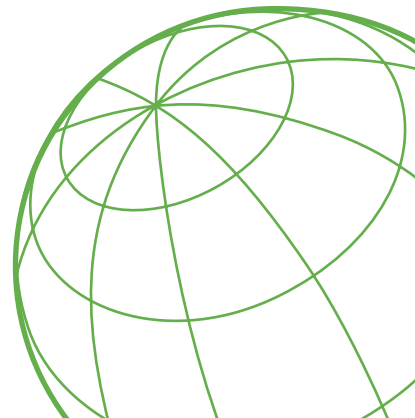




Seminar of the World Medical Association,  
September 1<sup>st</sup>, 2009, Copenhagen

# Climate Change and Health Care

---





# Climate Change and Health Care

## Seminar of the World Medical Association, September 1<sup>st</sup>, 2009, Copenhagen

Rapporteurs: Øjvind Lidegaard<sup>1</sup> and Maura N. Ricketts<sup>2</sup>

### EXECUTIVE SUMMARY

The World Medical Association (WMA) recognizes that the ongoing global warming is caused by humans' increasing emission of greenhouse gases, that this warming is causing global climate changes, and that these changes have local, regional and global health implications. The seminar in Copenhagen was an opportunity to review the state of the art concerning health implications of climate change, and to comment on the WMA position statement.

The health consequences of climate change could, according to *Colin D. Butler* (Australia), be understood using a classic health model: primary, secondary and tertiary health impacts. The primary health impacts include heat waves, injuries after floods or fires, infrastructure collapse, secondary consequences

are vector-borne diseases, food- and water-borne infections, and allergies, and the tertiary consequences would be famine, local and regional conflicts, displacement, refugees, and developmental failure. *Dr. Butler* stressed that tertiary consequences would cause the greatest health impacts in this century.

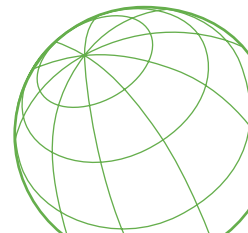
*Education* is crucial, though not sufficient to solve these problems. *Dr. Butler* emphasized the need for changes in university and professional education. In particular, education at the undergraduate and post-graduate levels needs to focus on sustainability and limits to growth.

*Ms. Francesca Racioppi* (WHO) noted that when we think about the trends brought about by the financial crisis, we can quickly understand that a crisis caused by climate change would similarly weaken our capacity to respond. We need to think in the medium and long term and not just about the next election.

*Dr. Mike Gill* (UK) proposed that health professionals became more aware of the immediate and certain health benefits of climate change mitigation.

1) Professor, Rigshospitalet, Dept. of Obstetrics & Gynaecology, University of Copenhagen, Denmark

2) Director, Office for Public Health, Canadian Medical Association, Canada



Life style changes, such as active transportation will mitigate climate change and will have a positive influence on obesity, heart diseases, diabetes, cancer, respiratory diseases, road traffic injuries, and osteoporosis. As those in wealthier countries change their lifestyles, they will also bring about equity.

The WHO estimates that the prevalence of preventable disease in high-income and low-income countries due to environmental degradation is, respectively, 17% vs. 25%. Understanding and surveying for the socio-economic determinants of health are essential in order to develop effective public policy. *Dr. Maura N. Ricketts* (Canada) concluded that an understanding is not achieved without an emphasis on research.

*Ms. Susan Wilbum* (WHO) urged physicians, medical associations and countries to work collaboratively to develop systems for event alerts in order to ensure that health care systems and physicians become aware of high risk climate events as they unfold, and receive timely accurate information regarding the management of emerging health events.

In Asia, the most populous continent, the marine and coastal ecosystems are likely to be affected by sea-level rise and temperature increase, as is agriculture. The risk of hunger and water resource scarcity is growing, reported *Professor Dongchun Shin*. The Himalayas provide water to a billion people. South Asian countries must prepare for the impacts of global warming, melting glaciers and subsequent loss of potable water.

Even without climate change Africa is already suffering severely from public health problems that are exacerbating morbidity and mortality more than in other continents, *Drs. Sandrine Segovia-Kueny* and *Louis-Jean Calloc'h* summarized. WHO estimates that climate change is already claiming 150,000 human lives annually and most of this happens in Africa. Climate change (and global warming) is creating

climatic instability, which interferes with the rainfall patterns and affects domestic agricultural production. *Mrs. Ulla Tørnæs* in her closing remarks reminded us that the poorest countries are the most vulnerable to the negative impacts of climate change and thus that those who have contributed least to the problem are facing the most severe consequences. *Dr. Otmar Kloiber* further contributed to this perspective by his closing remark that “we owe our possibilities [to act, mitigate and adapt] to those who don’t have them”.

*Dr. Edward Hill*<sup>3</sup> introduced the meeting by presenting the two main objectives, first to learn the state of the art on the health consequences of climate change, and secondly to make comments on the draft position statement of WMA on this issue.

*Dr. Jens Winther Jensen*<sup>4</sup> thanked the WMA for their commitment and stressed the need for action. Action needs to come from national medical bodies to the level of each individual health employee. The WMA resolutions identify five main areas: education, leadership, advocacy, surveillance and research, and collaboration. Action is needed in all of these areas in order to tackle the immense health consequences of climate change within this century.

*Jakob Axel Nielsen*<sup>5</sup> expressed his appreciation for the initiative from WMA to focus on the health consequences of climate change, and to mediate the transfer of this knowledge to political decision makers. He stressed the importance of adapting health care systems to the health threats resulting from climate change, and made particular reference to the need to mitigate dramatic climate changes by agreeing to reduce the human emission of greenhouse gases at the December COP15 summit in Copenhagen. It is essential to do so to prevent the potentially devastating global health consequences of climate change.

*Dr. Yoram Blachar*<sup>6</sup> stated that every day, every citizen is doing hundreds of things that create greenhouse gases. As a result, not only should organisations and politicians act appropriately, but also every single one of us should commit to changes in our lifestyle in order to achieve a sustainable develop-

ment. He said that we have to behave responsibly in order to ensure that future generations will inherit a habitable planet. As physicians, it is our particular obligation to deal with health aspects of climate change, an obligation which was defined as soon as 1988, the year WMA committed itself to engage in environmental issues.

## EDUCATION

### Our way to a “muddle through” future in a world of limits

The health consequences of climate change could, according to *Colin D. Butler*<sup>7</sup> (Australia), be understood using a classic health model: primary, secondary and tertiary health impacts. The primary health impacts include heat prostration from heat waves, injuries after floods or fires, and the consequences of public infrastructure collapse; secondary consequences are vector-borne diseases, food- and water-borne infections, and allergies that would result from ecological and environmental changes; and the tertiary consequences would be famine, local and regional conflicts, displacement, refugees, and developmental failure. *Dr. Butler* stressed that tertiary consequences would cause the greatest health impacts in this century.

He pointed out something that might appear as a paradox at first sight, that while fashionable to speak of grand visions such as *our common future* and *health for all*, it would be a brilliant human achievement if we could simply *muddle through*. He said that if we could have a world in which global population health by year 2100 is not much better than today and certainly not worse, this would be a brilliant human achievement given the daunting problems that confront us.

He told us that some futurists foresee a “singul-

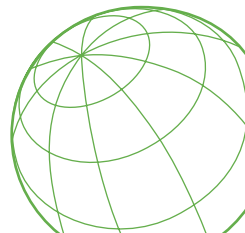
3) Chair of the Council of the WMA, American Medical Association, USA

4) President, Danish Medical Association, Denmark

5) Minister of Health and Prevention in Denmark

6) President of the WMA

7) Associate Professor, National Centre for Epidemiology and Population Health. The Australian National University, Canberra, Australia



larity” – a spike in technological development and collective intelligence that will be used to solve our problems. Others, such as *James Lovelock*, predict imminent collapse, followed by a world in which remnants of organised society exist in temperate high latitudes, defending themselves against raiding populations displaced from less hospitable, hotter regions. Between these extremes, a *middle path* future, which falls well short of utopia, might fairly be regarded as a success.

The obstacles that make even a *muddle through* world difficult to achieve include our expanding environmental *footprint*, evidenced by climate change and deteriorating global food security. Two key issues underlie these phenomena:

The first is that human numbers continue to increase at a rate that exceeds our collective capacity to solve the problems that accompany population growth. Because there are natural resources, and because those at the frontline of scarcity are remote from those holding power, the illusion of success persists. The second underpinning issue is that while strong evolutionary forces promote alliances, the human experience of the global scale of our civilization is as yet too brief to have generated the necessary degree of co-operation.

Education is crucial though not sufficient to solve these problems. *Dr. Butler* emphasized the need for changes in university and professional education. In particular, education at the undergraduate and post-graduate levels needs to focus on sustainability and limits to growth.

“The medical profession can play a vital catalysing role in facilitating the sustainability transition. Excellent clinical practice cannot deliver excellent health, without public goods, such as clean air and safety. Today, too many ‘over-consumers’ imagine almost limitless consumption. Instead, we have to live within limits and convey this understanding of

personal and planetary limits to our patients. Collectively we may thus create a future in which our descendants can genuinely aspire for a world that offers more than ‘muddle through’”. We must be alert to the threat posed by the bystander effect, where everybody awaits action from others before they act themselves.

## Comments

To a question from *Dr. Jens Winther Jensen* on how to engage doctors in this commitment, *Butler* reinforced the importance of engagement in networks and groups that can work together and counter the effects of the lobbyists.

## LEADERSHIP

*Francesca Racioppi*<sup>8</sup> described WHO’s work plan and its goal to support health systems in all countries, in particular low- and middle-income states and small island states. The purpose is to enhance the capacity for assessing and monitoring health vulnerability, as well as the risks and impacts due to climate change. Next, we should identify strategies and actions to protect human health, particularly of the most vulnerable groups, and to share knowledge and good practices. The four specific objectives are: 1) Raise awareness, 2) Engage in partnerships with other United Nations organizations and sectors other than the health sector at national, regional and international levels, in order to ensure that health protection and health promotion are central to climate change adaptation and mitigation policies, 3) Promote and support the generation of scientific evidence, and 4) Strengthen health systems to cope with the health threats posed by climate change, including emer-

8) Acting Head of Rome Office, WHO European Center for Environment and Health, Italy

gencies related to extreme weather events and sea-level rise.

She noted that the policy context for health's involvement in climate change is strong and informed us that "Towards a regional framework for action for protecting health of the WHO EU region" will be proposed at the 5<sup>th</sup> Ministerial conference for health and environment, March 2010 (Parma).

She emphasized that their plan is based on the expectation that climate change will amplify already existing health problems. She put this into perspective by indicating that in 2000, when the global temperature was only increased by 0.4 degree, the health impact accounted for 0.4% of the global burden of diseases.

When we think about the trends brought about by the financial crisis, we can quickly understand that a crisis caused by climate change will similarly weaken our capacity to respond. We need to think in the medium and long term and not just about the next election.

7% of National Plans of Action (NAPAs) focus on health and the United Nations Framework Convention on Climate Change (UNFCCC) has received only 0.2% (\$2.5 million of \$1.3 billion) of the total UN budget.

She stressed that health benefits of mitigation measures are generally poorly recognized, despite the fact that many mitigation initiatives on climate change have an important positive impact on public health, e.g. promotion of safe cycling, walking and public transport lower greenhouse gas emissions, which can reduce respiratory disease, improve fitness and healthy weights.

In Europe, the key objectives of proposed actions include: avoiding additional deaths, disease and injuries from climate-change-related extreme weather events, anticipation, early identification and responding to climate-change-related infectious disease out-

breaks and changes in distribution and quality of water, reducing respiratory diseases from climate change, and enhancing food security and safety.

### Comments

In the following discussion *Ole Faergemann* asked how to avoid too much emphasis on adaptation as compared with mitigation initiatives. *Francesca Racioppi* replied that our challenge was to bring it all together, be clear about our moral direction and our duties to protect the most vulnerable.

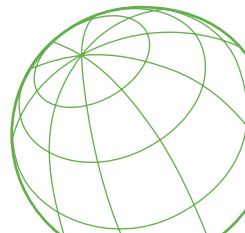
## ADVOCACY

According to *Mike Gill*<sup>9</sup> health professionals in general and doctors in particular, have a unique contribution to make to international efforts to stop climate change. The global financial crisis and the special characteristics of climate change effects on health mean that such advocacy should be embraced by health professionals throughout the world, and accepted as a professional duty.

Under the heading *What's special about NOW?* he emphasized that the global food production has doubled since 1960, that although global food production per capita has grown, more than 800 million people are still hungry, and that 15-35% of irrigation withdrawals exceed supply rates and are, therefore, unsustainable.

The initial steep increase in life expectancy that comes with increasing per capita income (and concomitant CO<sub>2</sub> production) flattens out around an income of \$10,000 (or five tons CO<sub>2</sub> emission per capita). Despite this some countries have an average income of more than \$30,000 and per capita emission of more than 15 tons CO<sub>2</sub>. It is hard to justify

9) Professor Public Health, Faculty of Health and Medical Sciences, University of Surrey, Guildford, UK



this particular inequity considering that the mean global per capita emission of CO<sub>2</sub> should be reduced to about one ton per year in order to mitigate dramatic climate changes.

The special circumstance of climate change means that “climate change is the biggest global health threat of the 21<sup>st</sup> century”. Over 350 million years-worth of carbon is being burned increasingly quickly: 100 years ago there were 4142 cars and ten miles concrete road in US, 50 years ago, the first commercial jet ticket was issued, and today there are 650 million cars and 4800 million passenger flights per year. In addition to producing record levels of greenhouse gases, half of all forests were destroyed in the 50 years prior to year 2000, and the present era’s legacy is a mass extinction event, with predictions of extinction of one half of all species within this century.

It is sobering to realize that most global health problems are self-inflicted: war, inequality, tobacco, alcohol, air pollution, road trauma, obesity, malnutrition, physical inactivity, and now climate change.

There are positive health messages to share. Health professionals should become aware of the immediate huge and certain health benefits of climate change mitigation. Lifestyle changes that mitigate climate changes will have a parallel positive influence on obesity, heart diseases, diabetes, cancer, respiratory diseases, road traffic injuries, osteoporosis, and will bring about more equity. The uncertainty of the economic benefits of mitigating climate change, as expressed in cost-benefit equations, disappears in the face of the cost savings that result from the health benefits of behaviour and lifestyle changes. It also brings low-, middle- and high-income countries closer in terms of their consumption and lifestyle.

*Dr. Gill* informed the participants of a soon-to-be published report from the Task Force on Climate Change Mitigation and Public Health. This seminal report will describe the health consequences of

policies aimed at climate change mitigation in four sectors: electricity generation, built environment, transport, and food and agriculture. The report will be published before COP15.

Health professionals are generally a most trusted source of information. It falls upon health professionals to describe the clear links between how we live and the consequences to our health, primarily, and secondarily for the environment and the economy. Physicians should articulate the major benefits, advocate every day, and ensure that the politicians know that health professionals are concerned. *Dr. Gill* recommends that the delegates make the WMA resolution as powerful as possible, saying that low carbon societies will be the next great health advance. Health improvement depends on equity and social justice. He urged us to lead as individuals, creating personal lifestyles that are climate friendly. *Dr. Gill* had three main messages with which to end his presentation: health needs sustainable development, not economic growth, we need to understand what “prosperity”, “health”, “well-being” truly consist of, and the economic recovery has to be based on sustainability or it will not succeed.

## Comments

*Vivienne Nathanson* asked how we can help the average doctors become sufficiently confident to approach their patients on changes that we are recommending because of our concerns about the environment. *Mike Gill* replied that many “environmental” messages are normal clinical messages and belong to the clinical encounter. Physicians should be encouraging active transportation, for example, in any case, in respect of the big killers. Physicians need to take the prevention story more seriously. He emphasized that we must start with ourselves, with the doctor’s own investment in healthy living – how are we getting to our practices, managing our practices, etc.



## SURVEILLANCE & RESEARCH

We are all familiar with the lists of policies, regulations and laws that can be, relatively easily, created through a simple review of governmental policy *Maura Ricketts*<sup>10</sup> introduced. This reveals the intent of governments but not the impact. Often the levels of compliance with regulation are low. There is a significant cost associated with ensuring compliance and it has two practical implications. First, the preference of government and industry for voluntary compliance, and second the need of sufficient financial resources.

Risk assessments underlie most national policies for hazardous chemical exposures and pharmaceuticals. Many governments have also undertaken formal risk assessments for food-borne pathogens. Academic sources for risk assessment provide an important independent resource for policy makers and the public.

Some exposures do not easily lend themselves to risk assessment because the linkage between the exposure and the outcome is indirect, have multiple sources (e.g. tobacco, radon, asbestos are all risks for lung cancer), have multiple outcomes, are confounded by interactions from other causes, are difficult to measure or the outcomes are rare.

Surveillance of the environment is a proxy for human exposure. Many governments undertake extensive environmental surveillance for economic reasons e.g. loss of fish populations.

The WHO estimates that the prevalence of preventable disease between high-income and low-income countries due to environmental contamination is 17% and 25%, respectively. Understanding and surveying for the socio-economic determinants

are essential in order to develop effective public policy.

Therefore, research is essential in risk assessment, in surveillance of our environment, in preventing diseases, in health promotion and in identifying risk behaviours. We are just in the beginning of assessing the health consequences of climate change.

## COLLABORATION

*Susan Wilbum's*<sup>11</sup> introductory remarks reminded the participants that WHO has a role in facilitating collaboration: working together to put health first. WHO's goal is to reduce by 25% the global burden of disease that is linked to environmental exposure. This should be achieved by intensifying primary prevention, influencing public policies in all sectors and addressing the root causes of environmental threats to health.

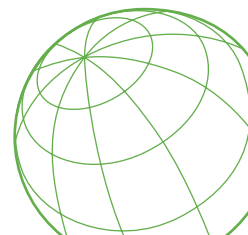
At the same time, WHO is developing strategies to strengthen health systems to cope with the health threats posed by climate change, including emergencies related to extreme weather events and sea-level rise.

In addition to these mitigation and adaptation strategies, WHO continues to establish further scientific *evidence* in the updated "burden of disease study" to be published quite soon. Further they address the inequities about who will suffer the most from climate change, highlighting the immediate potential benefits for health by reducing greenhouse gas emissions e.g. 800,000 deaths per annum from urban air pollution avoided. Additionally, the study has projected the loss of 1.9 million lives and 19 million years of healthy life as a result of physical inactivity and 1.2 million road deaths from traffic accidents.

WHO has also developed strategies to achieve climate friendly hospitals, including energy green buildings, alternative energy generation, local food,

10) Director, Office for Public Health, Canadian Medical Association

11) Technical Officer, Occupational and Environmental Health Department of Public Health and Environment, WHO, Geneva



reduction in waste production and reduced water consumption.

What can physicians and medical associations do? We can learn more about the health impact of climate change, and prepare ourselves, our health systems, and our professional organizations to recognize and care for these threats. We can put health at the front of climate discussions and negotiations. *Susan Wilburn* urges WMA and NMAs to advocate for strong national and global climate treaties, and to lead by example by reducing our own carbon footprint at home and at work.

WMA might wish to urge physicians, medical associations and countries to work collaboratively to develop systems for event alerts in order to ensure that health care systems and physicians are aware of high risk climate events as they unfold, and receive timely accurate information regarding the management of emerging health events.

WHO works with NGOs in the following collaborative actions: Global campaign for climate action [www.gc-ca.org](http://www.gc-ca.org), Climate and Health Council, International Network of Health Promoting Hospitals ([www.healthpromotinghospitals.org](http://www.healthpromotinghospitals.org)), UK National Health Service leading by example [www.corporate-citizen.nhs.uk](http://www.corporate-citizen.nhs.uk).

*Susan Wilburn* finished: “We are calling on all world leaders to take a strong and visionary stand in the Copenhagen negotiations in December, as well as in the national and international policy debates that ensue, by following this simple and clear prescription for a Healthy Planet”.

### Comments

What has WHO proposed to do in December, what recommendations will WHO make to the other organizations? *Wilburn* answered that the WHO needs our/WMA's help to put health at the front of the climate debate. She recommends that we find out who

the negotiators are and that we break into the process with authority and evidence.

*Peter Orris* (AMA) commenting on the WMA draft resolutions, noted that he was happy with the current draft but suggested that we strengthen it. He asked how sure are we of the diagnosis, and suggested that the delegates add a short action agenda with specific actions. WMA should also establish priorities by looking at the potential positive benefit for patients.

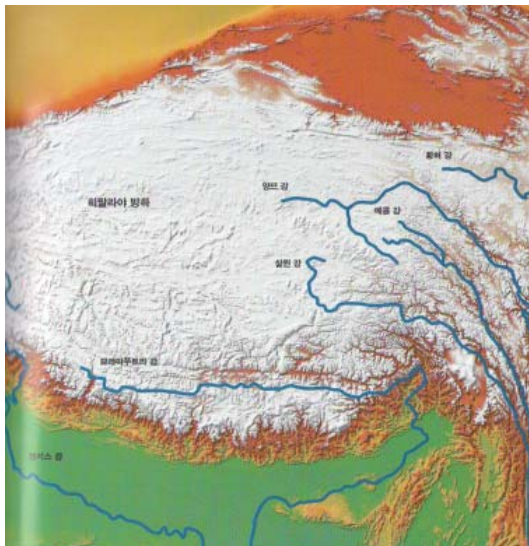
Another delegate asked, what would WHO's strategy be to improve governance in countries and to create a joint agenda for health effects and climate change. Developing countries want only development and to create jobs. How will it be possible to influence developing countries to incorporate externalities and co-benefits?

What should WMA do in respect of the negotiations in Copenhagen underway now? *Dr. Gill* says that we need to have health as part of the transference of information. We should have a press release after this meeting. The time is running out and we need to publish our message.

## REGIONAL PERSPECTIVES: ASIA

In Asia, the most populous continent, the marine and coastal ecosystems are likely to be affected by sea-level rise and temperature increase, as is agriculture. The risk of hunger and water resource scarcity is growing, reported *Professor Dongchun Shin*<sup>12</sup>. The Himalayas provide water to a billion people. South Asian countries must prepare for the impacts of global warming, melting glaciers and subsequent loss of potable water, as per the IPCC 2007 assessment report.

12) Chair of the International Affairs Committee, Korean Medical Association, Director, of the Institute for Environmental Research, Yonsei University, South Korea



The Himalayan glaciers on the Tibetan Plateau have been among the most affected by global warming. Himalayas contain 100 times as much ice as the Alps, and provide more than half of the drinking water for 40% of the world population through Asian river systems, that all originate from the same plateau: Yangtze, Yellow, Mekong, Salween, Brahmaputra, Ganges, Indus Rivers.

From the Himalayas, which provide water to a billion people, to the coastal areas of Bangladesh, South Asian countries must prepare for the impacts of global warming. A moderate rise in temperatures could cause serious changes to the environment in South Asia.

Most of Asian countries realize their own risk related to climate change, but not all of them are prepared for them. Some of the leading countries have developed capacity for reducing the emission of greenhouse gases and have started to support other countries in Asia. For example, CarboEastAsia (China, Japan and Korea) cope with climate change protocols by synthesizing measurement, theories and modelling in quantifying and understanding global warming mechanism ([www.carboeastasia.org](http://www.carboeastasia.org)).

It is reported that a strong radiative heating effect was caused by the mixing state of black carbon in atmospheric aerosols. *Professor Chun* reminded the delegates that black carbon is estimated to be the second largest contributor to global warming, after carbon dioxide. Today, the majority of black carbon emissions from developing countries in South Asia are as a result of biofuel cooking. In East Asia, coal combustion for residential and industrial uses play a larger role. Regulating black carbon emissions from diesel engines or local emission sources presents a significant opportunity to reduce black carbon's global warming impact.

Considering the magnitude of potential impacts, there is insufficient attention being given to building climate resilience in all sectors or to climate-proofing infrastructure for human settlements at risk. Climate change impacts may undermine the ability of many countries to achieve their long-term development goals, and it is likely that the poorest people in the poorest countries will suffer most. Climate change is not the only issue on the global agenda, but it is one of the issues where we should do our best at the local and personal level.

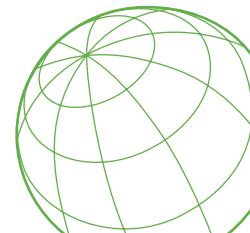
## REGIONAL PERSPECTIVES: AFRICA

*Sandrine Segovia-Kueny*<sup>13</sup> & *Louis-Jean Calloc'h*<sup>14</sup> provided a joint presentation. They were speaking in replacement of *Dr. Paul Saoko*<sup>15</sup> and took inspiration from his abstract. Even without climate change Africa is already suffering severely from public health problems that are exacerbating morbidity and mortality more than in other continents, *Drs. Sandrine*

13) Technical Advisor, French Ministry for sustainable development & environment

14) Secretary General, French Medical Association, will present the perspectives of the region of Africa

15) Vice President of the International Society of Doctors for the Environment, ISDE Africa region



*Segovia-Kueny* and *Louis-Jean Calloc'h* summarized. WHO estimates that climate change is already claiming 150,000 human lives annually and most of this happens in Africa. Climate change (and global warming) is creating climatic instability, which interferes with the rainfall patterns and affects domestic agricultural production.

This has serious implications for food security, child survival and development in Africa. In Kenya more than two million people faced hunger and starvation between 2008 and 2009. Water insecurity is another problem that influences the reported increases in cases of dysentery, cholera and typhoid. Of greater concern is that the rising temperatures are now making it possible for vector-borne disease vectors to invade previously “virgin” environments. There is evidence of malaria epidemics in the highland regions in Kenya and Tanzania due to rising temperatures. Other diseases spread by mosquitoes include Chikungunya, Dengue fever, Rift valley fever, Nile virus inter alia may also reach periodic epidemic levels.

Some airborne diseases are known to be influenced by climate and weather conditions, as evidenced by their seasonal nature. For example, meningococcal meningitis (spinal meningitis) occurs in sub-Saharan Africa most frequently during the dry season from December through June, and subsides markedly during the rainy season.

Even though there are spirited efforts to contain malaria through different methods, further mitigation measures should be considered such as: allocation of additional funds for rebuilding health services and restoring access to services following extreme climate related events, improved water and sanitation networks to prevent disease outbreaks associated with flooding or drought, improved surveillance of disease and use of health early warning systems, based on climate, environmental and population

movement data, and continued support for preventative control of vector-borne diseases such as malaria.

### Comments

Are physicians in a position to make a new proposition to deal with the problem by collaboration and integration? *Dr. Segovia-Kueny* believes that we could change the perspective for the future and talk about health instead of (as some countries appear willing to do) using force.

Seriousness of the climate change problem and the inequity question are the two main points that are coming out from the discussion thus far. It is recommended that we make a position to endorse reduction to 350 of CO<sub>2</sub>. What about the distribution of costs? Should rich nations continue to use so much? Or should we take the position that worldwide we should arrive at the same per capita emission rate?

## CLOSING REMARKS

*Ulla Tørnes*<sup>16</sup> thanked the WMA and the Danish Medical Association for the privilege and pleasure to discuss the issue of climate change and health care in the presence of so many renowned professionals. She was pleased to note the hard work that was put into the draft resolution. “In my humble view, the resolution contains the key elements and strikes the right balance. Well done. Now, we have to turn the five topics on today’s agenda into tomorrow’s reality.

The Intergovernmental Panel on Climate Change has shown us that we all will be affected by climate change. There simply is nowhere to hide. It is common knowledge that politicians, businessmen and NGOs play an indispensable role in mobilizing public awareness about the need to reduce emissions

16) Minister for Development Cooperation of Denmark

and adapt to climate changes. What is much less understood is that health professionals have a key role to play in this context.

Variations and sudden changes in the climate are causing death and disease through natural disasters such as heat waves, floods and droughts. In addition, many important diseases are highly sensitive to changing temperatures and precipitation. Climate change already contributes to the global disease burden, and this contribution is expected to grow in the future.

As pointed out earlier today, urgent action is needed in Africa. Widespread poverty, lack of financial means and weak institutions make it difficult for most African countries to counteract and adapt to climate change. The fact that the poorest countries often are the most vulnerable to the negative impact of climate change has been called an unjust paradox. And rightly so! It is totally unfair that those who have contributed the least to the problem should face the most severe consequences. Unfortunately, the climate does not understand fairness, and unfortunately, we cannot negotiate with nature.

It is therefore important for me to underline that the climate agreement at COP15 in Copenhagen in December must have everybody onboard. Climate changes are a global problem requiring a collective solution, and we will not leave anybody behind. The challenges are already with us and action cannot and should not be postponed any further.

The cost of postponing the 'climate bill' will only rise in the future, and dramatically so! The costs of inaction are higher than the costs of action. The British economist *Nicholas Stern* emphasized that important point in his study from 2007. And as *President Obama* has said so eloquently: 'Change will not come if we wait for some other person or some other time. We are the ones we have been waiting for. We are the change that we seek'. We must all – politicians, NGOs, businessmen, climate experts

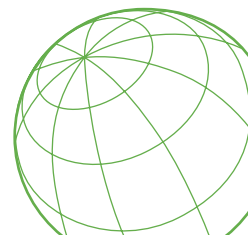
and health professionals alike – keep that in mind as we approach the conference in Copenhagen in December.

Nobody will dispute the close connections between climate change, poverty and health. The Intergovernmental Panel on Climate Change has said clearly that the negative effects of climate change are becoming a major obstacle to our ongoing efforts to promote sustainable development and reduce poverty. WHO estimates that around 150,000 deaths now occur in low-income countries each year due to climate change. An alarming 85% of these excess deaths are young children.

As underlined at this seminar, the day-to-day impact of higher temperatures, drought, flooding and erratic rainfalls, threaten to undermine progress towards achieving the Millennium Development Goals. Therefore, an agreement in December must not only include substantial paragraphs on how mankind in general can mitigate climate change. Also adaptation to climate change as well as financing must be key elements. An agreement must specifically address the particular needs of the poorest and the most vulnerable countries. It must become a beacon of light for those millions of people in developing countries, whose health and livelihood risk being wiped away.

What can be done in concrete terms? One of the main recommendations from WHO is to support health care systems to cope with the increased health threat posed by climate change. Today many health care systems in Africa are weak and not able to provide basic health care services. With an increase in the disease burden due to climate change the quality of services will most likely decrease, affecting first and foremost poor families.

I would like to point to four other key elements which can be done: *Firstly*, we must see adaptation to climate change as an integral part of the larger devel-



opment agenda. *Secondly*, we must develop strategies for adaptation specifically in the area of water and land management. *Thirdly*, we must make sure that these elements are well reflected in a new climate agreement; and *fourthly*, we must back this up with significant financial resources.

These four issues are all addressed in a Climate Dialogue – The Dialogue on Land and Water Management for Adaptation to Climate Change – which I launched at an international conference in November last year and which has got strong support from our development partners in Africa and Asia.

The Intergovernmental Panel on Climate Change has estimated that by 2020, between 75 and 250 million people in Africa alone are expected to be exposed to increased water stress.

Through regional workshops a set of guiding principles have been created which serve two specific objectives: To provide input to developing countries to a new climate agreement in Copenhagen and to provide guidance to stakeholders involved in developing strategies on how to adapt to climate changes in the management of land and water resources.

At this year's World Water Week that took place two weeks ago in Stockholm the concluding Stockholm Statement reflected the outcome of the Dialogue Process in substance. It is important that we get our message across consistently and frequently in the coming months.

Let me conclude by underlining the need for all stakeholders to take part in the fight against global warming. All stakeholders, including doctors and social workers, will have to play their part in mobilizing awareness about the need to reduce CO<sub>2</sub> emissions and to adapting to the climate changes that we already experience. I welcome your efforts to highlight the health consequences of climate change and your suggested solutions on how to deal with these challenges. We all need to bear in mind that we can-

not escape the responsibility for tomorrow by evading it today.”

## EVALUATION

*Dr. Otmar Kloiber*<sup>17</sup> closed the meeting by stating that “This is not the end, but a beginning. We are facing the catastrophes, therefore we also should act.” He stressed that many of our daily actions as citizens of the world today are at the expense of the life conditions of the next generations, and that already this circumstance forced us to act, as individuals, in our communities, in our organisation, and in our institutions.

We expect on the other hand clear actions from our politicians. We both have to adapt and to mitigate – now. We owe our possibilities to those who don't have them.

## GROUP DISCUSSIONS PRIORITIZING THE PROBLEMS PRESENTED BY THE EXPERTS

Group discussions followed within each of the headings of the WMA position paper: advocacy, leadership, education, surveillance and research and collaboration.

Each group presented additional subjects to be added and suggestions of supplementing or improving the already existing draft.

There was a general support for the document as it is, but with several specific suggestions for improvements, which have now been incorporated in the position statement by WMA to be further discussed and affirmed at the October meeting in New Delhi.

---

17) Secretary General, WMA





Lægeforeningen 



**Mixed Sources**

Product group from well-managed forests and other controlled sources  
[www.fsc.org](http://www.fsc.org) Cert no. SW-COC-001221  
© 1996 Forest Stewardship Council