Global health: concept and principles.

Introduction

This paper explores the concept of global health in context of the rising frequency of the term’s use. It reviews the definitions of global health from the academic community, international organizations, and countries and regions of the world. Further, it analyzes the different notions of global health in the proposed academic definitions and in the usage of the term by private and public actors. It then identifies common ground and principles that should apply to collective action on global health, but are not always consistently included in discussions, let alone fulfilled. These three principles are health for all (for all people worldwide) by all (by a representative range of stakeholders and actors) and in all (multi-sectorial efforts to increase health, with special attention to social determinants on health). No single actor – private or public – can fully meet these three principles, but collective action should aim at progressing towards them.

Methods

Frequencies of the use of the terms global health and international health in English, French, Spanish, Chinese and Russian, and use of related terms in English, are examined through Google Labs Ngram Viewer in books over time. The Ngram viewer searches for terms in 5.2 million books, that is, 4% of all books ever published. It quantifies the frequency of a term in a specific corpus [e.g. books written in English] per year as a percentage of all terms with the same number of words or punctuation in the corpus in that year (Michel, 2011). Thus, frequencies of terms can only be meaningfully compared to each other when they contain the same number of words or punctuation; otherwise, they can most usefully be compared to their own frequencies over time. The frequency is the total number of times the term is used, not the total number of books in which it is used. The search is case specific; to standardize, only lower-case terms are used. To supplement the numerical trends that Ngram presents, the etymology of the terms global and international are examined, expert definitions of global health and international health are analyzed for common themes and differences, and global health policies are assessed for presence of common themes.

Results

Trends in the use of the term global health

The use of the term global health has increased exponentially over the last decades. Figure 1 compares the frequency of the terms global health and international health in published books, using Google Labs Ngram Viewer tool data.

While the Ngram tool’s search is limited to published books, the large sample size allows for some assessment of trends in use of words and phrases. The figure shows cycles of frequency in the use of the term international health, with peaks in the 1940s and 50s as the United Nations came into

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1 Karen Grepin’s Global Health Blog includes a January 2011 post titled The rise of global health: global health vs. international health, with a Google Ngram figure of the same terms.
being, and the seventies and nineties. It also highlights the exponential use of global health, which overtook the use of international health during the last decade.

In French and Spanish, more than two translations of global and international health exist. French includes three common terms: santé internationale, (international health) santé globale, (global health) and santé mondiale (health, pertaining to the world). The Spanish is analogous: salud internacional, salud global, salud mundial. Google Ngram shows similar and increasing frequency for santé internationale / salud internacional and santé mondiale / salud mundial, and far greater, exponential growth for the santé globale / salud global. This paper will not discuss the distinction between these terms in French and Spanish, and there are surely different nuances between the terms in each language. However, it is interesting to note that the increase in the term “global health” is not only an Anglophone phenomenon.

The term “global health” is not as common in other United Nations (UN) languages such as Chinese and Russian. Although there has been a slight increase in its usage over the last decade, it is not replacing the term “international health.” Arabic, also a UN language, is not cataloged by Google Books Ngram Viewer.

Comparisons with the use of related terms

Analysis of related terms shows that health is not the only word to ‘go global’ (see Figure 4), and reveals a supportive environment for increased use of the term global health.

Use of the term global public goods has far surpassed use of international public goods, showing an emphasis on the supra-national nature of public goods (goods that are available to all, and are not significantly diminished by individual consumption). Similarly, global knowledge has become more frequently used than international knowledge.

Use of the term MDGs – Millennium Development Goals – has increased in parallel with that of global health during the last decade, consistent with the creation of the MDG agenda and its rise to prominence during this time period. Several MDGs focus on health and the conditions needed to create healthy populations worldwide, with the 8th MDG centered around global partnership. During this time period, use of the term development aid decreased slightly.

Globalization has become more frequently used while the frequency of the term international relations has decreased. This trend seems to reflect a far more interrelated and interdependent world, with a larger scope of actors and factors influencing the lives of people around the globe, beyond the previously more predominant role of nations and the relations (“international”) between national governments.

Taken from published books rather than conversation or articles, these trends also show an increase in explicit and formal discussion of this interconnectedness. For example, the analysis of the

2 Terms used for Russian: global health - глобального здравоохранения, international health - международные медико-санитарные Chinese: global health – 全球卫生 international health - 国际卫生.
challenges of global health by the World Health Organization’s (WHO) Commission on Social Determinants of Health concluded with recommendations that depend on deep changes in the functioning of the global economy (CSDH 2008).

Landscape of definitions and understandings of global health

As the term global health has become more frequently used, experts have attempted to differentiate it from international health. Besides the academic value, this process of definition and differentiation has implications for the prioritization of global health issues and funding, as well as the legitimation of and coordination among global health actors.

Before turning to these expert definitions of global health, it is important to examine the layperson’s definition of the word global. This everyday understanding provides a context that influences more technical, formal uses of the term global health.

Etymology

The term global dates from the 1600s, stemming from the Latin *globus*, “round mass, sphere, ball,” and meaning spherical in form (Klein 1971). Over time, the adjective became associated with the earth, and emphasized connectivity. The term “global village” was first used in the 1960s to describe how the world was being metaphorically contracted into a village by electric technology and the instantaneous movement of information (Carpenter & McLuhan 1960).

According to the Oxford dictionary, the adjective “global” has two meanings: having to do with the “whole world,” or “relating to or encompassing the whole of anything or any group of things, categories, etc.; comprehensive, universal, total, overall.” International, in contrast, is defined as “existing, constituted, or carried on between different nations.”

According to WHO, health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (1946). When applied to health, the term “global,” could relate to the health of the world’s population as a whole (health for all), to the involvement of the wide scope of actors related to health (health by all), and to a holistic concept of health dimensions and determinants, which requires a multi-sectorial approach (health in all).

These three “global” principles - health for all peoples, health by all actors, and health in all policies - relate to milestone global agreements on the goal and the principles or strategies required for health. They have recently been restated in the principles of the renewed Alma-Ata strategy of Primary Health Care by the World Health Report of 2009 and its related resolution at the World Health Assembly.

Expert definitions

In April 2005, the North American-based International Health Medical Education Consortium changed its name to Global Health Education Consortium (GHEC). The GHEC defines global health as “health issues and concerns that transcend national borders”, and that “require a collective (partnership-based) action”. It defines international health as “health practices, policies and systems in countries other than one's own” and states that international health stresses the differences
between countries more than the commonalities, and focuses more on bilateral foreign aid activities than on collective action.

In 2006, Brown et al analyzed the relation of the terms international and global health as reflecting a political and historical process. They use WHO as a case example, arguing that the organization found its dominant role challenged in international health, and began to reposition itself within a shifting set of power alliances, from leader to coordinator, facilitator, technical adviser or even mere observer of more powerful global health initiatives between many partners. The term “global” is more inclusive of partners beyond nations and multi-national organizations.

Stuckler and McKee (2008) emphasize the multidimensionality of global health. They argue that the global health can be understood through five metaphors, each with profoundly different implications for the field’s way forward – global health as: foreign policy, security, charity, investment, and public health.

Koplan et al (2009), representing the US Consortium of Universities on Global Health, also differentiate concepts attributed to global health: a notion - the current state of health in the world; an objective - a world of healthy people; and a mix of scholarship, research, and practice. They note that this mix involves complex and evolving questions, issues, skills, and competencies, given the complex relations between health and any global health determinant. Similar understandings are expressed by an increasing number of academic institutions within Europe (Haines 2011).

Some (Bozorgmehr 2010) have argued that attempted definitions of global health lack enough differentiation from international health. Definitions of global health often differ from one another, and single definitions may contain multiple meanings of the term.

Despite this variation, expert definitions of global health often share common themes, and highlight connotations that correspond with the dictionary definition of “global”: a wide range of actors, and a broad view of health and its determinants, posing new and emerging opportunities and threats to the health of all peoples.

Usage of the term global health by actors in health programs, policies and agendas

Private and Public-Private initiatives

Since the new millennium, the adjective “global” has been used widely by private sector–related health initiatives. However, many of these private “global” initiatives have focused on only some health problems (Global Fund to Fight AIDS, Tuberculosis and Malaria since 2002), some interventions (Global Alliance on Vaccines and Immunization since 2000) or some population groups (Global strategy on Women and Children’s Health since 2010), therefore restricting the dimension of "for all". While these initiatives have brought forward new approaches to partnerships between public and private and developed and developing countries' contributions, they often over-represent the interests of the institutions according to their economic and political capacities, and do not always reflect a democratic representation of the people they intend to support. The term has also been used by major philanthropists that have a progressive influence in global health aid, architecture and governance, such as the Bill and Melinda Gates Foundation, which has had a Global Health program since 2006.
International organizations

The Economic and Social Council of the United Nations (ECOSOC) addressed global public health in its 2009 Ministerial Declaration and outlined the main emerging factors influencing global public health (notably the financial crisis, food security crises and climate change) but did not attempt to define it. Indeed, in most UN references to global health – including several resolutions of the World Health Assembly in the last years – the term remains undefined, and simply related to some of the factors influencing/improving “it.”

The term started to be more commonly referenced among UN-related organizations after 2006, when the WHO 11th General Program of Work defined a “global health agenda” and described the “role of WHO in global health”. The ongoing global health agenda focuses on investing in health to reduce poverty; building individual and global health security; promoting universal coverage, gender equality, and health-related human rights; tackling the determinants of health; strengthening health systems and equitable access; harnessing knowledge, science and technology; and strengthening governance, leadership and accountability. After 2006, the terms “global health partners”, “global health community” and “global health partnerships” have been consistently mentioned in the annual resolutions of the World Health Assembly. While the global health agenda aims at a "health-in-all" approach, the democratic governance ("by all") of this agenda in action is challenged by the current aid architecture and the bias of economic influences described in the previous section. Likewise, the combination of national interest-based foreign policy links to development aid, and the agendas of the progressively more influential philanthropic groups, result in a biased support to some specific diseases or countries, hence undermining the "for all" principle.

Specific definitions of global health are often linked to initiatives stemming from its various dimensions, such as global health governance (WHO 2011a), global health security (Global Health Security Initiative 2011) or global health diplomacy (WHO 2011b, Kickbush 2011) and the UN resolution on global health and foreign policy (UN General Assembly 2010). This differentiation corresponds to Stuckler and McKee’s discussion of metaphors describing global health.

National and regional organizations

The following countries and international entities have developed policies on global health: Switzerland, United Kingdom, the European Union (EU), the US and Japan. While they do not claim to define global health, the policies discuss common principles of the globalized and multi-sectorial influence on health, and are aimed at improving both the health of their citizens and of those in the wider world. They focus on the specific shaded areas summarized in the table below and clustered around three dimensions of global health referred to previously: equity and health for all, governance and health by all and coherence and health in all international relations. The table also highlights in *italics* the strategies’ perceived added value or interest in cases where such a value has been specifically recognized, and in **bold** where a specific budget has been programmed. White boxes indicate a lack of explicit discussion about the global health area within the policy.
Discussion

Limitations of analysis

There are several limitations of the Ngram tool, which searches among a selection of 4% of all books published. This analysis method has several potential shortcomings (Michel 2010). To highlight a few: it is reasonable to assume a time lag between spoken use of a phrase and its publication in a book. The sample is biased based on whether books are acquired by libraries, from which Google scans them. Levels of use of a term in books may differ from levels of use in spoken conversation, unpublished resolutions and policies, journal articles and news media. The creators of Ngram viewer also state that relative frequencies after 2000, when Google Books was started, are influenced by the Google books project themselves. However, the cases examined in this paper exhibit such striking differences that the results are still notable. Finally, a change in relative frequency over time does not show causation by a specific factor.

The shift from international to global health

Since the mid-nineties, the term “global health” has gradually entered debates and statements on health worldwide, together with an increase in use of the globalization and other related terms. Behind shifts in vocabulary, there are corresponding shifts in underlying concepts and connotations. Although the term “international health” is still sometimes used interchangeably with “global health”, it is progressively being more specifically related to the health matters that principally involve the dialogue, agreement and actions of national governments. In most arenas of global health, the field has moved far beyond the paradigm of rich countries helping poor countries, or groups of countries interacting.

According to the above analysis, the term global health reflects notions of:

• The state of health in the world’s human population;
• Health’s complex and bidirectional relations with global factors whose influence extends beyond national boundaries;
• A growing scope of actors beyond the official institutions and governments traditionally dominating the dynamics of ”international health”.

Globalization and health

The components of the above definition are, in part, a reflection of our current state of increased globalization and interconnectivity. The complex global landscape that influences the health of all is as rich as it is chaotic; it has strengths and weaknesses, opportunities and threats. The increasing flow and speed of the dynamics of the factors that influence health (communication, knowledge, biological and chemical health threats, health-related goods, patients and health workers, social determinants of health) translate into both potential risks to undermine our health and new capacities to enhance it (Communication of EU 2010).

The globalized economy influences socio-economic disparities, which influence the health of all as much or even more than the efforts of health systems. The main non-state actors in the “globalized health economy” have possibly already surpassed, in most contexts, the capacity of institutions and governments to influence the health of their citizens or of those of other countries through development cooperation policies and aid. In relation to the speed of financial transactions, income disparities in the world have grown during the last two decades and correlate with national health
inequities, requiring a wider-than-health approach that targets social determinants (Commission on Social Determinants of Health 2008).

We live in a much more complex and interrelated world due to the social, economic, and cultural facets of globalization. Emerging economies in BRICS countries (Brazil, Russia, India, China and South Africa) have a powerful role, and 67% of the world’s poor are in middle-income countries (The Economist 2010). These facts show that the traditional international health paradigm of a rich country helping a poor country does not adequately address the complex determinants of health in the world today.

Moreover, the fragile relations between humankind and its natural environment pose additional collective challenges. In only a limited way has the use of the term global health included the inter-connectedness of human health with our planet Earth’s health. Yet the Earth’s health is key to the sustainability of our desired improved health (Agenda 21, Rio Declaration on Environment and Development 1992).

Unclear boundaries and multiple usages

There are a variety of understandings of the term “global” as applied to policies and actions claiming an effect in global health. Private actors, often in partnership with public institutions, are often focused on (or biased towards) some diseases or populations (not "for all"), specific health system approaches often only focused on the target disease and its interventions (not "in all"), and based on governance structures that have leveraged a wide set of actors towards global results but where representation is biased by the weigh of the economic capacities and contributions (limited "by all"). The growing influence of focused approaches by private and public actors also determines the policy-in-action of international organizations and especially the role of WHO in global governance for health. However, this distortion is recognized by WHO and will hopefully be addressed through the ongoing reform process. Global health policies in the countries or that have adopted one also offer different approaches and attention to the "global" dimensions of health. The US and Japan equate global health with support to the health needs of those most neglected in developing countries. They link it with their development aid and concrete, attributable budgets and results. The UK, Switzerland and the European Union focus on the wider range of policies and actors influencing the health of all, both their national citizens and the rest of the world, but remain vague on health aid budgets toward that aim.

In view of this variety of understandings and actions in the name of "global health", perhaps some of the popularity of the term global health is due to its wide applicability: many feel comfortable with its use and only accountable to their own interpretation. In some contexts global health seems to be more a “brand name” than a robust concept – a politically expedient term to denote any program dealing with health outside of one’s own country, while appealing to an ideal of broad reach and holistic focus. Yet despite this variation in – and perhaps even co-optation of – the term, strong themes emerge in understandings of global health.
Common grounds, yet neglected principles

The world’s shared health objective was defined in 1945 in the constitution of WHO, which now has been signed onto by all member states of the United Nations. It aims at the attainment by all peoples of the highest possible level of health.

As analyzed above, several of the policies and initiatives championing the concept of global health do not comply with the essence of the world’s shared health objective. While each global actor on its own cannot – and probably should not – aspire to ameliorate all three global dimensions of health, collective action, under strong leadership and governance, should progress towards them. Individual actors should also strive to help, not hinder these principles on a global scale.

At present, as detailed below, the collective action is not clearly progressing in the mentioned principles and no clear targets or indicators have been agreed regarding mainstream efforts and progress towards the common goal of attainment by all peoples of the highest possible level of health.

Health for all

1945 marked the creation of the World Health Organization’s constitutional objective: the attainment by all peoples of the highest possible level of health. While the understandings of health may have cultural connotations and the measurements of the quality of health may be subject to interpretations, life expectancy is a horizon that most persons and communities wish to see extended as long as possible.

This change has been made Increased flow and speed of the dynamics of the factors that influence health (communication, knowledge, biological and chemical health threats, health-related goods, patients and health workers, social determinants of health) translate into both potential risks that undermine our health and provide new capacities to enhance it (6).

Common ground, yet neglected

What has been less measured is how that best (ideally healthy) life expectancy applies to all: how the gaps in the world are narrowed, or how we progress in improved global health equity. In developed countries, some analysis indicates that health gaps within countries have widened in correlation with growing income disparities (Wilkinson and Pickett 2009). At global level, between countries and income regions of the world, there has been little, if any, advancement on global health equity in the last 20 years (J Garay in press). The Commission on Social Determinants for Health has recommended further research into ways to measure global inequity so as to enable regular monitoring of progress (2008).

Health by all

In 1978, the Declaration of Alma-Ata emphasized the crucial role of community participation in improved health (Article V). The dimension of health by all requires a democratic and empowered (informed and enabled) participation of the representativeness of the people, their most health-affected groups and the main actors involved in health policies and actions. It should include an
open, inclusive and transparent process including situation analysis, priority setting, decision-making, budgeting, and implementation and monitoring of policies and actions. This principle has influenced many national policies to respect and promote an inclusive approach. However, health factors are progressively influenced by the wide scope of the market-related, free-communication factors and private actors of the “globalized health economy”. They pursue their profit and/or philanthropic objectives, with a potential of harnessing greater energies but the risk of inequity on the one hand and arbitrary, restrictive choices on the other.

The ongoing reform process of WHO is an example of this challenge. Private and public-private initiatives have influenced WHO’s role in global governance for health; the organization suffers from a very low share of core or flexible funding (as compared with funding earmarked according to priorities by donors) to carry out the democratic mandate ("by all") of the World Health Assembly (WHO Director General 2011). WHO, while recognizing the distorting effects of earmarked support, funds its very reform process through the Bill and Melinda Gates Foundation (WHO 2011c).

An index of the degree of inclusiveness (scope of stakeholders), representation (their democratic representation of society) and scope of participation (throughout the health policy/program/project cycle), would enable the measurement of this axis of global health.

Health in all

The health of individuals and populations is dependent on a host of environmental, economic, social, and political factors. The dimension of health in all requires impact assessments for relevant policies as proposed by the Ottawa Charter for health promotion. At the national level, many health strategies have involved other relevant sector policies and introduced health impact assessments of relevant actions potentially influencing health conditions and/or outcomes. At global level, there is recognition by ECOSOC (2009) and by many resolutions of the World Health Assembly of the need to relate health actions and relations with other international and trans-territorial policies, agreements and dynamics. For example, the effects of health aid may, in some cases, be neutralized by trade or migration agreements that limit the access to essential medicines (Westerhaus 2006) or the availability of health professionals (Kirigia 2006). As at national level, those potential effects require health impact assessments, seldom done in the current global relations. A composite index measuring the coherence across relevant international policies and agreements towards improved health, the most pertinent policies would facilitate the assessment of this dimension.

In order to galvanize efforts towards the shared goal of attainment by all peoples of the highest possible level of health, collective action should be better harmonized around the three principles of global health hereby proposed: health for all, health by all and health in all. The Commission on Social Determinants for Health has already recommended the definition of goals and indicators to measure and progress towards global health equity. Such need also applies to the dimensions of participation towards health by all, and to coherence across global policies towards health in all. In the current complex landscape of global health, a renewed and strong leadership by WHO is required for this aim.
Conclusion

Health dynamics worldwide are complex and, with increased globalization, ever more linked to a variety of factors and actors around the globe. The term “global health” has replaced much of the conceptual space earlier referred to as international health, while adding new focus. While the definitions of global health relate to the widening scope of influences on global health, the usage of the term varies across actors. There is common ground, through international agreements, in the objective of improved health of all peoples and in the principles that should inform policies and actions towards it. These can be summarized as health for all people, through health by all actors, and health in all policies. While some of these principles have inspired national strategies and have proven effective for better health (World Health Organization 2011d), collective action is not yet progressing towards improved global health by using these principles.

These principles are not yet fine-grained enough to guide prioritization of money and interventions – a huge challenge, and an important one given that resources are always finite. However, the principles will hopefully serve as the basis for a more concrete approach to measuring progress towards global health. The vectors driving progress towards these principles – equity towards health for all, participation towards health by all and coherence in policies towards health in all – require agreed targets and measurable indicators. Renewed and strong governance for global health is required to galvanize a diverse set of actors towards the common goal.
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Figure 1: Use of global health vs. international health in a sample of published books
Figure 2: Use of global health vs. international health in French
Figure 3: Use of global health vs. international health in Spanish
Figure 4: Use of related terms

- Use of term, (as % of all "same-n Ngrams" for that year)
- Use of term, (as % of all "same-n Ngrams" for that year)