### Health: Global

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#### **Abstract**

The term global health has come into common use within the past few decades, and an increasing number of institutions pursue the goal of improving health around the world. Despite its importance, global health remains a contested concept with a range of interpretations and implications. Most view the field through a biomedical and anthropocentric lens with the aim of promoting and facilitating modern health care for vulnerable and under-resourced people and communities within the framework of a Westphalian system of sovereign nation-states. Arguably, a more embracing ecocentric concept of global health is required to facilitate significant progress in improving health, understood more comprehensively, in a post-Westphalian world in which the lives, health, and future prospects of all are much more interconnected and interdependent in the context of limited resources on a threatened planet. The emergence of global health ethics as a distinct field of scholarship is encouraging.

## Keywords

Global health; International health; Anthropocentric; Biomedical; Ecocentric; Global health ethics; Threatened planet; Suffering; Burden of disease; Poverty

### Introduction

After discussing the origins of the term global health and some published definitions, the state of health around the word is synoptically described. Anthropocentric and biomedical notions of health are reviewed, and the suggestion made that progress in global health requires an ecocentric approach and extension of the bioethics discourse to include global health ethics as a newly developing concept. Societal influences on how global health is perceived and what strategies to adopt to improve global health lead to some suggestions for making progress.

# Origins of the Term "Global Health"

The term "global health" has emerged along a trajectory that began with interest in colonial medicine, later becoming tropical medicine and infectious diseases and subsequently international health. The HIV/AIDS pandemic, with its widespread health and security implications, amplified and promoted interest in international health endeavors. By the early twenty-first century, many who

\*Email: solomon.benatar@uct.ac.za \*Email: solly.benatar@utoronto.ca were involved in this field and who worked in departments, centers, or institutes of international health changed the terminology of their work and institutions to global health. While largely continuing with an agenda that may be more correctly conceived of as international health, there is much overlap between these terms and their frames of reference (Birn et al. 2009), and the field is dominated by scholars from the Global North (Crane 2010; Farmer et al. 2013; Merson et al. 2012).

The predominant focus of international health on biomedical care makes the assumption that when the health of many individuals is improved, the health of whole populations will also be advanced. The agenda has thus been structured around increasing humanitarian and philanthropic endeavors to bring modern medicine to vulnerable people and deprived communities. This notion is rooted in the Westphalian notion of independent sovereign states, and the presumption that advanced biomedical knowledge and skills from the wealthy nations should be altruistically and paternalistically brought to, and shared with, those who are still "developing." However, to improve the health of all globally requires imaginative new approaches, including a shift toward an ecocentric and cosmopolitan post-Westphalian view of the world that could enable efforts to address the many interdependencies that determine the state of health of whole populations.

### **Definitions**

To date, several contentious definitions of global health have been offered (see Battams and Matlin 2013):

- health issues that transcend national boundaries and governments and call for actions on the global forces that determine the health of people
- an area for study, research, and practice that places a priority on improving health and achieving health equity for all people worldwide
- collaborative international research and action for promoting health for all

These definitions all fit with an implicitly anthropocentric focus and have been articulated predominantly by scholars in the "Global North" to drive particular agendas.

A more embracing definition has recently been offered drawing on Winslow's definition of public health (Benatar and Upshur in Benatar and Brock 2011):

• the science and art of preventing disease, prolonging life and promoting physical and mental health through organized global efforts for the maintenance of a safe environment, the control of communicable disease, the education of individuals and whole populations in principles of personal hygiene and safe living habits, the organization of health care services for the early diagnosis, prevention and treatment of disease, and attention to the societal, cultural and economic determinants of health that could ensure a standard of living and education for all that is adequate for the achievement and maintenance of good health

Paraphrasing Richard Lewontin in his book *Biology as Ideology* allows a view of global health as:

• a social concept about which there is a great deal of misunderstanding, even among those who are part of it. Those who work on global health view the topic through a lens that has been moulded by their social experience.

### The State of Health Across the Globe

Measures of life expectancy at birth and morbidity and mortality from various diseases, together with such indices as DALYs and QUALYs, as so popularly portrayed in a multitude of World Health Organization Annual Reports, are the most common methods for measuring and quantitating the burden of disease.

Widening disparities in human health, described in detail elsewhere (Birn 2011; Labone and Schrecker 2011 in Benatar and Brock), are succinctly illustrated by the following ranges of measures across the world: life expectancy at birth from under 40 years in countries like Sierra Leone, Afghanistan, and Angola to over 80 years in Japan, Switzerland, and Australia, under 5 mortality from under 5:1,000 to 170:1,000 live births, maternal mortality from 1:7 in Somalia to 1:11,000 pregnancies in Canada, and annual per capita expenditure on health care from <\$20 in many poor countries to >\$8,000 in the USA (World Bank 2013). About one-third of all human deaths (18 million annually) are from poverty-related causes. 22,000 children die each day due to poverty – many quietly in some of the poorest villages on earth, far removed from the scrutiny and the conscience of the world. People of color, females, and the very young are heavily overrepresented among the global poor.

Approximately 790 million people in the developing world are still chronically undernourished, almost two-thirds of whom reside in Asia and the Pacific. About 27 % of all children in developing countries are estimated to be underweight or stunted, with most being in South Asia and sub-Saharan Africa. Those lacking in access to basic needs include 1.1 billion to safe water, 2.6 billion to basic sanitation, 2 billion to essential medicines, 924 million to adequate shelter, and 1.6 billion to electricity. Moreover, 774 million adults are illiterate and 218 million children are child laborers. All of the above are indicators of poverty and directly or indirectly aggravate poor health. About 50 % of all people in developing countries suffer at any given time from a health problem relating to water and sanitation deficits. Chronic diseases are also increasing globally, bringing new challenges to health systems in both rich and poor countries. Africa carries an especially high proportion of the global burden of infectious diseases and diseases of poverty. Of over 800,000 deaths globally from malaria each year, 91 % are in Africa and 85 % of such African deaths are in children under 5 years of age. Of 33 million people living with HIV in the world in 2007, 22 million were in Africa. Five million African children under the age of 5 die each year of preventable diseases. Of the estimated 536,000 annual maternal deaths globally, 99 % occur in developing countries, including Africa (Shah 2014).

The Global Burden of Disease Study (Murray et al. 2013) revealed several major shifts since 1990:

(1) The age distribution of populations has changed with many more living to older ages. (2) Infectious disease and childhood illnesses related to malnutrition that were the primary causes of death have been overtaken by more deaths from chronic, noncommunicable diseases (NCDs) such as heart disease and cancer. (3) The disease burden is increasingly defined not by premature death but by disability: musculoskeletal disorders, mental health conditions, back and neck pain, and injuries. (4) Obesity and high blood sugar are replacing a lack of food as leading risks.

The relevance of social conditions to health is well known from observations on the progressive decline in mortality rates from tuberculosis and other infectious diseases in the UK and the USA, consequent on improved living conditions, long before causative organisms were identified (Koch discovered the tubercle bacillus in 1882) or drug treatments became available (antituberculosis drugs were introduced in 1944).

Positive impacts of progress over the past century include vast economic growth, advances in technology, and the application of impressive and effective medical advances in practice. These advances have impacted most favorably on the lives of about one-third of the world's population but have also had many adverse accompaniments.

A striking feature is widening disparities in health and wealth as conventionally measured, with almost 50 % of all people in the world lacking access to even the most basic health care and living greatly deprived lives under conditions of severe poverty and environmental degradation in both rural and urban contexts. Others include the reemergence of old infectious diseases and appearance of many new ones (HIV, SARS, Asian H2N2 'flu, and Ebola being the most feared); multidrug resistance to infections that kill millions every year; war, ethnic and other conflict, and mass migration; and environmental degradation, climate change, and crises of food and water security (Benatar 2003).

The extent of suffering is even greater if we consider global health beyond the spectrum of medically defined states of health around the world to include the concept of *social suffering* for which we have so few metrics – for example, suffering that arises from rape, sodomy, genital mutilation, and other forms of violence; malnutrition; child labor; displacement refugeeism, homelessness, and persecution on political, gender, and religious grounds; and lack of availability of palliative care and medication for those enduring slow painful deaths.

Moreover, any illness is a potential threat to an individual's existence. As most people are incapable of differentiating a mild evanescent illness from life-threatening disease, all illnesses generate anxiety and the need for access to affordable, competent evaluation and care either to restore patients to their normal life trajectory or to optimize treatment for potentially disabling conditions. The existential threat of illness makes professional medical care a distinctly different need from access to other marketable commodities and generates a unique professional role for physicians and health-care workers. What illness and suffering mean to individuals and how it affects their lives in a holistic sense is neglected by modern medicine. Narratives of illness provide insights that medical descriptions ignore and entail a much more extensive notion of health and illness.

## **Anthropocentric and Biomedical Perspectives**

Within the Western world, health has come to be viewed through what is popularly labeled the biomedical perspective. This perspective is focused on the Enlightenment notion of the centrality of the individual and on the supremacy of science in advancing health. Revival of interest in primary health care and in the biopsychosocial perspective on health has most recently been articulated through the social determinants of disease perspective (Birn et al. 2009; Birn, in Benatar and Brock 2011).

Within the biomedical conception of health, the focus is on research, technological innovation, pharmaceuticals, and an evidence-based approach to implementation. The attractiveness of this perspective is that it has contributed greatly to advances in medical practice with very significant advantages to individual patients – for example, through chemotherapy, cardiac surgery, prosthetic joints, sophisticated radiological diagnostic methods, laparoscopic surgical treatments, and much more. The disadvantages are that these are costly, are often introduced before there is adequate evidence of their effectiveness, and, more importantly, are frequently overused and abused and hence contribute to the unsustainability of health-care systems. As a result, these advances are only accessible to a small proportion of people who could benefit, and their impact on the health of whole

populations is minimal. Indeed, excessive focus on high-cost technological advances can be counterproductive by deflecting attention away from less dramatic activities that could benefit many more.

This perspective is closely linked to an economic approach with medical care considered by many as a market commodity predominantly available to those with resources and within medical care systems to a considerable extent driven by the profit motive of investors who view health care as a business. For example, pharmaceutical companies are inclined to focus on the development of new blockbuster drugs attractive to the wealthy or medically insured, while neglecting the development drugs for diseases of poverty.

In those societies that have enjoyed continuous economic growth over many decades and achieved annual per capita GDPs of tens of thousands of dollars, the trajectory of their history and wealth status has largely fostered safe and congenial social conditions of life for their own citizens. In such countries, the focus on disease has thus largely moved away from the social and economic forces that promote health and prevent disease toward the increasingly available and highly successful, often costly, personalized medical and surgical treatments. Narrowly defined, the goals of medicine have been articulated as the relief of pain, the prevention of disability, and the postponement of death by the application of new knowledge to medical care of individual patients.

It is against this background that individualized health care has become more commercialized, bureaucratized, and dependent on expensive technology with associated inadequate attention to (and adverse effects on) public health and equity (Callahan and Wasunna 2006). For example, it is now more widely acknowledged that health care in the USA is neither a model for other countries nor sustainable for themselves. Expenditure on health care in the USA is approaching 20 % of the GPD, costs are enormously variable for similar services, many people remain with very inadequate access to health care, and the overall health status in the USA is well below that in many other wealthy countries that spend less on health care. Yet, many see generating resources to make modern medical treatments more widely accessible to more people as the solution to the lack of access to health care.

When the value system underpinning individualized health care is extrapolated to international health, the goal similarly becomes to increase access to whatever medical treatments are available. Solutions are seen in making drug therapy available to all who suffer from HIV/AIDS, malaria and tuberculosis, and other diseases. It must of course be acknowledged that the development and widespread availability of antiretroviral drugs has had a major impact on millions of lives.

However, the recognition that a narrow vertical focus on treating patients with HIV/AIDS eclipses the need for more comprehensive horizontal services and treatment of many other common diseases in countries like South Africa argues against the notion that the response to HIV/AIDS is a defining example of "global health." It is rather an example of the internationalization of a biomedical approach to one particular disease. The recent release of the *Diagnostic and Statistical Manual of Mental Disorders V* is another example of the biomedical approach to health with global imposition of (nonscientifically based) diagnostic criteria and treatments that pay no attention to cultural and social factors affecting mental health and its amelioration.

In essence the view of international health being advanced predominantly through innovations in technology or pharmaceuticals is embodied in the Institute of Medicine (IOM) report on America's commitment to what is euphemistically called "global" health. This report makes it clear at the outset that it does not address the causes of food security, clean water, sanitary measures or gender discrimination, and universal access to basic health care, all of which are essential for improved population health. The focus is on the American foreign aid for HIV/AIDS and other infectious diseases. So attention is drawn to those aspects of health that can be classified medically and treated with medications. It is regressive that this report fails to address the social determinants of health and disease when the WHO is just beginning to do so — many decades later than it should have done!

These are just some of the many examples of the medicalization of international and global health, associated with the commodification and commercialization of health care that is increasingly controlled by bureaucrats and excessively influenced by the technological imperative. Such developments do not reveal insight into how more technologies and drugs do not necessarily improve population health. Neither do they demonstrate the knowledge that global health is profoundly affected by how the global economy, international trade, arms deals, and the so-called international development aid are structured through power relations to maintain the wealth and health care (often wastefully provided) of those with resources, while extracting human and material resources from poor countries and contributing to the impoverishment of the lives of billions of people (Benatar in Gill 2011). The latter enjoy little health care beyond that provided philanthropically or by the governments of those countries whose "development" has been hampered by local and international exploitative forces.

Perpetuation of this commercialized medical view of "global" health while ignoring the powerful upstream forces that profoundly shape the health of the whole populations neither does justice to human intelligence nor reflects the so-called "vital interest in" and "commitment to" global health. A challenge to the US medical establishment not to neglect the local and global health challenges it could address has received little attention (Benatar and Fox 2005).

## **Ecocentric Perspective**

How we view the widely disparate states of health across the world and other major threats that have become clearly manifest in the past decade (climate change, environmental degradation, natural disasters, the global economic crisis, violent conflicts and crises in food, water and energy security, and most recently the Ebola crisis) is dependent on how we view ourselves, the world in which we live, and what kind of world we may wish for in the future. How we view global health will also significantly influence our understanding of the appropriate research agenda to pursue in the quest for improved global health.

Global health, appropriately understood, is a more complex ecocentric conception that includes the acknowledgment of the upstream social and societal determinants of health, the lack of geographic or social barriers to the spread of infectious diseases, and the importance of the interconnectedness of all forms of life and human well-being on a planet threatened by the exponential use of limited nonrenewable natural resources. Population growth in poor countries and a global political economy that encourages endless consumption are damaging to weak and poor nations and destructive of the environment (Gill 2011).

A broader way of thinking about global health would extend beyond humans to include concern about and our interactions with nature (animals, plants, and the ecological system) that sustains all life (Benatar D, in Benatar and Brock 2011, Friel et al. in Benatar and Brock 2011). Within this perspective, health care is viewed as a caring social institution, access to which, like education, is necessary for achieving the human potential (intellectual and physical) and health status required to be satisfied and productive members of society. Here, the emphasis is as much on prevention as on treatment. In relation to global health, this perspective requires an understanding of the impact of humanly constructed forces on health and disease and of the links between the global political economy and health (Labonte and Schrecker in Benatar and Brock 2011).

These questions and others related to the interdependency of health of all within an increasingly threatened global ecological framework have long remained beyond our horizons on health in an era

of high-technology medicine. It is also arguable that it is not possible to contemplate health and how it could be improved within this broadened perspective without insight into the global political economy – how it is structured and controlled, its ideological and cultural underpinnings – and what should and could be changed. However, it is gratifying that there has been a recent significant shift away from notions of health described predominantly in biomedical terms and primarily defined by biomedical causes toward the greater consideration of the broader determinants of health that are shaped through ideological forces into structural violence.

## International/Global Health ("Global Health") Policy

As there is considerable overlap between scholarly work on international health and global health at a time when the idea of a cosmopolitan post-Westphalian world has not yet been widely accepted, the term "global heath" is used here to embrace the thoughts of many scholars concerned with health all over the world. The significance of the discourse and action is that health is of great importance to enabling individuals to live more satisfying and productive lives and "global health" is important to markets, states, individuals, and international institutions, as well as to state security and both local and global economies. As a component of development, health remains at the cornerstone of questions of justice, of equality and rights, and indeed of the long-term survival of our species.

We can either view the state of disparities in "global health" as inevitable or consider them as humanly constructed. Which view we hold, or what balance between them we strike, will influence what action is considered to be necessary (Benatar 2003). Even if we view such disparities as humanly constructed and potentially remediable, the strategies that may be adopted could still vary considerably, and several potential explanatory metaphors for "global health" have been offered.

If "global health" is seen predominantly as an element of *foreign policy*, remedies will be driven by political motives with a view to pursing national strategic interests and economic growth. When viewed as a problem of security, the goal becomes to seek to protect local populations in wealthy nations against infectious diseases and bioterrorism from the third world. The WHO Global Health Security Agenda stimulated by the 2014 Ebola virus epidemic in West Africa is an example. "Global health" diplomacy, as part of foreign policy in international relations, is seen by some as having benign implications for "global health" funding and world peace, as having a new and less destructive role than military forces, and as of relevance to both the theory and practice of international relations. "Global health" as charity focuses on victims and addresses issues of poverty and disempowerment (from a philanthropic viewpoint), while the potential of global health as investment would focus attention on those whose improved health could maximize economic growth. The ideal of global health as public health would aim at decreasing the global burden of disease for all in a cosmopolitan world in which all are considered of equal moral worth, by focusing on those diseases that constitute the largest proportion of this burden. The even more ambitious idea of "global health" in terms of healthy people in a healthy planet requires an ecological understanding of the impact of our having moved as a species from dependency on nature for our survival to striving to control nature and in the process damaging its resilience to rectify the harms we have imposed.

# Taking Action on the Problem of "Global Health"

The first step is to admit that we live in a world undergoing entropy. This is evident in multiple overlapping and interconnected crises. The global economic system is collapsing on itself – massive

fraudulent financial losses have severely jeopardized the lives and health of billions. Medicine seems to have lost its way as a caring social function, with health care becoming increasingly focused on those who can pay, while diseases of poverty relentlessly undermine the lives of many. Global security is failing due to an outdated focus on weapons as means of protection and neglect of the potential of infectious diseases and of escalating social disruption to cause havoc with the security of us all. (The recent epidemic of Ebola in West Africa is an example of a "rescue" approach to health that neglects the upstream public health and political determinants of epidemic prevention and the means required to achieve long-term control). Finally, the quality of our ecological environment is rapidly eroding due to the continuing promotion of consumption patterns that are unsustainable. Within a few hundred years, humankind has moved from being vulnerable to the forces of nature, through learning to live with and control nature, to the present era in which our destruction of nature and animal species seriously threatens the lives and health of the future generations on our planet.

Exponential population growth and excessive consumption lie at the very core of all these global crises. We can no longer continue to live beyond the renewable resources of the planet, with the ever-increasing personal, national, and environmental debt (Di Muzio in Gill 2011). In a world in which money is abundant and we have so much knowledge and ingenuity that could be used to widely improve human flourishing, we are persisting with clearly failed ways of thinking. It is surely unlikely that there could be sufficient improvement in the health of whole populations globally without the development of more sustainable consumption patterns and more equitable distributive mechanisms.

For example, remedies for the inadequate biomedical perspective would entail incorporating the aspects of social justice and priority setting into a new framework for health-care services and to consider integrating questions into technology assessment that address the economic sustainability of new technologies. This would entail a critical analysis of technologies through methods like cost-effectiveness analysis and cost-benefit analysis to evaluate the extent to which new technologies improve the welfare of those most disadvantaged as a condition of recommendation for their introduction into routine use.

However, this is only a beginning and it is unlikely that sufficient progress can be made in the health of whole populations globally without some changes to how the global political economy operates and the development of more sustainable consumption patterns and distributive mechanisms. Increasingly, scholars are describing how over the ages "civilizations" have flourished and declined – not least because of human behavioral excesses of one kind or another. More recently, the specter of the collapse of Western civilization has been contemplated based on population growth and unsustainable consumption patterns (Oreskes and Conway 2013).

### **Ethical Considerations**

Bioethics focuses attention on the moral appraisal of actions affecting the lives of individuals and communities. It is a discourse devoted to reflection, argumentation, and deliberation about the goodness, fairness, and justice of human actions and interventions. It brings to bear concepts such as rights, duties, obligations, reciprocity, caring, and solidarity as important normative dimensions of any discussion of global health and has the potential to influence health policy.

Since the birth of modern bioethics in the 1960s, the world has changed profoundly, and there is an increasing understanding of how interconnected we all are. It is notable that in 1971 Van Rensselaer Potter (Potter 1971) was already using the term with a broad meaning that included ecological ethics, and he proposed "global ethics" as a discipline representing a link between

biology, ecology, medicine, and human values as essential for the survival of both human beings and other animal species. However, a more limited perspective on bioethics emerged and became dominant. This is largely focused on biomedicine, and a large and still expanding literature for many years eclipsed Potter's broader perspective. With the recrudescence of new infectious diseases, a new bioethics discourse subsequently emerged in the field of public health (Dawson and Verweij 2009). Almost in tandem, concerns about climate change, environmental degradation, and global economic crises, all with adverse effects on global health, have led to an even broader discourse on global health ethics (Benatar and Brock 2011). Lowry has contributed arguments about "political" and "humanitarian" approaches to global health ethics that could enable us to deal rationally with threats to global health as systemic challenges (Lowry 2009).

Serious reflection on ethical concerns about global health and extension of the discourse on ethics and human rights toward a more comprehensive approach requires the realization that health, human rights, economic opportunities, good governance, peace, and development are all intimately linked within a complex interdependent world (Gill 2011; Benatar 2013). The challenges we face in the twenty-first century are to explore these links, to understand the associated power relationship implications, and to develop political processes that could harness economic growth to human development, to narrow global disparities in health, and to promote peaceful coexistence (Benatar and Brock 2011; Gill 2011).

### **Conclusions**

A new understanding is needed of what could be considered reasonable and sustainable entitlements for all. Genuine interest in global health in its broadest and most ambitious perspective would extend to understanding our relationship with nature. This entails developing a long-term view of human flourishing within a mind-set that reflects insight into the need to pursue the complex goal of developing sustainability, in place of the worn-out and failing agenda for sustainable development focused only on economic growth.

Unless we can face up to the reality of the future and what is required to intelligently deal with this, we are doomed to perpetuate unworkable old solutions for new problems, which we have the potential ability to address constructively. The future is not what it used to be! Achieving the goal of using resources fairly, with universal access, minimal wastage, and optimal health benefits for individuals and their communities as well as across the world (doing better with less) is a long-term local and global societal project that should be faced with courage, wisdom, and solidarity.

#### **Cross-References**

- ► Bioethics and Politics
- ▶ Bioethics: Global
- **▶** Biopolitics
- ► Climate Change and Health
- ► Communitarian Bioethics
- **▶** Compassion
- **►** Complicity
- ► Environmental Ethics
- **►** Exploitation

- ▶ Justice: Global
- ▶ Population Ethics
- ▶ Public Health
- **▶** Solidarity
- **▶** Sustainability

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### **Further Readings**

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