her colleagues illustrate that "global health and public health are indistinguishable" [10]. Koplan et. al. differentiate GH from IH (which stresses more differences between countries than commonalities) and PH (which focuses mostly on issues that affect the health of the population of a particular community or country) [7].

There have been attempts to specify the word 'global' in GH as well. Koplan et al see 'global' as referring to any health problem common to many countries or affected by transnational determinants or solutions as well as to the scope of problems not their location [7].

Bozorgmehr proposes a dialectic approach to understand 'global' as holistic, supraterritorial and worldwide. The author suggests that considering 'global' in GH as 'worldwide' and 'transcending-national-boundaries' are misleading and produce redundancy with PH and IH. Instead, 'global' as 'supraterritorial' provides 'new' objects for research, education and practice while avoiding redundancy [11].

Some authors argue that 'global' in GH refers to the idea of supranationality. Instead, they consider GH presumes some universal health standard, GH referring to "a norm or vision for health with global ambitions. It implies a homogenization of a world view of health with someone in the role of Cosmoheroes (world viewer)" [12].

Another idea of 'global' in GH term is based on 'global' = meaning for a very large group of people in a very large geographic area or 'global' = focusing on medical and health issues with 'global impact' or 'global solutions' to a medical or health issue [13].

Thus, GH as a guiding principle, a branch of health sciences and a specialized discipline focuses on the medical and health issues with global impact or providing global solutions and requires a specialized discipline involving educational institutions, research and academic societies [13].

Global health in medical education

Numerous publications report an increasing interest of healthcare professionals and students in GH programs and initiatives. Professionals not only in health care but in basic sciences, law, and economics want to participate in GH activities [14]. They search for educational programs providing them with essential competences to work in a constantly changing, culturally diverse environment. Medical students recognize the benefits of GH topics in medical curriculum. By broadening clinical experience, practicing medicine with limited access to laboratory and instrumental diagnostic opportunities they become better clinicians [15]. GH experience during medical school develops better cultural understanding, motivates individuals for future international healthcare work, gives better understanding of socioeconomic influences on health and illness and improves foreign language proficiency [16].

GH demands for medical professionals have emerged as well. Physicians in developed countries are expected to provide various alternative and culturally determined medical practices with a better understanding of tropical diseases and emerging global infections [15,17]. The increase in travel and migration raises cross-cultural interactions. Thus, training physicians requires developing cross-cultural competence and sensitivity together with understanding the existing and newly emerging global diseases [15].

Though there is little agreement on the make up of proper GH training programs for medical students, one of the requirements of accreditation bodies is engaging medical schools in GH professionals training. All medical students are required to be well–informed about the effects of transnational and transdisciplinary factors and effective collaboration on the health and well-being of patients [18]. Educational institutions are expected to train medical professionals "to think globally and act locally to deliver appropriate healthcare and adapt to changing needs of communities and populations, irrespective of where they practice medicine – global health practitioner" [19].

Training GH involves identifying GH competences for students to develop. So far, there is no consensus on the knowledge and skills within GH education in medical schools. At the same time, three competency domains in GH undergraduate education have been proposed: global burden of diseases, traveller's medicine and immigrant health. The authors suggest including these three components into the medical curricula for medical students [20]. Several initiatives have been attempted to identify discipline–specific GH competences for medicine, PH, and nursing [20–23] which provided important guidance for the further elaboration of broader interprofessional GH competences [24]. A core GH curriculum have been developed for undergraduate studies including the following elements: human rights and global health; global burden of disease; healthcare delivery systems; social determinants of health; environment and health; policy, trade, politics, policies and health; collaborative efforts, and philanthropic organizations [19].

For postgraduate doctors five core competences have been suggested: diversity, human rights and ethics; environmental, social and economic determinants of health; global epidemiology; global health governance; and health systems and health professionals [25].

Yet, there is no common understanding on the GH term and content of GH courses and programs since medical schools have developed GH curricular independent of each other [21].

There is a great variation across medical schools in the type and amount of GH education: from no training to multiyear programs with didactic work and supervised field placements in low-income settings. Courses may be compulsory or elective with various numbers of years and topics to study [16].

Many medical schools offer courses or seminars on GH issues, some provide international rotations. A wide variety of programs offer a varied curriculum in international and local GH experiences. Numerous medical schools provide GH residency programs, Master's degree programs or fellowships [26]. Several GH programs provide different fieldwork projects, including epidemiological research, community health, and clinical electives [27]. There are online programs as well.

Some experts suggest including GH aspects in various subjects [28].

Suggestions have been made to introduce GH education at the undergraduate level with students' exposure to all aspects of globalization, organization of IH practices, and collaboration with international partners in the domestic setting or abroad [14].

Exposing students to the social determinants of health through interdisciplinary teaching a part of the humanities block has provided students with a positive experience [29]. In the context of globalization of health many spheres of medical education, service delivery and research recognize the relevance of social sciences in the system of healthcare. As a result many GH programs should be seen not as biological problems but biosocial ones with close attention to the social determinants of health and disease [30]].

However, many universities have not incorporated mandatory courses in GH or have not documented their experience. There is also a growing interest in health communication [31,32], especially when patients and caregivers do not share the same native language [33].

Working with a multilinguistic population or in a multicultural environment requires certain GH communication skills to address local and international health issues.

Several challenges have been outlined for pre– and post– graduate instruction and training on GH communication: simplifying the language and finding common terminology for communication with different communities using best practices from different international models; providing future and current practitioners with practical skills in health communication, media development, cross–cultural communication; introducing innovative methods in educational and training programs (role playing, interdisciplinary courses and training modules, media and activity labs), etc. [32].

Language and communication affect all stages related to health care access [34] and health care quality [35]. Language barriers which healthcare providers encounter are considered a serious problem and have been associated with poor health outcomes [36].

Conclusion

Thus, GH being not a new science is seen as an emerging field of practice and research. It offers real opportunities for the best collective healthcare practices, though without an agreed definition it may cause a lot of confusion in the establishing policies, collaboration among the stakeholders, and education.

Having emerged from traditional health sciences GH is a dynamic and innovative field of knowledge that can satisfy the needs of future healthcare providers. As an umbrella term GH incorporates various disciplines. It includes the unique features of GH (its core) and can also cover further aspects from other related fields (PH, IH, tropical medicine). Taking benefits from the flexibility and diversity of topics it requires an agreed domain structure and standardized terminology.

GH is steadily entering medical curriculum. GH professionalism goes beyond biomedical disciplines and involves developing multi-professional skills and competences. Developing a GH professional requires international collaboration to share experiences, define objectives and competences in GH education. Interdisciplinary modules supervised by the faculty from the department providing teaching in PH, humanities, languages, communication studies seems to be instrumental in developing essential non-biomedical skills of a newly trained GH physician.

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