

THE GENEVA CHALLENGE 2019

The Advancing Development Goals International Contest for Master Students

“The Challenges of Global Health”

Last year, 336 teams made of 1'284 graduate students from 101 different nationalities, registered to take part in the Geneva Challenge 2018. Building on this success, the Graduate Institute continues to encourage interdisciplinary problem solving analysis among Master students from all over the world. Thanks to the vision and support of Ambassador Jenö Staehelin, a long-standing partner and friend of the Graduate Institute, we are proud to launch

the sixth edition of The Geneva Challenge – Advancing Development Goals Contest, which in 2019 proposes discussions on “The Challenges of Global Health”.

The Shanghai Declaration emphasized that health and well-being are essential to achieve sustainable development.¹ While significant advances have been made in reducing child mortality, improving maternal health or fighting HIV for instance (WHO, 2018), many more efforts are needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues.² According to the United Nations Development Programme, 6 million children still die before their fifth birthday every year and 16,000 children die each day from preventable diseases such as measles and tuberculosis.³ A joint report from the World Health Organisation (WHO) and the World Bank (2017) stresses that “at least half of the world’s population do not have full coverage of essential services”.

“Ensuring healthy lives and promoting the well-being at all ages” is core to goal number 3 of the Sustainable Development Goals. A significant commitment has been made to end the epidemics of AIDS, tuberculosis, malaria and other communicable diseases by 2030.⁴ In order to achieve universal health coverage, and to provide access to safe and affordable medicines and vaccines for all, it is timely to have call for innovative and cross-cutting proposals for mechanisms such as prevention and treatment, education, immunization campaigns, sexual and reproductive healthcare.

As pointed out by the WHO, “[m]aintaining the momentum towards the SDGs is only possible if countries have the political will and the capacity to prioritize regular, timely and reliable data collection to guide policy decisions and public health interventions” (WHO, 2018: v). Indeed, the challenge today is to establish fruitful synergies between the public, non-profit and business sectors in order to meet the set goals and to ensure a broad and continued societal and political support.

¹ WHO Regional Office for Europe, *Facing the future: opportunities and challenges for 21st-century public health in implementing the Sustainable Development Goals and the Health 2020 policy framework*, http://www.euro.who.int/data/assets/pdf_file/0003/374052/180278-public-health-future-eng.pdf?ua=1

² Sustainable Development Knowledge Platform of the United Nations, “Goal 3: Ensure healthy lives and promote well-being for all at all ages”, <https://www.un.org/sustainabledevelopment/health/>

³ UNDP, “Goal 3: Good health and well-being”, <http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-3-good-health-and-well-being.html>

⁴ UNDP, “Goal 3: Good health and well-being”, <http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-3-good-health-and-well-being.html>

Highlighted below are some issues and challenges related to health.

Health Resources, Infrastructures and Delivery

- Availability and access to basic healthcare services such as the human resources and the supplies in drugs and medical equipment remain a major challenge in many developing countries. As stressed in the Sustainable Development Goals Report 2018, “[a]vailable data from 2005 to 2016 indicate that close to 45 per cent of all countries and 90 per cent of least developed countries (LDCs) have less than one physician per 1,000 people, and over 60 per cent have fewer than three nurses or midwives per 1,000 people”.
- The lack of safe water, sanitation and hygiene services, particularly in rural areas, is the major contributor to infectious diseases such as diarrhoea and cholera, and to global mortality. Good hygiene is one of the simplest and most effective ways to prevent the spread of disease. However, the absence of these basic needs resulted to “about 870,000 deaths in 2016”.⁵ According to a report by WHO and UNICEF (2017), “[s]ome 3 in 10 people worldwide, or 2.1 billion, lack access to safe, readily available water at home, and 6 in 10, or 4.5 billion, lack safely managed sanitation”.
- Effective healthcare delivery remains a challenge in many developing countries. Complementary distribution channels (e.g., micro entrepreneurs, micro clinics, micro pharmacies, mobile distribution of supplies and services, and hospitals) may be needed to reach consumers for the provision of basic health supplies and care, especially those who live in rural and remote areas (Epstein and Bing, 2011).
- The effectiveness of government public good provision affects the health levels in a society, mainly in developing countries (Dupas and Miguel, 2016: 3). The WHO (2017: 16) states that “[h]ealth planning, policy and provision must be shaped by the principles of participation, equality, non-discrimination and accountability as well as by the principles of availability, accessibility, acceptability and quality of health facilities and services”.

Healthcare Information

- Access to reliable health information is a key component for improving health.⁶ Thanks to antiretroviral therapy, we have witnessed a decline of 48% in HIV-related deaths these last years. However, this therapy “only reached 53% of people living with HIV at the end of 2016” and there is therefore an urgent call to action in order to “increase treatment coverage, along with other interventions along the continuum of services, including prevention, diagnosis and chronic care” (WHO, 2018: 5). Many other examples can be raised to stress that millions of people suffer and die from conditions for which there exist effective interventions but a lack of information access.
- Reliable health information exchange (HIE) between stakeholders is also fundamental to put in place efficient health infrastructures and strong monitoring and accountability systems. While encouraging implementation results are seen in developing countries, low- and middle-income countries struggle due to scarce resources and limited capacities. Lack of information hinders the delivery of

⁵ Sustainable Development Goals Platform, *Progress of Goal 3 in 2017*, <https://sustainabledevelopment.un.org/sdg3>

⁶ PLoS Med, 2013, *Focusing the Spotlight on Lack of Access to Health Information*, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3640082/#pmed.1001438-NHS1>

healthcare and “prevents adequate planning of services and targeting in areas of greatest need and also affects the ability to attract funding” as there are no clear key indicators in place (Akhtlaq et al., 2016). Crucial challenges in measurement and surveillance need to be addressed, estimating the total numbers of people affected is crucial to establish the true size of populations in need and to monitor intervention coverage and effectiveness.

- Thus, effective health promotion strategies and information campaigns are key to save lives⁷ as they promote: “(1) health literacy and empower people across sectors and settings; (2) an inclusive model of governance by involving people and different sectors in decision-making; (3) healthy public policies and environments; and (4) a strong health promotion infrastructure and cross-disciplinary approaches” (WPRO, 2017). Also, these strategies need to take into account the cultural and social context in which they are implemented.

Health Equity

- Low- and middle-income countries face strong disparities in access to health services. The main barriers are the lack of information and of financial resources (Peters et al., 2008). Poverty puts people in a vicious cycle of deprivation as “poverty breeds ill-health, ill-health maintains poverty” (Wagstaff, 2002: 97). According to the WHO and the World Bank (2017), health expenses are for almost 100 million people “high enough to push them into extreme poverty, forcing them to survive on just \$1.90 or less a day”. The target 3.8 of goal 3 focuses precisely on “achieving universal health coverage (UHC), including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all” (World Bank. 2017). As stressed by the UN Secretary General: “Through stronger, resilient health systems that are people-centred and human-rights based, the quality of services and access to those services will be improved across the board”⁸. Nevertheless, there is still a long way to go to achieve UHC.⁹
- In the view of the WHO (2017b: 7), “[o]nly committed leadership with accountability will produce sustained abandonment of harmful practices, inspire others to act in support of human rights to health and through health, guide systematically the needed human rights-based approaches to the design, implementation and evaluation of policies and programmes affecting health, and implement the necessary legal provisions”.

Health and Demographic Changes

- Countries around the world are experiencing an ageing of their populations, which will have a profound implications on our societies. According to the WHO (2018), “[g]lobally, the total number of people over 60 is set to double by 2050, rising from 1 billion to 2 billion, with 80% living in low- and middle-income countries”. Furthermore, the burden of chronic diseases, like cancer and diabetes, as well as of

⁷ WHO, *Health Promotion*, <https://www.who.int/healthpromotion/conferences/9gchp/good-governance/en/>

⁸ UN, *Remarks at the Universal Health Coverage Forum*, <https://www.un.org/sg/en/content/sg/speeches/2017-12-14/universal-health-coverage-forum-remarks>

⁹ WHO, *Understanding #HealthForAll*, <http://apps.who.int/uhc/en/about/>

degenerative diseases such as dementia and Parkinson is growing in advanced economies.

- On the other hand, developing countries face the burden of diseases related to poverty and geographical context. As pointed out by Dupas (2011: 2), “[i]t affects people at much younger ages than the disease burden in developed countries, and its main channels of morbidity and mortality are infectious and parasitic diseases, which generate important public health externalities”.
- Therefore, pressure on health care costs and social care is mounting, thus innovative strategies and reforms need urgently to be put in place. As pointed out by the WEF, “countries cannot be complacent and rely solely on existing financial capacity to maintain and scale up health services”¹⁰.

Health in Emergency Situations: Conflicts, Natural Disasters, Migratory Flows

- Conflicts remain one of the greatest threats to human development and health systems are most often among its casualties (Atallah et al., 2017). As outlined by Martineau et al. (2017), conflicts affect “the provision of healthcare by increasing needs due to violence and increased spread of infectious disease, and by reducing the opportunities to access healthcare due to the destruction of health infrastructure and the loss of health workers, and the effects of instability on people's ability to reach health facilities.” Moreover, people living in poverty and in least developed regions are also the ones that suffer the consequences of crises the most. According to the Global Humanitarian Assistance Report 2018, “[o]f the 753 million people living in extreme poverty, 59% were living in countries affected by either fragility, environmental vulnerability or both.”
- In recent decades, increasing numbers of crises have evolved from catastrophic, short-term, highly visible events to more structural, longer-term situations. Syria, Yemen, the Democratic Republic of the Congo and South Sudan are only some examples. The Director of WHO's Emergency Risk Management & Humanitarian Response Department declared that “[t]hese crises break health systems. The Sustainable Development Goals will never be achieved if we do not address both the root causes and consequences of protracted emergencies.”¹¹ These situations need urgently more predictable and long-term funding and planning strategies. According to the WHO, “[a]chieving the Sustainable Development Goals will depend on strengthened relationships among governments, communities, humanitarian and development actors, who must come together to produce longer-term plans that are based on thorough needs assessments and prioritized to achieve real change in the lives of the people they serve”.
- According to the World Health Organization, tens of thousands people are dying every year due to the negative effects of climate change.¹² Natural disasters, such as earthquakes or floods, “have an immediate impact on human lives and often result in the destruction of the physical, biological and social environment of the affected people, thereby having a longer-term impact on their health, well-being and survival”.¹³ The seasonal pattern or temporal distribution of diseases such as

¹⁰ WEF, Here's how we can overcome global health challenges, <https://www.weforum.org/agenda/2018/01/how-to-overcome-global-health-challenges/>

¹¹ WHO, WHO says address protracted emergencies to achieve Sustainable Development Goals, https://www.who.int/hac/crises/ssd/releases/who_sustainable_development_goals/en/

¹² WHO, “Climate change and health” <http://www.who.int/mediacentre/factsheets/fs266/en/>

¹³ WHO, Environmental health in emergencies, https://www.who.int/environmental_health_emergencies/natural_events/en/

malaria, dengue, cholera and some other diarrhoeal diseases are also strongly impacted by climate change (Confalonieri et al., 2007). Furthermore, food security's vulnerabilities have a strong and indirect impact on malnutrition.

- Aside from being one of the most pressing global issues, the migration crisis puts pressure on host countries, “not least with regard to preparedness and resilience of health systems and access to health-care services” (Langlois et al, 2016). As pointed out by Puchner et al. (2018) and according to the WHO, “both at the global and national levels, the health policies and strategies to manage the health consequences of migration and displacement have failed to keep up with the speed and diversity of modern migration and displacement”.
- Emergency healthcare delivery is a daunting task: how to determine an essential package of medical services in a setting where there are so many competing priorities? Fragile states “lack the will and/or the capacity to manage public resources, deliver basic services and protect and support poor and vulnerable groups” (Bornemisza et al., 2010: V). There is an urgent need to discuss ways in which we can rethink and redefine existing collaboration models, governance structures and accountability mechanisms for international health and humanitarian actors to ensure the adequate delivery of health services in conflict-affected settings.
- The security of health-care workers is another great challenge (Footer & Rubenstein, 2013). As stated by Haar and Rubenstein (2012: 4), assaults on health care services “violate international law and can undermine the ability of institutions and personnel to carry out their missions, stimulate migration of health workers away from places in need, and limit access of populations to critically needed health-care services”. There is an urgent need to fill in the gaps of international and human rights law to provide stronger protection to health care services in conflict situations (Footer & Rubenstein, 2013).
- Donor involvements for global health programs in such fragile contexts are lacking, as investments are perceived as “politically or financially risky” by stakeholders (Haar and Rubenstein, 2012). International organisations are obliged to adapt and think of innovative funding mechanisms such as the International Committee of the Red Cross who launched “the world's first “Humanitarian Impact Bond” to help transform the way vital services for people with disabilities are financed in conflict-hit countries”.¹⁴

Health and Gender

- The Sustainable Development Goal 5, “achieve gender equality and empower all women and girls”, is an important prerequisite to “ensure healthy lives and promote well-being for all at all ages”. Gender inequalities exist both within and outside the health system and are linked with poverty, ethnicity, and sociocultural practices that hinder the access of women to health. 51% of people diagnosed with HIV worldwide are women¹⁵. According to the WHO (2017, ix), “HIV is not only driven by gender inequality, but it also entrenches gender inequality, leaving women more vulnerable to its impact”.

¹⁴ International Committee of the Red Cross, *The world's first “Humanitarian Impact Bond” launched to transform financing of aid in conflict-hit countries*. <https://www.icrc.org/en/document/worlds-first-humanitarian-impact-bond-launched-transform-financing-aid-conflict-hit>

¹⁵ UNAIDS, *When women lead, change happens*, http://www.unaids.org/sites/default/files/media_asset/when-women-lead-change-happens_en.pdf

- Maternal mortality is still unacceptably high, “[a]bout 830 women die from pregnancy- or childbirth-related complications around the world every day”¹⁶. Millions of women do not access to antenatal care and are not assisted by a midwife, a doctor or a trained nurse during childbirth. Preventing unintended pregnancies, reducing adolescent childbearing and maternal mortality through universal access to maternal, sexual and reproductive health care is also crucial to the health and well-being of women, children and adolescents.
- Therefore, public health policies must address gender inequalities and ensure that the specific needs of women are taken into account. As pointed out by the WHO (2017b: 17), “[w]omen’s rights to decision-making about their own bodies must be upheld, in accordance with human rights law, along with the development and implementation of evidence-based policy and programming”.

Health, Social Inclusion and Inclusion of Disabilities

- In 2006, the United Nations adopted the Convention on the Rights of Persons with Disabilities (CRPD) to “promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity”.¹⁷ It is imperative to take action in order to improve across the globe of people with disabilities and health conditions to be taken out of the risk of social exclusion.
- In addition to the physical disabilities, health issues such as mental disabilities, social integration problems and other psychological traumas require further attention within the scope of social inclusion. It is important to ensure that individuals are protected from a vicious cycle of social exclusion as social exclusion has serious mental consequences as well (Baumgartner and Burns, 2014).
- A comprehensive plan of instruments that target individuals at high risk of exclusion due to physical and mental health require planning from bottom to top level which also involve the community and personal network of individuals.

Health and Technology

- As pointed out by the World Economic Forum, “[w]ith one in four children born without being registered, it is an identity crisis that now represents one of the biggest barriers to achieving our development goals”¹⁸. Digital technology and social media are essential tools to track for instance immunized children and assess the population in need of treatments. Furthermore, these technologies will also enable to better monitor the effectiveness of health services.
- Developing new technologies to tackle neglected diseases such as tuberculosis and HIV/AIDS is crucial. For instance, “laying the foundation for a precision-medicine-ready healthcare system presents an opportunity to revise treatment approaches, inform resource allocation, implement innovative policies and skip over legacy approaches and equipment, thus leapfrogging some healthcare approaches of more

¹⁶ WHO, *Maternal mortality*, <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>

¹⁷ OHCHR, *Convention on the Rights of Persons with Disabilities*, <https://www.ohchr.org/en/hrbodies/crpd/pages/conventionrightspersonswithdisabilities.aspx>

¹⁸ WEF, *Global healthcare needs a revolution. This is how technology can help*, <https://www.weforum.org/agenda/2018/04/better-id-could-revolutionize-the-healthcare-universe/>

developed economies”¹⁹. However, the development of prevention tools and transformative treatments will need substantially more funding (Watkins et al., 2018).

- Artificial intelligence (AI) and robotics can help to ensure more effective healthcare ecosystems and a more efficient quality healthcare delivery. For instance, “[r]epetitive, uncomplicated tasks such as the analysis of CT scans and certain tests can be performed more accurately by AI-enabled systems, reducing physician error and enabling early diagnosis and interventions before conditions become critical”.²⁰ Costly problem of dosage errors could also be prevented by AI techniques and “could generate \$16 billion in savings”.²¹

Therefore, it is timely to have call for innovative and cross-cutting proposals that take into account the context and the multitude of potential actors involved.

This highlights the pivotal need for an interdisciplinary approach in confronting this global issue. The underlying idea here is that this pressing challenge provides scope of participation from various areas such as (but not limited to) – anthropology, business administration, development studies, economics, engineering, geography, history, international affairs, international development, international relations, law, management, political science, public policy, psychology and behavioural science, social policy, sociology, medical and health studies.

Hence we welcome students from diverse academic backgrounds to present their ideas and proposals to tackle this pressing issue.

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¹⁹ WEF, *Could Rwanda become Africa's healthcare leader?*, <https://www.weforum.org/agenda/2018/08/why-rwanda-could-become-africa-healthcare-leader/>

²⁰ WEF, *Four ways AI can make healthcare more efficient and affordable*, <https://www.weforum.org/agenda/2018/05/four-ways-ai-is-bringing-down-the-cost-of-healthcare/>

²¹ Harvard Business Review, *10 Promising AI Applications in Health Care*, <https://hbr.org/2018/05/10-promising-ai-applications-in-health-care>

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