The Premier Model United Nations Conference in the Pacific Northwest

2016

NWMUN

Background Guide for the

WORLD HEALTH ORGANIZATION

(WHO)

Northwest Model United Nations - Seattle | November 18-20, 2016 | Seattle, Washington, USA

August 1, 2016

Dear Delegates,

Welcome to **Northwest Model United Nations – Seattle (NWMUN-Seattle) 2016** and the World Health Organization. The World Health Organization committee staff, consisting of Director Whitney Thompson, Assistant Director Tiffany Dao, Chair Augaly Kiedi, and Special Adviser Mia Saint Clair, looks forward to working with you at NWMUN-Seattle 2016 and this session of the World Health Organization.

Our entire staff is excited to work with you this coming November. We appreciate the hard work, research, and commitment you have undertaken in preparation for this conference! We are pleased to present the final background guide.

The topics for the committee are as follows:

I. Climate Change and Health
II. Global Burden of Mental Disorders and the Need for a Comprehensive, Coordinated Response from Health and Social Sectors at the Country Level

Every participating delegate is *required* to submit a position paper prior to attending the conference. We have laid out expectations regarding content, structure, and formatting on our website. Adhering to these guidelines helps ensure a well-prepared committee and an excellent conference experience. Position papers are also a key competent of the awards process.

The deadline to submit position papers is **Tuesday, 1 November 2016 at 11:59pm (Pacific Standard Time)**. Please refer to our website for details regarding the submission process.

We wish each of you the best as you prepare for the conference and this committee. We urge you to explore beyond the background guide as you learn more about the Member State you will represent and the topics we will discuss. Please do not hesitate to direct any questions or concerns towards your Director or the Director-General. We look forward to meeting you at the conference and best of luck!

Sincerely,

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The World Health Organization at NWMUN-Seattle 2016

NWMUN works each year to create as accurate a simulation as is possible for our delegates. We have developed some additional ways for delegates to interact within the simulation, including enabling delegates to take action other than passing resolutions on an issue. This section aims to provide additional, specific information for the World Health Organization at NWMUN-Seattle 2016.

Briefings

While discussing a topic, World Health Organization delegates are able to receive briefings from representatives of relevant Member States or UN subject matter experts. The specific thematic experts available will be announced on the NWMUN website, as well as the beginning of the conference.

Mandate

The mandate of the World Health Organization is:

> *To oversee and coordinate healthcare activity throughout the United Nations system, including through research into medical advancements, the sharing of best practices, the setting of healthcare standards, and to provide technical support to Member States.*

Functions & Powers

The functions and powers of the World Health Organization are:

- To promote international cooperation in the field of health care and to recommend, as appropriate, policies to this end;
- To provide general policy guidance for the direction and coordination of health care programs within the United Nations system;
- To promote the contribution of the relevant international scientific and other professional communities to the acquisition, assessment and exchange of health care knowledge and information and as appropriate, to the technical aspects of the formation and implementation of health care programs within the United Nations system.

Outcome Documents

When taking action on a topic, the World Health Organization can adopt resolutions.

Rules of Procedure

The World Health Organization will use the standard NWMUN rules of procedure, available on our website as well as at the conference.

Members of the World Health Organization at NWMUN 2016

The World Health Organization at NWMUN 2016 will simulate the World Health Organization Assembly. Accordingly, all Member States of the United Nations will be invited to attend.

Committee Overview

Introduction

The World Health Organization (WHO) is the United Nations' (UN) leading authority on global health.[1] Established in 1948, WHO is the specialized agency responsible for coordinating and directing the response to address global health crises and in providing support to Member States in achieving national health objectives.[2] The ultimate goal of WHO is to ensure a healthier future for all peoples.[3] In doing so, WHO works within the following areas: expanding universal health coverage; promoting health throughout all stages of life; combating communicable and non-communicable diseases; engaging corporate services to increase access to health care; and leading preparedness, surveillance, and response to health crises.[4]

History

WHO was created during the formation of the UN in 1945 as a means to promote international cooperation for better health conditions worldwide.[5][6] The *Constitution for the World Health Organization* (1945) came into effect on 7 April 1948, a date now celebrated as World Health Day.[7] The organization is headquartered in Geneva, Switzerland with its Global Service Center located in Malaysia.[8]

Since its inception, WHO has provided coordination and authority on global health. One of its greatest triumphs was spearheading the eradication of smallpox in 1980 after the World Health Assembly (WHA) passed a specific budget to fund mass vaccination programs in western Europe and a method called "surveillance and containment" in developing Member States.[9] The *Ottawa Charter* (1986), which was the outcome of the First International Conference on Health Promotion in Ottawa, Canada in 1986, directed the WHO's mission to promote health in three areas: recognizing prerequisites for health, such as peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice and equity; advocating for these prerequisites; and mediating collaborations to ensure them.[10] The *Ottawa Charter* (1986) was "response to growing expectations for a new public health movement around the world" and set its deadline for achieving progress in these areas for 2000.[11]

The introduction of the Millennium Development Goals (MDGs) in September 2000 set new targets for WHO.[12] As the United Nation's agency for global health, WHO has played a vital role in helping Member States achieve health-related MDGs.[13] The MDGs enabled WHO to approve and ensure the greater availability of more than 250 generic essential medicines including preventive chemotherapy for neglected tropical disease and to improve the accessibility of safe drinking water to 87% of the world's population in 2008.[14] With the recent adoption of the Sustainable Development Goals (SDGs), WHO is working to implement the new framework, particularly focusing on SDG 3 on ensuring healthy lives and promoting the well-being of all peoples.[15] This specific health-related target reflects the main priorities of WHO's program of work for 2014-2019.[16] Furthermore, they highlight the three main objectives of WHO's reform: programs and priorities, governance, and management.[17]

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[1] WHO, *Dr. Margaret Chan: Biography*. http://www.who.int/dg/en/
[2] WHO, *About WHO*. http://www.who.int/about/en/
[3] *Ibid.*
[4] WHO, *What we do*. http://www.who.int/about/what-we-do/en/
[5] WHO, *Partnerships*, 2016. http://www.who.int/about/collaborations/partnerships/en/
[6] WHO, *History of WHO*, 2016. http://www.who.int/about/history/en/
[7] WHO, *Who we are*, 2016. http://www.who.int/about/en/
[8] WHO, *WHO People and offices*, 2016. http://www.who.int/about/structure/en/
[9] WHO, *What we do*. http://www.who.int/about/what-we-do/en/
[10] *Ibid.*
[11] WHO, *The Ottawa Charter for Health Promotion*, 1986. http://www.who.int/healthpromotion/conferences/previous/ottawa/en/
[12] United Nations, *Millennium Summit*, 2000.http://www.un.org/en/events/pastevents/millennium_summit.shtml
[13] WHO, *20 ways that the World Health Organization helps countries reach the Millennium Development Goals*, 2010. http://www.who.int/topics/millennium_development_goals/who_dgo_2010_3/en/
[14] *Ibid.*
[15] WHO, *Sustainable Development Goals (SDGs)*, 2016. http://www.who.int/topics/sustainable-development-goals/en/
[16] WHO, *From MDGs to SDGs, WHO launches new report.* 2015. http://www.who.int/mediacentre/news/releases/2015/mdg-sdg-report/en/
[17] WHO, *Twelfth General Programme of Work*, 2014. http://www.who.int/about/resources_planning/twelfth-gpw/en/

Structure and Organization

WHO is divided into three organs: the World Health Assembly, the Executive Board, and the Secretariat.[18] The WHA is the decision-making body in which UN Member States are represented by up to three delegates, one of which serves as chief delegate.[19] The president and other officers of the Assembly are elected at the beginning of each annual session.[20] Non-Member States are able to join the Assembly upon a simple majority vote by the body.[21] Territories may be admitted as Associate Members upon being recommended by a Member State or the territory's representative of international relations.[22] Observer status can also be granted to organizations that are actively involved in various aspects of health.[23] Currently, the Assembly consists of 194 Member States that are grouped based on regional distribution.[24]

The Executive Board of WHO consists of 34 members based on a balanced geographical distribution.[25] Like the Assembly, members of the Board are selected based on their qualifications in the health field for three-year terms.[26] The Board elects its chairman from among its members and adopts its own rules of procedure.[27]

The Secretariat includes the Director-General, currently Dr. Margaret Chan, from the People's Republic of China, who serves as WHOs chief technical and administrative officer and supervises policy for the organization's international health work.[28] The Director-General is nominated by the Board and appointed by the Assembly to serve as the chief technical and administrative staff of WHO as well as the *ex-officio* Secretary of the Assembly, the Board, and all commissions and committees of WHO.[29] As of 22 April 2016, the process began for the election of the next Director-General.[30] Member States are encouraged to take part in the initial step of the rigorous process by submitting their nominations before 22 September 2016.[31]

The three organs of the WHO ensure the functions of six departments: General Management (GMG), Outbreaks and Health Emergencies (OHE), Family, Women's and Children's Health (FWC), HIV/AIDS, TB, Malaria and Neglected Tropical Diseases (HTM), Non-communicable Diseases and Mental Health (NMH), and Health Systems and Innovation (HIS).[32] Support for the departments, and therefore the WHO, is sourced from more than 700 institutions including UN agencies, donors, and the private sector.[33]

Mandate and Powers

According to WHO's constitution, the Assembly is mandated to meet annually to review and approve the financial policies of the Organization, report and direct attention to any urgent health matters, and consider other agencies' recommendations on health matters.[34] Furthermore, the Assembly is given authority under Article 23 to "make recommendations to Members with respect to any matter within the competence of the Organization."[35] These functions, specified in Article 2, are met in cooperation with other UN agencies, Member States and non-state actors, collaborating centers, and expert advisory panels and committees.[36] Other partnerships include: Roll Back

[18] *Ibid.*
[19] *Ibid.*
[20] WHO, *Constitution of The World Health Organization*. http://apps.who.int/gb/bd/PDF/bd47/EN/constitution-en.pdf?ua=1
[21] *Ibid.*
[22] *Ibid.*
[23] World Trade Organization, *International intergovernmental organizations granted observer status to WTO bodies*, 2016. https://www.wto.org/english/thewto_e/igo_obs_e.htm
[24] WHO, *Countries*. http://www.who.int/countries/en/
[25] *Ibid.*
[26] *Ibid.*
[27] *Ibid.*
[28] *Ibid.*
[29] *Ibid.*
[30] WHO, *Process to elect next Director-General of WHO begins*, 2016. http://www.who.int/mediacentre/news/releases/2016/election-process/en/
[31] *Ibid.*
[32] WHO, *WHO Headquarters structure*, 2015. http://www.who.int/about/structure/organigram/en/
[33] WHO, *The Global Guardian of Public Health*, 2016. http://www.who.int/about/structure/global-guardian-of-public-health.pdf?ua=1
[34] *Ibid.*
[35] *Ibid.*
[36] WHO, *Who we work with*, 2016. http://www.who.int/about/en/

Malaria Partnership (RBM); Partnership for Maternal, Newborn and Child Health (PMNCH); the Alliance for Health Policy and System Research (AHPSR); the Global Health Workforce Alliance (GHWA); the International Drug Purchase Facility (UNITAID) and the European Observatory on Health Systems and Policies.[37]

The Executive Board is mandated to meet twice a year: once to prepare recommendations and an agenda for the Assembly's meeting, and secondly to respond to any matter of emergency.[38] Under *Article 28*, the functions of the Board include: effectuating the decisions and policies of the Assembly; advising the Assembly on matters assigned to the WHO by conventions, agreements, and regulations; preparing the Assembly's meeting agenda; and taking compulsory measures within the functions and financial resources of the WHO to deal with events requiring immediate action.[39] Additionally, the Board is entrusted to establish committees considered desirable to serve any purpose within the scope of the WHO.[40]

The Secretariat is entrusted to establish procedures that give the Director-General direct access to various health administrations and national health organizations.[41] The Director-General is also responsible for preparing the WHO's financial statements and budget estimates.[42]

Recent Work of the World Health Organization

Since the Ebola Outbreak, WHO has trained more than 5,000 medical personnel on "case management, contact tracing, safe and dignified burials and social mobilization."[43] WHO has particularly engaged with communities in Guinea, Liberia and Sierra Leone, and as a result enabled those communities to promptly recognize symptoms and take immediate action.[44] Furthermore, WHO has put together a Global Ebola Vaccine Implementation Team that is developing the use of an Ebola vaccine in the three most affected West African Member States, as well as those previously affected, including the Democratic Republic of Congo, Sudan, and Uganda.[45] The vision for the vaccine is to serve as a reactive measure to an outbreak.[46] With the recent adoption of the SDGs, in April 2016 the World Health Organization and the World Bank co-hosted the World Bank-International Monetary Fund Spring Meetings where discussions were held to promote mental health from the margins to the mainstream of the global development agenda.[47] During the two-day series of meetings, the WHO and the World Bank presented the expected economic, health and social benefits of investing in mental health services, particularly focusing on mental health issues that derive from mass migration and sustained conflict.[48] In leading the effort to achieve the objectives of the *Mental Health Action Plan 2013-2020*, which was adopted by the World Health Assembly in May 2013, the WHO is endorsing the innovation of mental health policy and practice in Member States.[49]

On 7-8 July 2016, WHO and the Government of France hosted the Second Global Conference on Health and Climate, in Paris, France.[50] The focus of the conference was building healthier societies through implementation of the Paris Agreement, which marked the beginning of a new era in the global response to climate change.[51] The Conference addressed a global strategy for health resilience investments; ensuring support for health and climate

[37] *Ibid.*
[38] WHO, *Process to elect next Director-General of WHO begins*, 2016. http://www.who.int/mediacentre/news/releases/2016/election-process/en/
[39] WHO, *Constitution of The World Health Organization*. http://apps.who.int/gb/bd/PDF/bd47/EN/constitution-en.pdf?ua=1
[40] WHO, *Independent Oversight and Advisory Committee*. http://www.who.int/about/who_reform/emergency-capacities/oversight-committee/en/
[41] WHO, *Constitution of The World Health Organization*. http://apps.who.int/gb/bd/PDF/bd47/EN/constitution-en.pdf?ua=1
[42] *Ibid.*
[43] WHO, *WHO's contribution to the Ebola response*, 2014. http://www.who.int/features/2014/who-ebola-response/en/
[44] *Ibid.*
[45] WHO, *Looking, hopefully, towards an Ebola-free future*, 2016. http://www.who.int/features/2016/ebola-vaccine/en/
[46] *Ibid.*
[47] WHO, *Out of the Shadows: Making Mental Health a Global Development Priority*, 2016. http://www.who.int/mediacentre/events/2016/mental-health-meeting/en/
[48] *Ibid.*
[49] WHO, *mhGAP Forum 2015*, 2015. http://www.who.int/mental_health/mhgap/report_forum_2015.pdf?ua=1
[50] WHO, *World Health Organization II Global Conference on Health and Climate Change*, July 2016. http://www.who.int/globalchange/conferences/2nd-global-climate-conf-scope-and-purpose.pdf?ua=1
[51] *Ibid.*

action; and assessing the health gains that Member States can expect through implementing low carbon policies as recommended in the SDGs.[52]

Conclusion

Since its inception, WHO has achieved remarkable milestones in modern health care. From the complete eradication of smallpox to developing a promising vaccine for the Ebola virus, WHO remains committed to its objective to attain the highest possible level of health for all peoples.[53] However, despite significant progress, there is growing evidence of widening gaps in health especially between developed and the least developed countries.[54] Furthermore, WHO is also facing fundamental challenges that require a structural reform, which the Twelfth General Programme of Work is intended to facilitate.[55] The newly established priorities and the adoption of better governance and management practices will not only extend WHO's capability and flexibility to respond to evolving health issues but, ultimately, also enable the organization to fulfill its constitutional mandate as the authority on international health work with more effectiveness.[56]

[52] *Ibid.*
[53] WHO, *The Constitution of the World Health Organization*, 2016. http://www.who.int/governance/eb/who_constitution_en.pdf
[54] WHO, *Chapter 1: Global Health: today's challenges*. http://www.who.int/whr/2003/chapter1/en/
[55] WHO, *Twelfth General Programme of Work*, 2014. http://www.who.int/about/resources_planning/twelfth-gpw/en/
[56] WHO, *Why reform.* http://www.who.int/about/who_eform/change_at_who/what_is_reform/en/

I. Climate Change and Health

Climate change related health costs are estimated to reach up to four billion US dollars per year in 2030. It is our responsibility to prevent such development. […] We need more concrete actions, more commitments and especially more human creativity. I urge us all to find more ways to help us all to better mitigate and adapt to climate change. A business as usual approach is no longer a viable model. – Sauli Niinistö, President of the Republic of Finland[57]

Introduction

Environmental hazards, which are growing as a result of global climate change, are estimated to be responsible for 25% of the disease worldwide, with even higher rates in areas like sub-Saharan Africa.[58] Every year, over 7 million people die prematurely as a result of air pollution.[59] Carbon emissions and household pollution cause an estimated 4.3 million deaths annually, and ambient air pollution caused another 3.7 million deaths.[60] Malnutrition, malaria, heat-stress, and diarrhea are health issues that can result due to climate-related conditions and lead to premature death of tens of thousands of people each year.[61] Decreased water accessibility and increased breeding seasons for insects are two such climate-related conditions that are linked to health concerns.[62]

By the year 2030, annual deaths from climate change are estimated to increase by 250,000, and climate change related health costs globally are expected to reach between $2 - 4 billion per year.[63] By taking actions to tackle climate change, there will be significant benefits to both global health and the economy.[64] While there has been some progress in addressing climate change, the increase in climate change related health costs demonstrates how much work the international community has yet to do to deal with climate change and the negative effects on health including air pollution, water security, food scarcity, and disease transmission. WHO's purpose is to advance the global health agenda which has included climate change and health for over 40 years. According to the Technical Briefing for the World Health Organization Conference on Health and Climate, human health is affected by climate variability and climate change, and overall this impact is more negative than positive.[65]

International Framework

In 1977, in Mar del Plata, Argentina at a global conference on water, the *Mar del Plata Action Plan* (1977) was approved.[66] The Action Plan had two parts: the first was a set of recommendations for water management and the second was twelve resolutions on a variety of topics including the environment, health, and pollution control.[67] The goals of the UN Conference on Water included areas linked to health concerns including assessing the status of water resources, ensuring quality water availability, increasing water use efficiency, and promoting preparedness to prevent a global water crisis which has been made worse by climate change[68]

[57] Finland, *Opening statement by President of the Republic of Finland Sauli Niinistö at a thematic discussion "Climate, Health and Jobs", UN Secretary-General´s Climate Summit in New York 23rd September 2014*, 23 September 2014. http://www.presidentti.fi/public/default.aspx?contentid=313123&culture=en-US

[58] WHO, *Health and Environment Linkages Initiative*. http://www.who.int/heli/en/

[59] Finland, *Opening statement by President of the Republic of Finland Sauli Niinistö at a thematic discussion "Climate, Health and Jobs", UN Secretary-General´s Climate Summit in New York 23rd September 2014*, 23 September 2014. http://www.presidentti.fi/public/default.aspx?contentid=313123&culture=en-US

[60] WHO, *Climate change and health*, September 2015, http://www.who.int/mediacentre/factsheets/fs266/en/

[61] *Ibid.*

[62] *Ibid.*

[63] *Ibid.*; Finland, *Opening statement by President of the Republic of Finland Sauli Niinistö at a thematic discussion "Climate, Health and Jobs", UN Secretary-General´s Climate Summit in New York 23rd September 2014*, 23 September 2014. http://www.presidentti.fi/public/default.aspx?contentid=313123&culture=en-US

[64] Niinistö, *Opening statement by President of the Republic of Finland Sauli Niinistö at a thematic discussion "Climate, Health and Jobs", UN Secretary-General´s Climate Summit in New York 23rd September 2014*, 23 September 2014. http://www.presidentti.fi/public/default.aspx?contentid=313123&culture=en-US

[65] WHO, *About WHO*. http://www.who.int/about/en/

[66] WHO, *Water Sanitation and Health*. http://www.who.int/water_sanitation_health/unconfwater.pdf

[67] *Ibid.*

[68] *Ibid.*

In 1992, the *United Nations Framework Convention on Climate Change* (1992) (UNFCCC) was negotiated at the Earth Summit in Rio de Janeiro and entered into force less than two years later.[69] With the purpose of preventing dangerous human interference with the global climate systems, UNFCCC recognized there was a correlation between climate change and greenhouse gas emissions.[70] UNFCCC defines adverse effects of climate change to include significant deleterious effects on human health and welfare.[71] Per Article 4 of the UNFCCC, ratifying Member States (of which there are 197) commit to consider climate change when creating social, economic, and environmental policies.[72]

Adopted in December of 1997 in Kyoto, Japan and entered into force in 2005, the *Kyoto Protocol* (1997) was said to be "a first step towards reducing our impact on the climate system, which exerts such a strong influence on our health." [73] As a result of the commitments made through the Kyoto Protocol, governments have developed legislation and policies to meet their commitments and private companies have been pushed to make climate-conscious decisions, which have positive impacts on health.[74] The second commitment period is currently in effect (from 2013 to 2020), established through the Doha Amendment.[75] To date, 192 Member States have ratified the Kyoto Protocol.[76]

The goal of the *Paris Agreement* (2015), adopted in December of 2015, is to strengthen the global response to the threat of climate change by keeping this century's global temperature increase to less than two degrees Celsius higher than pre-industrialized temperatures.[77] The Paris Agreement explicitly recognizes the benefits of mitigating climate change on health and sustainable development.[78]

The Millennium Development Goals (MDGs) were eight international development goals that were created in 2000 after the Millennium Summit.[79] Two of the goals which focused on health and climate change (Goal 7, to ensure environmental stability, had many sub-focuses including reducing global emissions, the deterioration of the ozone layer, and promoting access to potable water and Goal 6, combating major diseases, outlined goals to fight malaria, a disease that is flourishing partially due to increased mosquito breeding due to climate change) inspired continued progress in that realm.[80] In 2015, the General Assembly adopted resolution 70/1, "Transforming our world: the 2030 Agenda for Sustainable Development."[81] Expanding on the MDGs, this resolution calls on Member States to begin efforts to achieve the 17 Sustainable Development Goals (SDGs) by 2030.[82] SDG 13 on climate action sets forth the goal to combat climate change and its impacts, and SDG 3 on good health and well-being, has the goal of ensuring healthy lives and well-being for people of all ages.[83] In addition to the overarching goals, each goal is comprised of several smaller targets which help actors working on the SDGs focus their efforts and measure progress.[84] Implementing the SDGs requires collaboration across different levels of government and the creation of integrated strategies to bring together several aspects of sustainable development.[85]

[69] UNFCC, *First steps to a safer future: Introducing The United Nations Framework Convention on Climate Change*. http://unfccc.int/essential_background/convention/items/6036.php
[70] *Ibid.*
[71] *Ibid.*
[72] *Ibid.*
[73] UNFCC, *Making those first steps count: An Introduction to the Kyoto Protocol*. http://unfccc.int/essential_background/kyoto_protocol/items/6034.php
[74] *Ibid.*
[75] *Ibid.*
[76] UNFCC, *Background on the UNFCCC: The international response to climate change*. http://unfccc.int/essential_background/items/6031.php
[77] *Ibid.*
[78] UNFCC, *The Paris Agreement*, 2015. https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf
[79] United Nations, *Sustainable Development Goals*. https://sustainabledevelopment.un.org/sdgs
[80] *Ibid.*
[81] UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015. http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
[82] *Ibid.*
[83] United Nations, *Sustainable Development Goals*. https://sustainabledevelopment.un.org/sdgs
[84] Bizikova et al., *Implementing the Sustainable Development Goals at Home*, 21 September 2015, https://www.iisd.org/blog/implementing-sustainable-development-goals-home
[85] *Ibid.*

In 2008, World Health Assembly resolution 61/9 on "Climate Change and Health" was adopted.[86] The resolution urges Member States to reduce current and anticipated health risks from climate change while noting that climate change could hamper the prevention of disease.[87] This resolution urges Member States to develop health measures to be incorporated into adaptation plans for climate change.[88] Additionally, Member States are urged to provide guidance to public health leaders in order to increase their abilities and competency; increase tracking of the impacts climate change on public health and work to minimize those impacts through preparedness, preventative measures, and effective management of natural disasters; and promote collaboration between health and other sectors, agencies, and key partners to reduce the future health risks expected to be caused by climate change.[89]

In January 2013, WHO Executive Board resolution EB124.R5, "Climate Change and Health," was adopted.[90] The resolution notes the importance of advocacy and awareness, collaborations and partnerships with UN organizations and other parties, accurate scientific data, and measures to improve health systems to decrease the adverse health impacts that people face due to climate change.[91] After completing assessments of health vulnerability of more than 30 Member States across all regions, the WHO Secretariat emphasized Member States' roles in promoting health awareness in adaption to climate change efforts; reducing the spread of infectious diseases due to climate change, and strengthening regional and UN Member State team projects.[92]

Role of WHO and the International System

WHO's program on climate change has developed and grown in recent years, increasing its focus on working with partners such as national Ministries of Health to provide guidance in the healthcare management.[93] WHO works with Member States and provides leadership on matters critical to health; sets and monitors the implementation of health-related standards; provides evidence-based policy options; and monitors health situations and trends.[94]

Climate change and its impact on health have been discussed in global settings since the first World Climate Conference in 1979 and continue to be extremely relevant today.[95] As one of the leading organizations of the First World Climate Conference, WHO carries out the responsibility of monitoring the health situation and assessing health trends in the global setting.[96] WHO convened with World Meteorological Organization (WMO), UN Environment Programme, Food and Agriculture Organization of the United Nations (FAO), and UN Educational, Scientific, and Cultural Organization (UNESCO) to assess the impact that climate change was having on human society and the knowledge available on climate change and health.[97]

There have also been two international conferences on the link between the climate health: the first in August 2014, and the second in July 2016.[98] The Second Global Conference on Health and Climate conference demonstrated how the public health community supports the implementation of the Paris Agreement.[99] The conference discussed current trends in climate-related health issues, and how resilience-building, and mitigation programs can improve current trends and improve overall health.[100]

[86] World Health Assembly, *Climate Change and Health (WHA61.19)*, 2008. http://apps.who.int/gb/ebwha/pdf_files/WHA61-REC1/A61_REC1-en.pdf
[87] *Ibid.*
[88] *Ibid.*
[89] *Ibid.*
[90] WHO, *Climate Change and Health* (EB124.R5), 2012. http://www.who.int/globalchange/mediacentre/events/progressreportwhaclimateandhealt.pdf
[91] *Ibid.*
[92] *Ibid.*
[93] WHO, *About WHO*. http://www.who.int/about/en/
[94] *Ibid.*
[95] UNFCC, *Background on the UNFCCC: The international response to climate change*. http://unfccc.int/essential_background/items/6031.php
[96] WHO, *The Role of WHO in Public Health*. http://www.who.int/about/role/en/
[97] World Meteorological Organization, *World Climate Conferences*. https://www.wmo.int/pages/themes/climate/international_wcc.php
[98] WHO, *Second Global Conference on Health and Climate*, 2016. http://www.who.int/mediacentre/events/2016/health-climate-conference/en/
[99] *Ibid.*
[100] *Ibid.*

The Health and Environmental Linkages Initiative (HELI) is a global effort by WHO and United Nations Environment Programme (UNEP) to support action that policymakers in developing areas are taking to combat environmental threats to health.[101] HELI promotes knowledge about links between health and environment, utilizing existing data from WHO and UNEP.[102] HELI encourages Member States to address health and environment links when looking at economic development and assess the relevance of ecosystem factors (including climate regulation and water, food, and energy accessibility) to human health and well-being.[103]

In 2010, WHO along with United Nations Development Programme launched the Climate Change Adaptation to Protect Human Health project.[104] It was the first global project on public health adaptation to climate change and was implemented through a partnership with several national Ministries of Health.[105] The project works to identify the best practices to address climate change-related health risks.[106] Seven Member States are involved in piloting this program, representing a range of different climate and health concerns.[107] The focuses range from early warning systems to extreme heat in China; water scarcity and reducing diarrheal disease in Jordan through sanitation and safety of wastewater; and addressing changes in vector-borne diseases in Bhutan, Kenya, Barbados, and Fiji.[108]

The Global Framework for Climate Services (GFCS) Adaptation Programme in Africa, is a three-year project from 2014 to 2016.[109] Partnering with World Meteorological Organization and the Norwegian Ministry of Foreign Affairs, along with several other organizations, WHO is involved in this program with a goal to increase the fortitude of vulnerable people to the impacts of climate-related events through a joint program of Climate Services.[110] Focused in Tanzania and Malawi, the program addresses vector-borne diseases like malaria and water-borne diseases like cholera, which are prevalent concerns in these climates.[111] The Adaptation Program aims to make impacts on the national, regional, and local levels to achieve its goal.[112] The program targets to improve the awareness of climate-related risks in all sectors including agriculture and health and improve the capacity of each sector to address climate risks.[113] The program works with decision makers and public health authorities to guide their decision-making processes to address health concerns.[114]

Key Issues

Air Pollution

Urban outdoor air pollution, which through greenhouse gas emissions generates a change to the climate, is estimated to cause 1.3 million deaths per year, while indoor air pollution is estimated to result in 2 million deaths annually.[115] Air pollution has significant impacts on human health.[116] In addition to the premature deaths caused by air pollution each year, air pollution can cause non-fatal health problems and have a significant impact on quality of life.[117] Respiratory infections, including pneumonia, are the primary killer of young children, and it is estimated that 60% of acute respiratory infections are caused by environmental factors.[118]

Health risks from chemicals commonly found in polluted indoor air include pneumonia, stroke, lung cancer, respiratory lesions, decreased physical ability, early renal disease, leukemia, non-Hodgkin's lymphoma, respiratory

[101] WHO, *Health and Environment Linkages Initiative*. http://www.who.int/heli/en/
[102] *Ibid.*
[103] *Ibid.*
[104] WHO, *Climate Change Adaptation to Protect Human Health*. http://www.who.int/globalchange/projects/adaptation/en/
[105] *Ibid.*
[106] *Ibid.*
[107] *Ibid.*
[108] *Ibid.*
[109] WHO, *The Global Framework for Climate Services (GFCS) Adaptation Programme in Africa*. http://www.who.int/globalchange/projects/gfcs/en/
[110] *Ibid.*
[111] *Ibid.*
[112] *Ibid.*
[113] *Ibid.*
[114] *Ibid.*
[115] WHO, *Air Pollution*. http://www.who.int/ceh/risks/cehair/en/
[116] *Ibid.*
[117] *Ibid.*
[118] *Ibid.;* WHO, *Global Plan of Action for Children's Health and the Environment*. http://www.who.int/ceh/en/

infections, chronic obstructive pulmonary disease, and ischemic heart disease.[119] In 2010, WHO published its "Guidelines for Indoor Air Quality" which presents guidelines to protect public health from risks caused by chemicals frequently found in indoor air, including carbon monoxide, formaldehyde, polycyclic aromatic hydrocarbons, and others.[120] The guidelines provide a scientific basis for "legally enforceable standards," and are targeted toward groups and departments responsible for preventing health risks in the design and use of buildings.[121] In addition to outlining health impacts and guidelines for recommended levels and maximum exposures, the guidelines note ventilation, decreased exposures to tobacco smoke and environmental factors, and suggest banning dangerous products (e.g. mothballs containing naphthalene).[122]

Common sources of air pollution include vehicle emissions, household combustible devices, industrial facilities, and forest fires.[123] Indoor air pollution from solid fuels, which are used as a heat source and for cooking, is a huge contributor to global health problems including respiratory infections.[124] Women and children are at an increased risk of health impacts from exposure to indoor pollutants, who spend more time near the domestic hearth in many societies.[125] Impoverished communities often face the greatest impact of indoor air pollution since the lack of resources and financial prosperity restricts the accessibility of safer stove technologies.[126] Replacing inefficient stoves globally with cleaner ones, such as advanced combustion stoves, may prevent over 8% of all childhood mortality each year.[127] WHO provides technical support to Member States who have are working to promote cleaner fuels and improved housing situations, though the financial cost of such technology, particularly for impoverished populations is proving a significant barrier.[128]

In May of 2015, WHO adopted resolution 68/75 on "Health and the Environment: Addressing the Health Impact of Air Pollution."[129] This resolution notes the potential to prevent unnecessary deaths and decrease health expenses by reducing air pollution.[130] The resolution encourages Member States to increase the monitoring of pollution-related illnesses by creating health registries and developing air quality monitoring systems to help coordinate the tracking.[131] In addition to calling upon Member States to make improvements internally, the resolution calls for WHO Secretariat to improve its technical capacity to provide support to Member States, including the development of additional research on air quality and its relationship to health, a cost assessment of air improvement efforts, and providing support for Member States working to implement WHO's "Air Quality Guidelines of 2005" and "Indoor Air Quality Guidelines of 2014."[132]

In addition to the emphasis the WHO has had on addressing air pollution and its relation to health problems, air pollution poses environmental risks. In 2014, the United Nations Environment Assembly met, marking air pollution as a priority.[133] UNEP was called to prioritize air pollution efforts, strengthening existing projects including the Climate and Clean Air Coalition.[134] UNEP has existing projects in areas linked to indoor air pollution and transport emissions.[135] The shared goal of reducing air pollution lends itself to inter-agency cooperation.

[119] WHO, Regional Office for Europe, *WHO Guidelines for Indoor Air Quality*, 2010. http://www.euro.who.int/__data/assets/pdf_file/0009/128169/e94535.pdf
[120] *Ibid.*
[121] *Ibid.*
[122] *Ibid.*
[123] WHO, *Health Topics: Air Pollution*. http://www.who.int/topics/air_pollution/en/
[124] WHO, *Children's Environmental Health*. http://www.who.int/ceh/risks/cehair/en/
[125] *Ibid.*
[126] *Ibid.*
[127] World Health Organization & World Meteorological Organization, Atlas of Health and Climate, 2012. http://www.who.int/globalchange/publications/atlas/report/en/
[128] WHO, *Children's Environmental Health*. http://www.who.int/ceh/risks/cehair/en/
[129] WHO, *Health and the Environment: Addressing the health impact of air pollution (A68/A)*, 2015. http://apps.who.int/gb/ebwha/pdf_files/WHA68/A68_ACONF2Rev1-en.pdf
[130] *Ibid.*
[131] *Ibid.*
[132] *Ibid.*
[133] UNEP, *Historic UN Environment Assembly Calls for Strengthened Action on Air Quality, Linked to 7 Million Deaths Annually, Among 16 Major Resolutions*, 2014. http://www.unep.org/newscentre/Default.aspx?DocumentID=2791&ArticleID=10931
[134] *Ibid.*
[135] *Ibid.*

Water Security

Unclean water and poor sanitation are the second-leading cause of fatalities in children and 443 million school days are missed each year due to water-related illnesses; these easily preventable with the provision of clean water and sanitation.[136] Climate change is impacting water accessibility, which reduces access to clean water. Changes in extreme weather and increased temperatures are linked to changes in rainfall distribution, snowmelt, river-flows, and the availability of groundwater.[137] While water access is already an issue of concern, climate change is expected to worsen the problem, which will impact all aspects of the economy, including health.[138]

Water-related impacts to human health that are linked to climate change include increased exposure to health risks such as diseases and contaminants, decreased access to health services for communities dependent on existing aquatic ecosystems to ensure their livelihoods, and decreased nutritional status of aquatic ecosystems.[139] Climate change is also linked to increased droughts and flooding, which both create health risks.[140] With competing demands for water for sanitation, agriculture, irrigation, hydropower, transportation and other sectors, water resources are over-stretched in times of scarcity and drought.[141] Water scarcity places a strain on the environment and can lead to potential conflict over these resources.[142]

There has been significant progress on improving access to potable water that was noted in The Millennium Development Goal Report (2015).[143] While access to drinking water is noted as a fundamental human right, access to water for crops is not as clearly recognized.[144] Climate change has impacted access to food through changes in species, weather, water, and ice.[145] With climate change, regional habitats are changing impacting the availability of plants to gather and animals to hunt, especially in aquatic environments.[146] Climate change is also creating droughts and water scarcity, which leads to a lack of sufficient water for agriculture, resulting in low crop yields, and inadequate nourishment.[147] Additionally, global climate change is associated with the disruption of food-producing ecosystems which impacts food availability.[148] With the projected population growth, it is estimated that the food demand will increase by 70% by 2050 that could lead poor nutrition exacerbation symptoms of existing health conditions or the development of malnutrition.[149] Poverty and inappropriate land use put communities at greater susceptibility to devastation during a period of drought.[150] Drought-related mortality is most frequently observed in individuals in regions with civil or political conflicts, suggesting that these regions may face higher risks.[151]

UN-Water has recommended creating and implementing decision-making systems on country-specific levels that account for climate change impacts.[152] Improving and sharing information on successful water management leads to more pragmatic and sound decisions on water use and distribution.[153] Existing water and sanitation services are not adapting to climate change fully, despite their capacities for adaptation.[154] Water, sanitation, and all utilities could

[136] United Nations, *International Decade for Action 2005 to 2015*, 2015. http://www.un.org/waterforlifedecade/human_right_to_water.shtml
[137] UN Water, *Climate Change Adaptation: The Pivotal Role of Water*, 2009. http://www.unwater.org/downloads/unw_ccpol_web.pdf
[138] *Ibid.*
[139] *Ibid.*
[140] *Ibid.*
[141] *Ibid.*
[142] *Ibid.*
[143] United Nations, *Millennium Development Goals and Beyond 2015*, 2015. http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf
[144] UN Department of Economic and Social Affairs, *Water and Food Scarcity*. http://www.un.org/waterforlifedecade/food_security.shtml
[145] *Ibid.*
[146] *Ibid.*
[147] UN Water, *Climate Change Adaptation: The Pivotal Role of Water*, 2009. http://www.unwater.org/downloads/unw_ccpol_web.pdf
[148] UN Department of Economic and Social Affairs, *Water and Food Scarcity*. http://www.un.org/waterforlifedecade/food_security.shtml
[149] *Ibid.*
[150] World Health Organization & World Meteorological Organization, *Atlas of Health and Climate*, 2012. http://www.who.int/globalchange/publications/atlas/report/en/
[151] *Ibid.*
[152] UN Water, *Climate Change Adaptation: The Pivotal Role of Water*, 2009. http://www.unwater.org/downloads/unw_ccpol_web.pdf
[153] *Ibid.*
[154] *Ibid.*

benefit from systematic assessments of "climate change resilience."[155] UN-Water, the UN inter-agency mechanism for all freshwater related issues, recommends that long-term climate adaptation methods be evaluated for their impact on human health.[156]

Disease Transmission

Global climate change has been linked to changes in human health by altering the geographic scope and seasonality of some infectious diseases.[157] In 2008, WHO resolution 61/14 on "Climate Change and Health" recognized scientific evidence linking climate change and human health through the prevalence of diarrheal disease, cardio-respiratory diseases, and changes in infectious disease vector distribution.[158]

Climate change has an impact on waterborne diseases and diseases spread by insects, including malaria, Chikungunya virus, and dengue fever through mosquito migration to new areas and expanded breeding grounds for mosquitoes. [159] Changes in the ecosystem, such as increased mosquito and tick populations, have contributed to the spread of diseases like malaria and the Zika virus due expanded geographic areas for disease transmission and lengthened transmission seasons and influenced by the change in climate.[160] Water-related vector-borne diseases are on the rise in areas where eradication efforts had previously been successful or the diseases had not been present.[161] In Italy, Chikungunya virus is emerging, and dengue fever is becoming a growing problem in Argentina, northern Australia, and southern China.[162] Malaria kills nearly 600,000 people each year; African children under five years of age are disproportionately impacted by malaria.[163] The transmission seasons of vector-borne diseases are being lengthened with changing climates, and some diseases' geographic ranges are also expanding.[164]

Of the nearly 2 million people that die each year from diarrheal disease, 80% are children.[165] Cholera, a diarrheal disease, is often spread due to poor sanitation and lack of accessible water; increased infections of cholera are seen after extreme weather events (like hurricanes, earthquakes, typhoons, and flooding) where the water systems are disturbed, contaminating drinking water with waste water.[166]

Conclusion

Although the functions of the health systems that need strengthening will vary between regions, it is necessary to be specific about the targeted health functions that need improving to address the health impacts of climate change.[167] Air pollution, water security, and disease transmission are key areas of concern in the topic of climate change and health.[168] Since climate change acts over long periods of time, involves many factors, and is impacted by social and economic factors, it is different than many traditional health issues that WHO faces.[169] Climate change requires actions that develops core health systems in addressing these health concerns while working with organizations outside of the field of health to address the root causes of these health risks.[170] The global community is working

[155] *Ibid.*
[156] *Ibid.*
[157] *Ibid.*
[158] World Health Assembly, *Climate Change and Health (WHA61.14),* 2008. http://apps.who.int/gb/ebwha/pdf_files/WHA61-REC1/A61_REC1-en.pdf
[159] WHO, *Climate change and health*, September 2015. http://www.who.int/mediacentre/factsheets/fs266/en/
[160] WHO, *Mosquito control: can it stop Zika at source?*, February 2016. http://www.who.int/emergencies/zika-virus/articles/mosquito-control/en/
[161] UN Water, *Climate Change Adaptation: The Pivotal Role of Water*, 2009. http://www.unwater.org/downloads/unw_ccpol_web.pdf
[162] *Ibid.*
[163] WHO, *Climate change and health*, September 2015. http://www.who.int/mediacentre/factsheets/fs266/en/
[164] *Ibid.*
[165] World Health Organization & World Meteorological Organization, *Atlas of Health and Climate*, 2012. http://www.who.int/globalchange/publications/atlas/report/en/
[166] *Ibis.*
[167] WHO, *Strengthening Health Resilience to Climate Change*. http://www.who.int/phe/climate/conference_briefing_1_healthresilience_27aug.pdf
[168] World Health Organization & World Meteorological Organization, *Atlas of Health and Climate*, 2012. http://www.who.int/globalchange/publications/atlas/report/en/
[169] WHO, *About WHO*. http://www.who.int/about/en/
[170] *Ibid.*

towards a better use of available technologies and better policies and legislature to reduce pollutants.[171] This concerted effort will require increased data and information on these types of illnesses, and necessitate greater international collaboration to deal with climate change and health holistically.[172]

- What changes need to be made to the implementation of existing programs to create sustainable change?
- How can alternative energy sources impact human health and how can alternative energy sources be adapted to protect human health?
- What role can legislation and regulations for pollution play in local and global health benefits?
- How can the international community better equip Ministries of Health and national health agencies to deal with the impacts of global climate change?

[171] World Health Organization & World Meteorological Organization, *Atlas of Health and Climate*, 2012. http://www.who.int/globalchange/publications/atlas/report/en/

[172] WHO, *Climate Change and Health (EB124.R5)*, 2012. http://www.who.int/globalchange/mediacentre/events/progressreportwhaclimateandhealt.pdf

II. Global Burden of Mental Disorders and the Need for a Comprehensive, Coordinated Response from Health and Social Sectors at the Country Level

"Mental health problems… are real disorders. They cause death and disability. They cause suffering. They have symptoms. And they can be managed. […] No matter how weak the health system or constrained the resources, something can always be done" – Margaret Chan, Director-General of the World Health Organization[173]

Introduction

According to the World Health Organization (WHO) Constitution, health is "a state of physical, mental and social wellbeing and not merely the absence of disease and infirmity." [174] Mental health specifically refers to the state of well-being in which an individual has the potential and capability to "cope with the normal stresses of life… work productively and fruitfully […] contribute to her or his community."[175]

Accounting for over 13% of the global burden of disease, mental disorders affect hundreds of millions of people worldwide.[176] The term "mental disorders," as defined in the tenth edition of the *International Classification of Diseases and Related Health Problems* (ICD-10), applies to a wide range of mental, neurological, and behavioral disorders.[177] While noncommunicable diseases (NCDs), and substance and alcohol abuse do comprise a portion of this definition of mental disorders, many other conditions, including depression, bipolar affective disorder, schizophrenia, anxiety disorders, intellectual disabilities, and developmental disorders are also included.[178] Additionally, as the science and medical field continue to find new evidence and data of such disorders, international standards require frequent updates and revisions to facilitate the task of classifying mental disorders.[179]

While mental disorders are largely a health concern, they also have much broader implications and effects, including socioeconomic challenges such as poverty and homelessness; human rights violations; and ongoing stigma and discrimination, according 2011 report of the WHO Executive Board on "global burden of mental disorders and the need for a comprehensive coordinated response from health and social sectors at the country level."[180] Additionally, between 76% and 85% of persons with severe mental disorders lack access to adequate treatment in low- and middle-income Member States.[181] The numbers are only slightly better in high-income countries, but still high, with 35% and 50% of these individuals receiving no treatment.[182] While cultural differences have led to different perceptions of mental health and differing ideas for a comprehensive response to mental disorders, WHO has encouraged Member States to increase coordination and partnership with sectors outside of health to help prevent and reduce the number of mental disorders.[183]

International Framework

The right to health and well-being of an individual is recognized in several human rights instruments. The *Universal Declaration of Human Rights* (1948) (UDHR) states that "everyone has the right to a standard of living adequate for the health and well-being of himself and of his family."[184] Article 12 of the *International Covenant on Economic, Social and Cultural Rights* (1966) (ICESCR) affirms the "right of everyone to the enjoyment of the highest

[173] Chan, *Closing the Mental Health Gap*, 2010. http://www.who.int/dg/speeches/2010/mhGap_forum_20101007/en/
[174] WHO, *Constitution of the World Health Organization*, 2006. http://www.who.int/governance/eb/who_constitution_en.pdf
[175] WHO, *Mental health: a state of well-being*, 2014. http://www.who.int/features/factfiles/mental_health/en/
[176] World Health Assembly, *The global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level (WHA65.4)*, 2012. http://www.who.int/mental_health/WHA65.4_resolution.pdf
[177] WHO, *International Statistical Classification of Diseases and Related Health Problems 10th Revision* (ICD-10), 2016. http://apps.who.int/classifications/icd10/browse/2016/en#/V
[178] WHO, *Mental Health Action Plan 2013-2020*, 2013. http://apps.who.int/iris/bitstream/10665/89966/1/9789241506021_eng.pdf%3b
[179] WHO, *The ICD-10 Classification of Mental and Behavioural Disorders*, 1993. http://www.who.int/classifications/icd/en/bluebook.pdf
[180] *Ibid.*
[181] *Ibid.*
[182] *Ibid.*
[183] World Health Assembly, *The global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level (WHA65.4)*, 2012. http://www.who.int/mental_health/WHA65.4_resolution.pdf
[184] UN General Assembly, *Universal Declaration of Human Rights*, 1946. http://www.un.org/en/universal-declaration-human-rights/index.html

attainable standard of physical and mental health."[185] The *Declaration of Alma-Ata* (1978) reaffirmed the WHO definition of health including mental and social well-being.[186] The declaration also recognizes the important role of social and economic sectors and the health sector with regards to the formulation of national policies, strategies and plans to achieve goals related to not only physical but also mental health.[187]

On 17 December 1991, the General Assembly (GA) adopted resolution 46/119, on the "Principles for the protection of persons with mental illness and the improvement of mental health care."[188] In regards to mental disorders, these principles emphasized the importance of ensuring fundamental freedoms and basic rights for all persons with mental disorders with regards to the UDHR, ICESCR, and *International Covenant on Civil and Political Rights* (1966); determining mental disorders in accordance with international medical standards; and appropriate use of mental health knowledge and skills by mental health officials.[189] In 2011, the General Assembly (GA) adopted resolution 65/95 on "Global Health and Foreign Policy" that recognized that mental health problems not only contribute to the global burden of disease but also pose a significant economic and social burden to all societies.[190]

Echoing the mental health concerns in GA resolution 65/95, in 2012, the World Health Assembly (WHA) adopted resolution 65/4 on "the global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level," which urged Member States to address the socioeconomic consequences by developing and strengthening national policies and strategies.[191] This resolution also recalled World Health Assembly Resolution 55/10 on "Mental health: responding to the call for action," which urged Member States to provide support to the WHO's action program for mental health through increasing investments in mental health to guarantee and safeguard the well-being of all populations.[192]

The Sustainable Development Goals (SDGs) have placed renewed focus on this topic as well. SDG 3, target 3.4 aims to promote mental health and wellbeing for all by mitigating the consequences of noncommunicable diseases through prevention and treatment by 2030, as well as preventing and treating substance abuse and addiction.[193]

Role of World Health Organization and the International System

In 2012, the WHA held its 65th session to discuss a wide range of health issues, including mental health.[194] The meeting concluded with the adoption of 21 resolutions on these issues, including calling for a comprehensive, coordinated response to addressing mental disorders at the national level."[195] In particular, Member States recognized that mitigating mental disorders require approaches such as programs to support providers and families through the provision of social and medical services and to reintegrate persons with mental disorders into society and the economy.[196]

In 2015, the seventh WHO Mental Health Gap Action Programme (mhGAP) forum was held in Geneva, Switzerland, which included Member States, UN bodies and other intergovernmental organizations (IGOs),

[185] Office of the High Commissioner for Human Rights, *International Covenant on Economic, Social and Cultural Rights*, 1966. http://www.ohchr.org/Documents/ProfessionalInterest/cescr.pdf
[186] WHO, *Declaration of Alma- Ata*, 1978. http://www.who.int/publications/almaata_declaration_en.pdf
[187] *Ibid.*
[188] Office of the High Commissioner for Human Rights. *Principles for the protection of persons with mental illness and the improvement of mental health care.* 12 June 2016. http://www.who.int/mental_health/policy/en/UN_Resolution_on_protection_of_persons_with_mental_illness.pdf
[189] *Ibid.*
[190] General Assembly, *Global Health and Foreign Policy (A/RES/65/95)*, 2012. http://undocs.org/A/RES/65/95
[191] World Health Assembly, *The global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level (WHA65.4)*, 2012. http://www.who.int/mental_health/WHA65.4_resolution.pdf
[192] World Health Assembly, *Mental health: responding to the call for action (WHA55.10)*, 2002. http://www.who.int/nmh/about/wha55_10_resolution_mentalhealth.pdf
[193] UN, General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015. http://undocs.org/A/RES/70/1
[194] WHO, *65th World Health Assembly closes with new global health measures*, 26 May 2012. http://www.who.int/mediacentre/news/releases/2012/wha65_closes_20120526/en/
[195] *Ibid.*
[196] *Ibid.*

academic institutions, and non-governmental organizations (NGOs).[197] In addition to exchanging information on the mhGAP plan and strengthening collaboration between these stakeholders, this forum allowed a pathway for better integration of mental health into national policies and practices.[198] Most recently, the WHO has also collaborated with the World Bank to co-host a series of events, titled "Making mental health a global development priority," which aims to move the issue of mental health onto the global development agenda.[199] Consisting of a wide range of stakeholders, from finance ministers to bilateral organizations to technology innovators and civil society, the two-day series of events will emphasize the need to increase investments in mental health services with the long-term goals of health, social and economic benefits.[200]

Outside of the WHO and the UN system, other organizations and institutions exist around the world to promote mental health and to reduce the incidence of mental disorders, such as the South African Mental Health Advocacy Movement (SAMHAM), which works to give persons with mental disorders a voice because such individuals are ultimately "experts" in mental health.[201] Primarily focusing on reducing the human rights violations persons with mental disorders face, namely marginalization, and discrimination, SAMHAM has noted the importance of including these individuals in the designing of services and tailoring of programs with special consideration to cultural and contextual issues.[202] The Lisbon Institute of Global Mental Health (LIGMH) is a research institution which aims to generate innovate knowledge, build capacity, and provide technical collaboration to governments and non-governmental organizations.[203] The LIGMH undertakes research which aims to understand the relationship between a struggling economy and its effects on persons with mental disorders.[204] With this information, new policies, programs, and interventions aimed at reducing health inequalities and mental health problems will be proposed.[205]

Key Issues

Mental Health and Non-Communicable Diseases (NCDs)

Non-communicable diseases (NCDs), also known as chronic diseases, are defined as "diseases of long duration, generally slow progression" and are the key reason for adult mortality and morbidity globally.[206] NCDs often include cardiovascular diseases, cancers, respiratory diseases, and diabetes.[207] However, NCDs are also associated with mental disorders and related conditions.[208] NCDs disproportionately affect low- and middle-income Member States where nearly three-quarters NCD deaths worldwide occur annually.[209] Adding in high-income Member States, NCDs kill up to 38 million people on an annual basis.[210]

The 2012 WHO Secretariat report (A/65/10) on the global burden of mental disorders acknowledged that there is a correlation between mental disorders and NCDs.[211] In other words, mental disorders can predispose an individual to

[197] WHO, *Mental health innovations and their uptake into policy and practice*, 2015. http://www.who.int/mental_health/mhgap/report_forum_2015.pdf?ua=1
[198] *Ibid.*
[199] WHO, mhGAP Newsletter, *Making mental health a global development priority*, May 2016. http://www.who.int/mental_health/mhgap/newsletter_may_2016.pdf?ua=1
[200] World Bank Live, *Out of the Shadows: Making Mental Health a Global Development Priority*, 2016. http://live.worldbank.org/out-of-the-shadows-making-mental-health-a-global-development-priority
[201] SA Federation for Mental Health, *Advocacy*. http://www.safmh.org.za/index.php/who-we-are/what-we-do/advocacy
[202] *Ibid.*
[203] Lisbon Institute of Global Mental Health, *Home*. http://www.lisboninstitutegmh.org
[204] *Ibid.*
[205] *Ibid.*
[206] Schwab & Frenk, *The Global Economic Burden of Non-Communicable Diseases*, 2011. http://www3.weforum.org/docs/WEF_Harvard_HE_GlobalEconomicBurdenNonCommunicableDiseases_MethodologicalAppendix_2011.pdf
[207] WHO, *Noncommunicable Diseases*, 2015. http://www.who.int/mediacentre/factsheets/fs355/en/
[208] UN General Assembly, *Political Declaration of the High-Level Meeting of the General Assembly on the Prevention and Control of Non-Communicable Diseases*, 2011. http://www.who.int/nmh/events/un_ncd_summit2011/political_declaration_en.pdf
[209] WHO, *Noncommunicable Diseases*, 2015, http://www.who.int/mediacentre/factsheets/fs355/en/
[210] *Ibid.*
[211] WHO, *Global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level (A65/10)*, 2012, http://apps.who.int/gb/ebwha/pdf_files/WHA65/A65_10-en.pdf

an NCD, and vice versa.[212] Out of the 38 million deaths every year, 15 million people with both mental disorders and NCDs die prematurely.[213] Further, NCDs and mental disorders often push sufferers into poverty from, not only the lack of social and economic opportunities but also the expense of necessary health services.[214] Such expenses disproportionately impact vulnerable and socially disadvantaged groups.[215] More specifically, when compared to persons with mental disorders in high- income countries, those in low-income countries are more likely to fall into poverty because household resources are often quickly drained seeking care.[216]

Persons with dementia are one example of a vulnerable and socially disadvantaged group.[217] Ultimately, dementia is considered as a mental disorder as a result of conditions that "affect memory, thinking, behavior and the ability to perform everyday activities."[218] The socioeconomic effects of dementia are significant, often impacting families and friends on a personal, financial, and emotional level.[219] In particular, medical and social care costs in caring for persons with dementia are likely to increase rapidly, especially in low- and middle-income Member States.[220] Alzheimer's Disease International, a partner of WHO, has recommended governments to develop policies that ensure social protection for vulnerable people with dementia and support to caregivers as a solution to mitigate the socioeconomic effects of dementia.[221]

People with Mental Disorders as a Vulnerable Group

Depending on the context, certain individuals and groups in society may have a higher risk of experiencing mental disorders.[222] These groups include people with chronic health conditions; adolescents and children with autism and other developmental disorders; people exposed to conflict, natural disasters or other humanitarian emergencies; and prisoners.[223] While these groups are more susceptible to mental disorders, persons with existing mental disorders specifically comprise a separate, unaddressed vulnerable group.[224] Similar to other vulnerable groups, persons with mental disorders have a higher chance than the general population of risking exposure to stigma and discrimination; violence and abuse; political, social and economic barriers; and lack of access to health and social services.[225] Further, as a result of ongoing stigma and discrimination, many individuals are excluded from society.[226]

Vulnerability and mental disorders directly relate to each other, as both are most commonly the result of social, civil, political, economic and environmental inequalities, which often stem from discrimination.[227] For example, persons with mental disorders have a high chance of falling into poverty because of discrimination, or social exclusion.[228] In particular, persons with mental health conditions find themselves struggling with finding employment as a result of their symptoms.[229] Without employment, persons with mental disorders often fall deeper into poverty, meaning these individuals lack the ability to pay for treatment expenses.[230] Further, many find themselves without access to

[212] *Ibid.*
[213] Chisholm & Banatvala, *Noncommunicable Diseases and Mental Disorders*, 2014. http://www.imf.org/external/pubs/ft/fandd/2014/12/pdf/jonas.pdf
[214] *Ibid.*
[215] WHO, *Noncommunicable Diseases*, 2015. http://www.who.int/mediacentre/factsheets/fs355/en/
[216] Chisholm & Banatvala, *Noncommunicable Diseases and Mental Disorders*, 2014. http://www.imf.org/external/pubs/ft/fandd/2014/12/pdf/jonas.pdf
[217] Wilmo & Prince, *World Alzhiemers Report 2010: The Global Economic Impact of Dementia*, 2010. http://www.alz.co.uk/research/files/WorldAlzheimerReport2010.pdf
[218] *Ibid.*
[219] *Ibid.*
[220] *Ibid.*
[221] *Ibid.*
[222] World Health Organization, *Mental Health Action Plan 2013-2020*, 2013. http://apps.who.int/iris/bitstream/10665/89966/1/9789241506021_eng.pdf?ua=1
[223] *Ibid.*
[224] WHO, *Mental Health and Development: Targeting people with mental health conditions as a vulnerable group*, 2010. http://apps.who.int/iris/bitstream/10665/44257/1/9789241563949_eng.pdf
[225] *Ibid.*
[226] *Ibid.*
[227] *Ibid.*
[228] *Ibid.*
[229] *Ibid.*
[230] *Ibid.*

income, assets and services.[231] As a whole, although persons with mental disorders make up a vulnerable group, many are still excluded from the larger community and national policies and plans.[232]

Humanitarian emergencies often result in large-scale displacements, food shortages, and outbreaks of diseases, violations of human rights and dignity; after emergencies, people also have a higher chance of suffering from a wide range of mental disorders.[233] Such events often disrupt social structures and existing provisions for the care of persons with severe, pre-existing disorders.[234] Failing to provide sufficient and adequate psychological support to those that need it 'can be detrimental not only to the wellbeing of the individual, but also compromise physical health, prenatal functioning and the wellbeing of children and other family members.'[235] Despite the barriers to the provision of adequate care and support, emergency situations are opening to transform mental health care and "not to be missed because mental, neurological and substance use disorders are among the most neglected problems in public health," especially in emergency situations.[236] During emergencies, issues such as, difficulties coordinating agencies and actors providing mental health and psychological support, prevent the reduction of mental disorders.[237] In addition, significant gaps remain worldwide in the realization of comprehensive, community-based mental health care, especially in low- and middle-income Member States, where resources are often scant.[238]

Prisoners comprise another especially vulnerable group in relation to mental disorders.[239] Many prisoners often suffer from some sort of mental disorder before admission to prison and their conditions may further worsen as a result of imprisonment.[240] Currently, nearly half of the 9 million people in penal institutions around the world struggle with personality disorders and another one million with a "serious mental disorder," such as psychosis.[241] Over time, mental disorders become more severe due to numerous factors including poor prison conditions, lack of purposeful activity, and violence (physical, verbal, racial or sexual).[242] To reduce the number of persons with mental disorders who are incarcerated, the WHO European Health in Prisons Project has recommended governments to consider implementing mental harm reduction strategies into national health, penal and social policies.[243]

Prevention and Management of Mental Disorders

Mental disorder prevention aims at reducing the incidence, prevalence, and recurrence of mental disorders.[244] WH''s guidance on primary prevention of mental, neurological and psychosocial disorders, first published in 1998 and updated in 2004, serves as the primary guidance published by the organization on this topic.[245] One significant gap in existing prevention efforts is the reliance by Member States on short-term programs, rather than long-term, structural processes and programs that would have a lasting impact.[246] Further, funding for research on mental health prevention prioritizes short-term interventions due to the difficulty associated with long-term research which

[231] Office of the High Commissioner for Human Rights, *Reducing Poverty by Tackling Social Exclusion*, 2005. http://www2.ohchr.org/english/issues/development/docs/socialexclusion.pdf
[232] [232] WHO, *Mental Health and Development: Targeting people with mental health conditions as a vulnerable group*, 2010. http://apps.who.int/iris/bitstream/10665/44257/1/9789241563949_eng.pdf
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[235] Young, Holly. *Refugees and Mental Health: 'These people are stronger than us'*, 14 September 2015. http://www.theguardian.com/global-development-professionals-network/2015/sep/14/refugees-and-mental-health-pyschological-support-msf
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[237] *Ibid.*, p. 5.
[238] *Ibid.*
[239] WHO, *Mental Health and Prisons*, 2007. http://www.who.int/mental_health/policy/development/MH&PrisonsFactsheet.pdf
[240] *Ibid.*
[241] WHO, *Health in Prisons: A WHO Guide to the essentials in prison health*, 2007. http://www.euro.who.int/__data/assets/pdf_file/0009/99018/E90174.pdf?ua=1
[242] *Ibid.*
[243] *Ibid.*
[244] WHO, *Prevention of Mental Disorders: Effective Interventions and Policy Options*, 2004. http://apps.who.int/iris/bitstream/10665/43027/1/924159215X_eng.pdf?ua=1.
[245] *Ibid.*
[246] Jacka & Reavley, *Prevention of mental disorders: evidence, challenges and opportunities*, 2014. http://bmcmedicine.biomedcentral.com/articles/10.1186/1741-7015-12-75.

requires consistent follow-up periods with persons with mental disorders over several years or even decades.[247] Governments frequently choose not to implement long-term solutions due to cost, whether political or financial.[248] Further, health care providers, public health authorities, and health professionals often do not see prevention as their primary responsibility, especially when interventions are typically implemented by sectors outside of health services.[249] Governments and health sectors have failed to adequately address the socioeconomic consequences of such disorders.[250]

Mostly recently, WHO published a manual to guide health professionals in response to the scarcity of mental health professionals to help persons with mental disorders.[251] While some mental disorders are severe and require the help of such professionals, such as schizophrenia, "low-intensity" mental disorders can be treated without the involvement of trained individuals in mental health care.[252] In particular, the manual, "Problem Management Plus," proposes methods of care for persons with minor depression and other minor mental disorders.[253] While not a diagnostic tool, the manual aims to address both psychological issues and social problems.[254] While "Problem Management Plus" is a good resource to reduce incidences of minor and common mental disorders, management of "serious" mental disorders still remain a challenge, especially among general practitioners (GPs).[255] Further, despite reforms in mental health care, early diagnosis and management of various disorders and evidence-based programmes and policies to facilitate early diagnosis and management of mental disorders have yet to be implemented in Member States.[256] Even with such programmes already in place around the world, there are still the questions of their effectiveness of the kinds of evidence-based programmes that can be introduced in developing Member States.[257]

Conclusion

Overall, mental disorders are not limited to mental and physical challenges, but are also connected to social and economic issues. [258] Many persons with mental disorders often encounter several barriers that prevent them from fully participating in society.[259] However, the personal implications of these disorders do not negate their wider impact; mental disorders are a global burden and can have negative effects on whole societies.[260] Although efforts have been made at the international level to mitigate mental disorders, many of these disorders still lack a comprehensive and coordinated response.[261] Although mental health is slowly gaining recognition in development agendas at the global level, guarantees of mental health are still excluded from national policies and plans.[262]

- What types of policies and programmes can governments develop in ensuring the inclusion of persons with mental disorders?
- How can the health sectors work with social sectors to provide access to care and services for persons with mental disorders?

[247] *Ibid.*
[248] *Ibid.*
[249] WHO, *Prevention of Mental Disorders: Effective Interventions and Policy Options*, 2004. http://apps.who.int/iris/bitstream/10665/43027/1/924159215X_eng.pdf?ua=1.
[250] *Ibid.*
[251] WHO, *Problem Management Plus (PM+)*, 2016. http://apps.who.int/iris/bitstream/10665/206417/1/WHO_MSD_MER_16.2_eng.pdf?ua=1.
[252] *Ibid.*
[253] *Ibid.*
[254] *Ibid.*
[255] Fleury, et al., *General practitioners' management of mental disorders: A rewarding experience with considerable obstacles*, 2012. http://bmcfampract.biomedcentral.com/articles/10.1186/1471-2296-13-19
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[259] *Ibid.*
[260] *Ibid.*
[261] *Ibid.*
[262] WHO, *Mental Health and Development: Targeting people with mental health conditions as a vulnerable group*, 2010. http://apps.who.int/iris/bitstream/10665/44257/1/9789241563949_eng.pdf

- How can high-income Member States assist low- and middle-income Member States with the development appropriate mental disorder prevention strategies?

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