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International Federation of
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IFMSA Contribution to the UN OHCHR study on the Climate Change and human rights to health, in the road to COP21.

Author: International Federation of Medical Students' Associations (IFMSA)

Contributors:

Karim M. Abdeltawab (Egypt)
Skander Essafi (Tunisia)
Kit Moran (Canada)
Alistair Wardrope (United Kingdom)
Claudel Pétrin-Desrosiers (Quebec-Canada)
Dimitris Fiolis (Greece)

Introduction:

The International Federation of Medical Students Associations (IFMSA) envisions a world in which medical students unite for global health and are equipped with the knowledge, skills and values to take on health leadership roles locally and globally. Founded in 1951, it is one of the world's oldest and largest student-run organizations. The Federation unites medical students worldwide to lead initiatives that impact positively the communities we serve. IFMSA represents the opinions and ideas of future health professionals in the field of global health, and works in collaboration with external partners.

We recognize the need to tackle, prevent and control some human rights and health issues, and reduce the worldwide morbidity and mortality related to diseases, as well as reduce the risk factors and improve quality of life of populations by adopting the social determinants of health approach. We focus on building capacity on the implementation of the different articles of the declaration of Human Rights. Through our programmes and activities, we contribute to ensure rights to education of children, right to equality and tackling gender based violence and a central core of our activities is the right to health and access to health-care services. Our experience shows students that they are not merely passive subjects in a rapidly globalizing world, but rather valuable individuals with a potentially powerful role to play in global health. Hence IFMSA offers medical students a taste of the real and pressing health issues worldwide, and help them learn that their idealistic goals can be achieved with readily attainable knowledge and commitment. The emphasis is placed on students returning to their local environments with new ideas and the skills to implement them.

IFMSA is an active observer within the UNFCCC platform, for more than 4 years now. We have been following closely the negotiations and lobbying with parties for more action on health-related impacts in the mitigation and adaptation sections, as well as to include a recognition of more health in the Paris Agreement. Therefore, IFMSA demands more considerations for health in the climate talks, and its advocacy work has been successfully recognized by the WHO and the UNFCCC. IFMSA is also dedicated to building capacity at the international level, by organizing several workshops and worldwide campaigns.

Recently, IFMSA has developed a [Health Analysis](#) of the recent INDCs submitted; 125 submissions, reflecting 152 countries had been received by the UNFCCC. One of the preliminary results was that a majority of parties from all negotiating groups have submitted their INDC. However the number of INDCs containing mentions to health vary greatly from one group to another ranging from 0% in the EU (which submitted a single INDC for all its member states) and 11% in the Umbrella Group to 66% of AILAC members having references to health.

1. Relationship between Climate Change and the enjoyment of human right to health



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The human's fundamental rights to health and life are violated as climate change exacerbates. Pressure on populations to change their diet which for millenniums have depended on animal and plant farming, are both massively affected by climate change. Life-threatening accidents are increasing because of rapid changes to ice, snow, and land. Traditional food preservation methods are becoming difficult to practice safely. Natural sources of drinking water are disappearing and diminishing in quality. Increased risks of previously rare heat and sun related illnesses also implicate the right to health and life.

The protection of the environment is hence a vital part of contemporary human rights doctrine, for it is a *sine qua non* for numerous human rights such as the right to health and the right to life itself.

This is highlighted in the [Petition to the Inter American Commission on human Rights seeking relief from violations resulting from global warming caused by acts and omissions of the United States](#) (1).

The petition has been widely credited as sparking international political interest in rights approach to climate change; making violation of right to health core to petition. It also stresses the inseparability of right to health, other positive rights, and right to environmental protection that "*because Inuit culture is inseparable from the condition of their physical surroundings*". The petition also highlights that the threat to health posed by climate change is exacerbated by inadequate adaptation e.g. environmental change undermining traditional Inuit subsistence diets forcing communities to turn to a "*western, store-bought diet*" with implications for rising **obesity, NCDs etc.**

Climate change acts as a threat multiplier for other processes including but not limited to, forced migration, conflict, mental well-being, economic security, food and water security, threatening human rights to health, subsistence, community & family life - and their social, political, environmental determinants. As such Climate Change -derived obligations for mitigation and adaptation are a core part of - and to a degree inseparable from - obligations regarding these other rights-threatening social processes.

In Malawi, one of the major vulnerable countries in regards to climate change according to the UNDP, Major climate related hazards that wreak havoc in the country are floods and droughts. For example, in 2015, floods affected 15 out of 28 districts in Malawi. About 1.1 million people were affected, 230,000 were displaced, 176 were killed and 172 were reported missing. The total cost of loss and damage that the Government of Malawi incurred during these severe floods was estimated to be US\$335 million, and the recovery and reconstruction costs stood at US\$494 million.

Another example in Bangladesh, where extreme temperatures, erratic rainfall, floods, drought, tropical cyclones, rising sea levels, tidal surges, salinity intrusion and ocean acidification are causing serious negative impacts on the lives and livelihoods of millions of people in Bangladesh, and are gradually offsetting the remarkable socio-economic development gained over the past 30 years, as well as jeopardising future economic growth

Climate change has an unambiguous negative impact on people's right to health. While many people benefit positively from the consumption of fossil fuels, they are also unintentionally denying others around the globe the right to live healthy lives. Unmitigated climate change will lead to impacts on the security, availability and distribution of clean water, nutritious food, and adequate medical care and housing.

Particularly illustrative of the effect of climate change on the right to health is the case of the world's northern indigenous peoples: fossil fuel use is leading to decreased polar ice, upon which many of the northern indigenous peoples living traditional lifestyles depend. This in turn is undermining their ability to gather food, maintain shelters, and educate their children in traditional ways. By individual actions in carbon-intensive countries, unknowing individuals are forcing change and weakening the collective rights of peoples in other places. For these reasons, it is a moral obligation to work towards mitigation and adaptation of climate change by all peoples, for all peoples.



Mitigation & Health co-benefits

The health benefits of increased active travel are obvious. It carries the dual benefit of increased physical activity - [leading to reduced risk of diseases including coronary heart disease, stroke, diabetes, osteoporosis, dementia, depression, and cancer](#) (2) - and reduced motorised transport use, [cutting air pollution, road traffic injuries, noise pollution, and community degradation](#) (2). A 2009 *Lancet* paper estimated that increased walking and cycling and reduced car use in London would prevent the loss of [nearly 7500 disability-adjusted life years by 2030](#) (4), including a 10-19% reduction in the burden of ischaemic heart disease. This translates to a potentially huge saving in health expenditures - one estimate calculating that, if cycling in British cities reached levels seen on the continent, the morbidity and mortality reduction would [save the NHS £17bn by 2030](#). Contrast this with the costs of motorised transport; given the massive negative externalities related to air pollution and road traffic injuries, the cost of travel by car is massively subsidised in the UK and similar nations.

2. Relevant data on the relationship using underlying determinants

The Intergovernmental Panel on Climate Change (IPCC) divides the health impacts of climate change into three broad classes. The direct effects are those health-damaging events directly arising from a changing climate: floods, heatwaves, droughts, landscape fires, and climate-sensitive natural disasters. While these might be the most obvious consequences of climate change for health, they are not necessarily the most serious; the greater burden of disease is likely to arise from the downstream effects of climate-induced perturbations on other systems. The IPCC divides these indirect effects into two classes: those mediated by natural systems - for example, altering distributions of infectious diseases, increased food and water contamination, and changes in vector ecology spreading diseases like malaria and Dengue fever; and those mediated by human and social systems - where climatic factors exacerbate stresses on social processes already under pressure, causing forced migration, food and water insecurity, conflict, and mental stress. This is obviously a somewhat artificial distinction and the three classes are far from independent, but it provides a useful organising metaphor for breaking down the kinds of problems health workers will have to face in a clinical practice defined by a changing climate.

Climate change is already leading to changing and expanding regional prevalence of some disease. *Plasmodium falciparum* malaria, in one specific case, is recognized by the [IPCC](#) as likely to expand in net distribution due to warming climate. An equally important effect is the [increased incidence](#) of malarial disease within its existing range. These patterns are likely to be observed in other diseases: already Canada is observing increased distribution and prevalence of Lyme disease in southern regions. The extent to which these geographical distribution and incidence of diseases will be modified by climate change are disease-specific, variable, and still subject to much uncertainty.

Mental Health

Climate change affects largely a wide range of aspects of health. One thing in particular is our mental health. Our mental wellbeing as well as our physical condition is dependent upon our environment and the food, air, water, and ecosystems that support us and our societies. Climate change is already having a profound effect on our mental health, through its direct impacts as well as its consequences on social support systems. Much of the mental health toll of natural disasters comes not directly from the destruction itself, but from the resultant collapse of the social support systems necessary for maintaining mental health. Climatic stressors on social factors including support networks, health care services, economic wellbeing, agricultural productivity, and food insecurity, have further downstream mental health impacts. Climate-induced extreme weather events like floods, droughts, and



temperature increase have a significant mental health burden, causing Post-traumatic Stress Syndrome (PTSD), depression, anxiety, and increased suicide rates.

The degradation of home environments causes distress amongst communities living in them, and the natural environment is an important determinant of mental health.

It is perhaps unsurprising that events like floods, hurricanes, and droughts could result in conditions like post-traumatic stress disorder and depression, or exacerbate psychotic or depressive illnesses. What is perhaps less obvious, however, is the magnitude of these impacts and the amount of time they last after the initial event. While the initial mental health morbidity caused by natural disasters like the impact of Hurricane Katrina on New Orleans was significant, research suggests that [mental-health conditions such as PTSD and depression worsened over time](#) (5). 18 months after the hurricane struck, over 20% of New Orleans residents interviewed reported symptoms of PTSD, 14% suffering from serious mental illness. Impacts of a similar size have been found [in child and adolescent populations suffering the effects of cyclones in the South Pacific](#) (6). Flooding from other causes has also long been associated with detrimental impacts, causing [depression and anxiety in adults, and emotional disturbance and aggression in children](#) (7); again, these effects last long after the flooding itself has resolved.

Air Pollution

While climate change might be the most-publicised threat arising from a carbon-dependent society, fossil fuel combustion produces a range of other pollutants that, if anything, have an even greater health cost. Particulate air pollution caused [over 7 million premature deaths](#) (8) in 2012 - that's 1 in every 8 deaths. That figure includes both ambient air pollution - whose major source is fossil fuel combustion, but also includes landscape fires, desert winds, and other processes - and indoor air pollution, from biomass and coal burning for heat and cooking without adequate ventilation; the morbidity and mortality split is about 50/50. While the majority of these deaths are in rapidly-industrialising nations such as China and India (according to the 2010 Global Burden of Disease report, ambient air pollution cost Indian people [17.7 million healthy years of life](#) (9)), air pollution is a major health threat across the world. Ambient air pollution causes 29,000 premature deaths every year in the UK, while the Health and Environmental Alliance estimates that air pollution from coal energy generation in the EU alone causes health impacts with a total cost to EU health systems of over 42bn euros per year.

Air pollution has a wide range of impacts on health. Most prominently, it is a major cause of both cardiovascular and respiratory disease, but it has also been linked to pathologies [from inflammatory bowel disease to Alzheimer's](#). Particulate air pollution is [a recognised group 1 \(highest-risk\) carcinogen](#) (10), greatly increasing risk of lung cancers and also contributing to bladder cancers. WHO global health observatory data breaks down air pollution-related mortality by major cause and geographical region, highlighting the impacts of ambient air pollution from stroke in adults to acute respiratory infections in young children.

From a life-course approach, the developmental impacts of air pollution are of particular concern, with detrimental impact on respiratory and cognitive development in particular, these effects showing even in-utero. In India, over 40% of children in Delhi (the city with the highest level of small particulate [PM2.5] pollution in the world, according to WHO figures) showed restricted lung function (compared to around 20% of rural controls). And even within a single city, higher air pollution exposures at school correlate with impaired development of working memory, even after controlling for social, economic, gender, age, and home exposure-related factors. Air pollution is also an important concern from an environmental justice perspective. In the UK, while higher socio-economic status groups disproportionately produce air pollution (especially from road traffic), it is poorer communities - with low rates of energy usage and car ownership - who suffer from the greatest burden of ill health. While often seen to be an 'invisible killer', air pollution is increasingly becoming a focus for grassroots environmental justice campaigning, as communities react to the health burden imposed upon them. The publication of [Public Health England's air pollution mortality figures](#) (11) by local authority in 2014



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surprised many, gaining local and national media coverage for the heavy death toll exacted by pollution.

3. National commitments , policy and frameworks

The Indigenous and activist frameworks (e.g. [Bali principles](#) (12) and [Inuit circumpolar conference](#) (1)) provide important attempts to provide such frameworks, but have received limited uptake in climate policy negotiations.

The [2007 Male Declaration on the Human Dimension of Climate Change](#) from AOSIS invokes UN Charter and Universal Declaration of Human Rights as essential to any such framework, along with “*the fundamental right to an environment capable of supporting human society and the full enjoyment of human rights*” that is recognised “*in the constitutions of over one hundred states*” and international instruments - i.e. invoking the full content of already-existing rights frameworks.;

There are relatively few national commitments, legislations or policy frameworks specifically related to climate change mitigation or adaption on the national level related to human rights to health. However, increasingly medical associations around the world are adopting statements on the effects of climate change. The International Federation of Medical Student Associations have recognised the likely detrimental impacts that climate change will have on the right to health, which can be implemented at all the countries where IFMSA has medical students associations. They expect that physicians become stewards for environmental responsibility as our actions now will impact the future health of our patients.

The policy interventions that IFMSA have called for include:

1. The peak of global CO₂ emissions by 2015.
2. A cap on greenhouse gas emissions such that the atmospheric concentrations of CO₂ stabilise at 350 ppm.
3. A global temperature increase of no more than 1.5 degrees based on pre-industrial level, ensuring the safety of our ecosystems and the health of vulnerable populations.
4. A minimum global reduction in greenhouse gas emissions based on 1990 levels of 80%, by 2050.
5. A strengthening of the adaptive capacity of vulnerable countries to minimize the adverse impacts of climate change, with adequate financial support from high income countries.
6. Every national health sector to decrease their own emissions through a reduction in energy consumption, new technologies and improved waste management.
7. A fair international negotiation process under the UNFCCC, in which the rights of every country and their peoples are respected and represented equally.
8. Medical students, practitioners as individuals, and organizations representing the interests of medical students and practitioners to take the lead in educating the public on the likely effects of climate change on health, as well as directly lobbying key stakeholders including governments, to take action on the issue.
9. The integration of climate change and its threat to health within the curricula of medical schools worldwide.

The investment of time, effort and finances into mechanisms which create real rather than theoretical carbon reductions.

In the recent submitted Intended Nationally Determined Commitments, some countries have highlighted the need to act upon climate change and the enjoyment of human right to health. An example is Uganda that commits to conduct an assessment of health sector to climate change, how the climate change impact human health and well-being, develop the health systems accordingly and strengthen the public health systems, in this way limiting the outbreaks of diseases and promote hygiene. Another strong example is India, where a ‘Health Mission’ is being formulated under the ambit of NAPCC to evolve strategies for mitigating, containing and managing the adverse impact of Climate Change on health. The mission aims at analysing epidemiological data, identify vulnerable

medical
students
worldwide



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population and regions, build knowledge base and expertise, increase awareness and community participation.

While national accountability and oversight mechanisms can help to solve some human rights claims as a result of climate change, for many future claims this is unlikely to be sufficient. The experiences of AOSIS are explicit examples of this scenario. While in some cases it may be possible to assign blame, in the scenario where a small island state succumbs to rise oceans, there is unlikely to be any satisfaction from a national policy of accountability. Rather, it will be necessary for an international framework to hold accountable carbon-intensive nations to those impacted most severely by their actions.

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