



IFMSA

International Federation of
Medical Students' Associations

IFMSA Policy Document Health, Environment and Climate Change

Proposed by Team of Officials

Presented to the IFMSA General Assembly March Meeting 2020, in Rwanda.

Policy Statement

Introduction

It is proven that climate change puts the lives and wellbeing of billions of people at increased risk. Health impacts can be directly mediated through weather events, or indirectly mediated through the effects on economies, access to healthcare, social structure and ecosystems. Climate action also offers a great opportunity to improve global health through health co-benefits, which include reduced air pollution, dietary change and increased physical activity, leading to a reduction in the burden of disease such as cardiovascular and respiratory diseases.

IFMSA position

The IFMSA believes that our duty of care not only includes the future of our individual patients, but also that of communities locally, nationally and globally. Therefore, the IFMSA acknowledges i) the direct attribution of human activity to climate change, and ii) the urgent threat climate change poses to global health. We stress on the importance of climate action including the health co-benefits of mitigation and adaptation strategies and the need for climate resilient health systems that can protect the promotion and provision of quality healthcare for all. Health should be a central consideration to the work and discussions on climate change.

Call to action

Therefore, the IFMSA calls on:

Governments to:

1. Meet an emissions trajectory consistent with the limiting of the global temperature rise to 1.5 degrees above pre-industrial levels;
2. Adopt national emissions trajectories consistent with their current and historical responsibility and recognizing international and intergenerational equity issues surrounding climate change;
3. Adopt a comprehensive approach to consider the health impacts of climate change when setting targets in their Nationally Determined Contributions (NDCs);
4. Mobilize health advocacy organizations to consult Ministries of Health and of the Environment to integrate health considerations into the NDCs review process;
5. Create a society wide transition to a fossil free economy;
6. Rapidly divest from fossil fuels and immediately withdraw fossil subsidies;
7. Rapidly adopt no-regret climate and health policies;
8. Provide a strong mechanism to address loss and damages supported by financial means that are not in competition with climate finance for mitigation and adaptation;
9. Develop and implement climate change education, training, public access to information, public awareness, public participation and international cooperation.
10. Address and neutralize misinformation/disinformation campaigns, and be held accountable for the adoption of informed refutational practices.



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The World Health Organization to:

1. Increase eco-medical literacy and disseminate global climate health information that supports climate change stakeholders, policy-makers, researchers and practitioners;
2. Strengthen the initiative of the WHO Country Profiles on Climate and Health to support health sector advocacy;
3. Monitor the contribution of countries' policies and actions to the Sustainable Development Goals on climate change and health;
4. Provide a platform of multilateral national communication and collaboration on ambitious NDCs.

The UNFCCC to:

1. Provide an institutionalized space within the UNFCCC framework for climate health considerations to be discussed;
2. Ensure accountability and transparency for climate action by countries through continuous analysis and monitoring of NDCs;
3. Encourage and applaud no-regret climate policies which generate greater health benefits than their cost.

The Health Sector, Universities and Medical Faculties to:

1. Integrate climate change core competencies in medical education including its health impacts and co-benefits, its interlinkage with clinical and public health practice, and the role of the healthcare sector in adapting and mitigating to climate change;
2. Develop climate health capacity building programs targeting health and educational professionals;
3. Design sustainable healthcare facilities and universities through active recycling and low non-recyclable material use, the use of clean energy resources, accessibility by public transport, and provision of sustainable food;
4. Allocate resources for research and activities, including student-led initiatives, to understand the trends, geographical distribution, and evolution of new and emerging health issues related to climate change and their impacts on social and economic structures;
5. Disseminate the outcomes of climate health advocacy among national and subnational governments and health practitioners;
6. Develop sustainable and climate resilient health systems, infrastructure and technologies.

IFMSA National Member Organizations (NMOs) and medical students to:

1. Use the *IFMSA recommendations for sustainable and climate-friendly meetings* as a guidance to limit the environmental impact of IFMSA meetings;
2. Conduct student-led activities on climate health and promote sustainable lifestyle habits;
3. Collaborate with universities and other educational bodies to integrate climate change and health competencies in medical education;
4. Urge governments to increase ambition in climate action and implement their NDCs.



Position Paper

Background

In 2009, the first Lancet Commission called climate change “*the biggest global health threat (of) the 21st century,*” stating that the impacts of climate change on health will exacerbate social, economic and gender inequalities [1]. Since then, a growing body of evidence is providing insight into the impact of climate change on health, leading to The Lancet Countdown report in 2019 on how climate change impacts the future life and health outcomes of a child born today [2]. The World Health Organization highlighted the direct and indirect connections between climate change and health in various publications. Direct health impacts occur due to changes in temperature and increased frequency of severe weather events, which can lead to physical injuries or heat-related deaths through dehydration or exacerbation of cardiac and pulmonary disease. Indirect impacts arise from changes in ecological systems and human systems induced by climate change such as: *i)* environmental degradation leading to more forced migration and civil conflict, *ii)* changes in water and food supply, increasing malnourishment and diarrheal disease, *iii)* increased allergens and air pollution, contributing to respiratory and cardiovascular diseases, *iv)* changes in disease ecology, resulting in outbreaks of infectious and vector borne diseases. Moreover it is presumed that climate change additionally impacts our mental health. Extreme weather events are associated with higher incidence of depression, post-traumatic stress disorder and anxiety, particularly when those who are displaced have little advanced warning [3]. The health impacts vary between geographical regions and among socioeconomic groups, with some areas being affected more negatively than others [4]. Climate change is disproportionately affecting vulnerable populations (elderly, children, Indigenous communities, women, and coastal populations) and low-income and middle-income countries (LMICs), placing the burden of disease on those least responsible [1].

The wide-ranging impacts of climate change on health highlight that climate change adaptation (any adjustment in response to the expected impact/risk of climate change) and mitigation (all human activities aimed to reduce impact) are essential for protecting health, as well as environmental and social justice, and should be a public and global health priority in both policy and practice [5]. Loss and damage is a relatively novel area of action in climate change which reflects the inevitable impacts of climate change that we are unable to mitigate or adapt to. It has been adopted in the Paris Agreement and it now forms a key element of climate negotiations to address past, current and projected future emissions. It also recognizes how international cooperation is required in high impact events to support developing countries [6].

Discussion

Political Processes

In 2015, at the historic Paris Climate Conference, the Paris Agreement was signed, which committed nations to limit global rise in temperature to 1.5 degrees Celsius. The Agreement was signed by 196 countries. At its heart was the creation of the Nationally Determined Contributions, that show each country’s efforts to mitigate and adapt to the effects of climate change [7].

With the ratification of the Paris Agreement, parties acknowledged that “*Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, [...] as well as gender equality, empowerment of women and intergenerational equity*” [7]. However, a study by the World



Medical Association indicated that out of the 184 Intended Nationally Determined Contributions (INDCs) analyzed, only 121 (65.8%) include a mention of health - of which 90 (74.4%) include health in the context of adaptation and 28 (23.1%) include health in the context of mitigation. This illustrates an inadequate integration of NDCs, NAPs, development plans, other sector plans and policies [8].

The WHO collaborates with several other United Nations agencies to prevent deaths from environmental risk factors caused by climate change. Moreover, the WHO and the United Nations Environment Programme recently signed a collaborative framework for both immediate and long term actions to reduce mortality attributable to the environment and climate change [9]. Additionally, one of the UN Development Programme's focus areas is Climate and Disaster Resilience, recognizing that resilience to climate disasters strengthens access to healthcare, as well as the interconnectedness of the environment, sustainable development and health [10].

The 71st World Health Assembly recently noted a report by the WHO Director-General calling for alignment of national environmental risk factor and disease monitoring with the WHO's 2019-2023 General Programme of Work, including monitoring and assessing funding and financing of health in relation to climate change [11].

The World Bank, a United Nations agency, is one of the largest lenders to governments, as well as development data collectors. In 2016 it adopted a new framework that ensures that its loans do not lead to actions that are deleterious to its people or the environment. The implementation of this Environmental and Social Framework (ESF) has begun in 2018 and contains 11 detailed operational policies. Furthermore, it prioritizes loans for renewable energy capacity expansion of countries [12].

It is recognized that there is an urgency to increase the efforts to adapt to the adverse impacts of climate change and make finance flows consistent with reducing greenhouse gas emissions and becoming more climate-resilient [13].

Vulnerable Populations

Climate change disproportionately affects vulnerable populations. Children carry 88% of the burden of disease caused by climate change, in addition to elderly, indigenous communities, women, and coastal populations; and low and middle-income countries (LMICs), placing the burden of disease on those least responsible [1].

Health co-benefits

In the context of climate change mitigation and adaptation, the term 'health co-benefits' is used to refer to health advantages that occur indirectly as a result of reductions in greenhouse and climate-altering emissions [14]. For instance, a community transition to non-combustion energy sources (such as solar) will simultaneously reduce greenhouse emissions and reduce exposure to pollutants and respiratory irritants. Other examples include the protein transition which according to Drawdown [15] would be number 5 solution to reverse climate change and as prescribed by the planetary health diet [16] would reduce 22.4% of the Global Burden of diseases, decreased sedentary behaviors through promotion of active transport would decrease obesity as well as vehicular use and emissions, [17; 18], building greener cities which would reduce air pollution, mitigate the island effect and improve mental health[19].



Health co-benefits should be considered as a major advantage when developing climate change mitigation projects and policies. Firstly, local health action has the potential to generate global climate benefits. Thus, implementing effective policy in resource-depleted countries provides an opportunity to increase the local health profile while also meeting global climate targets on the international stage. Additionally, this double-edged approach allows policymakers to address multiple social issues at once, maximizing the cost-effectiveness of the project and appealing to economic rationale [20]. It is, therefore, clear that immediate climate change action addresses an imminent health emergency while simultaneously investing in future wellbeing in an efficient and resource-effective manner.

Health adaptation measures

Next to mitigation measures, the implementation of adaptation mechanisms (e.g. building resilience of existing health systems, increasing access to health services, constructing resilient health institutions) is crucial as climate change is likely to result in further demands on the healthcare services. [21]

According to the WHO Climate and Health Country Survey, 30 out of 40 countries (75%) reported having a national adaptation strategy for health, approved by their governments. Yet only 16 of 40 responding countries (40%) have implemented activities to increase the climate resilience of their health infrastructure. Despite interest from countries in undertaking adaptation actions addressing health, the availability of and access to funding for health and adaptation is limited. In terms of finances only 4.63% (\$16.46 billion) of the world's total adaptation spending is on health and 3.13% (\$29.47 billion) is on health-related adaptation. Between 2003 and 2017, less than 1.5% of total adaptation funding for development, flowing through global climate change financing mechanisms, was dedicated to health adaptation [22].

Climate Change and gender equity

The Paris Agreement [7] acknowledges the importance of the gender perspective within climate action plans [23]. Women commonly face higher risks and greater burdens from the impacts of climate change in situations of poverty, and the majority of the world's poor are women. It is also important to note that women are powerful change agents to address climate change at scale. They are key actors in building community resilience and responding to climate-related disasters. Yet their unequal participation in decision-making processes and labour markets lead to inequalities and often prevent women from fully contributing to climate-related planning, policy-making and implementation [24]. Empowering women worldwide is a crucial step in climate action; educating women and girls worldwide and providing them access to family planning are key solutions for reversing climate change, according to Project Drawdown respectively number 6 and 7 [15].

Role of (future) health professionals

Healthcare professionals are a potentially powerful sector of our global community, which can be a critical part of the solution to climate change. It is undoubtedly imperative for healthcare professionals to be the link between the scientific evidence of the health impacts of climate change and societal awareness. Hence, the role of healthcare professionals is three-pronged:

Firstly, on a patient-level, healthcare professionals can advocate for the implementation of climate change policies with health co-benefits among patient communities. This can be achieved by suggesting the use of low carbon transport such as walking, cycling or public



transport. This would both increase physical activity and reduce the risk of cardiovascular diseases, obesity and diabetes, as well as reducing greenhouse gas emissions [25]. Livestock rearing for meat and milk is also an important source of greenhouse gas emissions. Therefore, healthcare advocates should raise the awareness of patients to the planetary health diet and reduce animal product consumption which would decrease the carbon footprint of people while simultaneously reducing the levels of saturated fat and meat consumed, decreased the incidence of cardiovascular disease and bowel cancer [16, 26].

Secondly, external (non-patient) advocacy can target the governmental and public health sectors. Healthcare professionals should start by advocating for sustainable policies in their own health systems. Healthcare professionals can then address policy-makers. This should include a multidisciplinary approach that targets all levels of government, from local to national. Advocacy should inform city planning, waste management, pollution control, transportation strategies, food origin, energy sources, water sanitation and conservation of biodiversity and natural resources [27]. This would result in more efficient policies for the benefit of people and the environment. Research shows that these kinds of policies are also associated with economic benefits [28].

Lastly, there's an urgent need for a climate change curriculum based on the emerging scientific evidence and reviews on the health impacts of climate change [29]. This significant association calls for medical education to prepare future healthcare professionals for health sector mitigation and adaptation to climate change. There is a need for medical students and doctors to be trained on health sector mitigation and adaptation to climate change [30]. The recent surge of increasingly destructive hurricanes proves how disaster preparedness must be given high priority and thus be a part of medical education [31]. Medical students should be equipped with the knowledge and skills to manage climate-related illnesses, engage in eco-health promotion, and disease prevention. In addition, such a curriculum would pave the way for a climate-resilient society and health sector [32].

Sustainable healthcare facilities

Globally the health care sector contributes to 4.4% of the world's carbon footprint [33]. Hence, there is a significant opportunity for emission reduction and for global leadership by example.

The health care sector should therefore chart course for zero emissions health care by 2050 and decrease its carbon footprint, by decarbonizing the health facilities, health organisations and the health sector's supply chain. Decarbonizing health care facilities could be done by the use of appropriate low-carbon technology for care; low-carbon or net zero emissions building design and construction; investment in renewable energy and energy efficiency; climate-smart cooling technologies; sustainable waste, water, and transport management; and minimizing the use of high global warming potential anesthetic gases; among others [33].

Furthermore, waste volume and toxicity can be reduced at the source with environmentally-preferable purchasing, and the impact of necessary waste can be reduced through a comprehensive waste management system (incorporating separation of wastes and employee training). Water can be more effectively conserved through the elimination of bottled water in favor of potable water, efficient fixtures and organizational frameworks for net zero water usage. Energy requirements can be decreased and sourced from clean energy resources, ideally through onsite and self-sustaining infrastructure. Additionally, the physical healthcare buildings themselves can be designed and constructed according to green building principles, including carbon-neutrality, protection of natural surroundings, easy access to public transportation, and the use of local materials and services [34]. Many



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of these goals provide additional economic benefit in maximizing cost-effectiveness of the health service delivery; for instance, replacing bottled water with potable water eliminates transport and manufacturing costs and ensures water is supplied on an 'as needed' basis.

Healthcare services have an inherent ethical duty to ensure that service delivery doesn't contribute to poorer health outcomes through environmental footprint. Keeping these considerations in mind during the planning and delivery of healthcare ensures long-term investment in public health, as well as secondary financial savings.

In low-income countries, projects run by the UN Development Programme, World Health Organization and Global Environmental Facility seek to work with national governments to integrate health to NAPs. These projects also aim to increase the capacity of health professionals to manage climate change related illness and build resilience of healthcare facilities to climate change.

Fossil fuel divestment

According to the WHO, 7 million premature deaths per year are caused by indoor and outdoor pollution led by accelerating rates of burning fossil fuels, posing an alarming hazard to our health [35]. Current fossil fuel extraction in this era of climate crisis is fundamentally unethical and irresponsible. This spurred the beginning of the international fossil fuel divestment campaign in 2011, with organizations and individuals removing their money from a variety of institutions that fund, invest in, or otherwise contribute to the fossil fuel industry. It is currently estimated that the fossil fuel divestment movement is 'worth' more than \$5.99 trillion, with more than 800 major organizations around the globe having already taken steps to divest [34]. Organizations committed to fossil fuel divestment include the world's biggest sovereign wealth fund; and, in the medical realm, the World Medical Association, the British Medical Association in 2014, the Canadian Medical Association in 2015 and the Royal Australasian College of Physicians in 2015.

The health sector must lead by example the divestment movement, ceasing their investments in institutions and organizations associated with the fossil fuel industry, putting the issue firmly on the political agenda, and strengthening public understanding of climate change health risks. Additionally, health professionals can address the governments to cut their fossil fuel subsidies and to instead use these finances to invest in clean energy sources and increased healthcare coverage [36]. This would simultaneously impact the environment and healthcare by transitioning to a sustainable society and, consequently, improving the health of the people and planet alike. Medical students can also press their universities and hospitals onto mitigating carbon emissions by divesting. This was demonstrated by the University of Massachusetts in May 2016, which became the first major public university system to divest its investments in fossil fuels [37].

Organizational sustainability within the IFMSA

As the health of the planet directly influences the health of its inhabitants, including humans, IFMSA, strongly committed to the improvement of Global Health worldwide, decided to lead by example by initiating the reform of her own organizational sustainability. In the past years, our General Assemblies, Regional Meetings, and other activities have significantly increased in size and quantity. With this increase, the impact of our activities on our environment has increased too. To set the first steps towards a green and sustainable IFMSA, the IFMSA Recommendations for Sustainable and Climate-friendly meetings were drafted and published to focus on the following areas: Accommodation and Venue, Transportation, Food and Beverage, Material Use & Merchandise [38].



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