IMPATIENCE EARTH

Climate + health(care)

Arab Foundations Forum

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Speakers

Mohamed Kamal

Mohamed Kamal is the executive director at Greenish, an Egyptian foundation that aims to achieve sustainable development through environmental awareness, education and advocacy. Mohamed has been actively working on plastic pollution related projects in Egypt for the past 4 years, specifically quantification and mapping of mismanagement of plastics across the country. He is a specialist in solid waste management and plastic pollution, and has been working on CSO advocacy and engagement for COP27 since October 2021 on several fronts, to better engage Egyptian Environmental NGOs with COP27 and utilise the opportunity provided by the event to elevate the integration of NGOs into the climate negotiations and policymaking space.

Mohammad Shalaby

Mohammad Shalaby is the executive director of Magrabi Foundation, an Egyptian non-governmental organisation working in the field of community eye health integrated in development, on a rights-based approach. Through its organised outreach platform, the Magrabi Foundation, offers a localised solution to individuals located in the most remote areas of Egypt, who traditionally have limited accessibility to overall healthcare services, whilst also making their services affordable for those who otherwise would not be able to afford healthcare. They also set up advanced training courses and tailored research projects, in the fields of ophthalmology and visual rehabilitation, to help further educate Egyptian healthcare professionals on best practice.

Insights from our speakers

Planetary health and the links between climate and health

- We heard that most of the public define healthcare as the treatment of disease, however the World Health Organisation (WHO) defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. As such, health is determined by a wide range of factors, which can be either modifiable (social and environmental factors) or non-modifiable (genetic). These social and environmental factors are highly influenced by climate change, and as such have significant impacts on health.
    - The WHO identifies six "building blocks" of the health system, and these are leadership, governance, financing workforce, products and technologies, health information research, and service delivery. In order to better improve health and healthcare, all of these areas need to be worked on.
- We heard that climate change is caused both by the emissions of greenhouse gases and the loss of carbon sinks. A lot of countries, especially in the MENA region, historically had lots of carbon sinks, which provided a natural way for carbon dioxide to be returned to the ground and also boosted biodiversity. But as many of these carbon sinks were in regions where fossil fuels and wood were extracted from, they've been lost.
- We heard that if nothing is done to alleviate climate change, every year henceforth will continue to be the hottest year on record, and weather phenomena such as droughts, floods and extreme heat waves will become more frequent, with many happening in the same year.
    - One example of this was the flash floods in Derna (Libya) in September 2023, where a paper found that there was a very high likelihood that the flood was 50% more severe as a result of climate change.
    - One of the areas that is most affected by a wide range of climate impacts is Iraq, which has suffered from an increase in pests that destroy crops and spread disease, an increase in soil salinity which destroys crops, a reduction of water availability and increase in heat waves.
- We heard that the threats of climate change are also heavily interlinked with the biodiversity crisis and the pollution crisis, and as such they should be spoken about as one topic rather than separately, using the term "Triple planetary crisis". All three issues in the triple planetary crisis affect our own health, and solutions towards these should take an integrated and intersectional approach.
- We heard that planetary boundaries is a concept which sets nine environmental limits within which humanity can continue to develop and thrive for generations to come. This concept first came from the Stockholm Resilience Centre in 2009 when the first report of these planetary boundaries were assessed, and the most recent updates of this were released in a report in 2023.
- We heard that since 1968, humans have placed significantly more pressure onto environmental systems, with urban population growth, primary energy use, paper production, water use, building large dams, the growth of international tourism and trade, telecommunications and transportation all significantly increasing and impacting planetary health.
    - However, when looking at health from a human perspective, since 1968 there has also been major advances in reducing child mortality and improving life expectancy.

        - Humans have unsustainably exploited natural resources in order to create benefits in the present, and due to this, the human race has flourished. However, future generations have a higher risk of health issues and a lower livelihood quality because the natural support systems are strained or no longer usable due to the exploitation.
- We heard that planetary health is a holistic system that keeps human health as a central focus, but also aims to improve the environmental and ecological determinants of health, as well as the natural support systems.
    - Currently, there is a knowledge gap in understanding how all the determinants and factors of planetary health are interconnected or affect each other. However, we do know enough to acknowledge the moral responsibility of our decisions on the global, corporate, national and personal levels.
- We heard that climate has a number of direct and indirect impacts on human health. Direct impacts include injuries and fatalities due to climate disasters, heat related illnesses, mental health impacts and cardiovascular diseases resulting from air pollution. Indirect impacts include malnutrition from lack of food security and dehydration from droughts.

Health impacts from climate in the MENA region

- We heard that there are 3 primary impacts that dictate most of the climate effects in the MENA region.
    - The first impact is the rise in temperature, both in regard to an increase in the rate of heatwaves, and also an increase in the ambient temperature. This increase in temperature is exasperated by the heat island effect, where urban areas are significantly warmer than surrounding rural areas. This significant increase in temperature, combined with difficulties in the city adapting to climate change, make it likely that these cities will not be liveable areas in the future.
    - The second impact is an increase in precipitation variability, with there being a change in the timings for when rain will fall across the MENA region. The IPCC 6th assessment report found that in a scenario where global temperatures increase by 2°C, there would be 10-20% less rain, and in a 4°C temperature increase scenario, there would be 50% less rain. This would significantly impact cities in the MENA region that are dependent on refillable aquifers for irrigation and for water usage.
    - The third impact is rising sea levels due to the ice caps melting. A rise in sea levels increases the contamination of salt into freshwater and into the soil, which makes the soil significantly less suitable for growing crops. This increase in soil salinity can therefore lead to malnutrition due to lack of food security.
        - This issue is already becoming common in Egypt and coastal regions around the Mediterranean Sea.
- We heard that many cities in the MENA region, such as Aswan in Egypt, are already some of the hottest places on Earth and are dangerous for people to work outdoors during the summer. A general increase in global temperatures by as little as 0.2°C would significantly increase the risk of heat exhaustion or other temperature related ailments for those working in cities such as Aswan. These people also become more at risk of diseases, and the city will become less productive due to the inability to work and a less healthy population.

- We heard that changes in water flow and availability as a result of increased groundwater salinity is likely to increase the rate of disease transmission i.e. cholera.
- We heard that the MENA region is also known for its poor air quality, with there being high levels of PM 2.5 and 10 (meaning particles with a diameter of 10 micrometres or fewer), which have the potential to cause health defects and illnesses. However, as pollution has a cooling atmospheric effect, the more that the MENA region reduces pollution, urban areas will become warmer.
- We heard that increasing temperatures and an increase in rainfall will create conditions that are more hospitable for vector borne disease carriers, such as mosquitoes. The increase in temperatures will also make regions that were previously inhospitable to these carriers more habitable, and as such spread diseases to new regions, putting further strain on the healthcare system.
- We heard that a lot of the applications on health from climate are focused on the re-emergence of diseases, especially the emergence of new strains of diseases that humans have been able to overcome through the development of our health systems.
- We heard that 80% of the NDCs (nationally determined contributions) for the MENA region mention health as a key factor, which suggests those in the MENA region are clearly aware of the impacts of climate on their own region's healthcare. This is not a global phenomenon, as many countries' NDC's do not mention health.
    - Jordan, for example, identified climate based hazards and risks, found strategic needs around them, and decided on areas of intervention to focus on those that reduced the hazards and threats. One of the focus areas that was identified was improving a health early warning system, where the health system is able to predict the emergence of acute conditions, such as an increase of waterborne diseases after a flood.
    - Another country with a health focus on its NDC's was Oman, which focused on making its health system more resilient, and as such withstand and navigate unexpected changes or events i.e. COVID-19
- We heard that many small communities in the MENA region have disproportionately high rates of issues caused by asthma, which is believed to be influenced by the high proportion of factories in densely populated areas.
- We heard that when issues impact small communities, they are very likely to find solutions to climate issues on their own. In regard to heatwaves, many small communities in Egypt have created simple ventilation funnels that allow for increased air movement, which helps to cool areas down during a heatwave. These funnels also create shade, lowering the outdoor temperatures.
- We heard that it is very rare for small communities in the MENA region to be compensated for any loss and damage they face as a result of climate disasters. However, with the recent addition of a loss and damage fund at COP28, countries are scaling up their methods of identifying if damage was caused as a result of climate change, which would allow them to get compensation. Countries need robust monitoring techniques in order to gather proof for compensation claims, as without enough evidence, then they will not receive compensation.
- We heard that the focus of African countries, be they in the MENA region or elsewhere, should be on adaptation towards being able to survive the effects of climate rather than on solely mitigation. Africa as a whole is only responsible for 3.8% of global emissions, so mitigating those emissions will likely have very little impact on the global sphere. However, any new development that is made should be based on a future that is not fossil fuel focused, and the MENA region should avoid exploiting their fossil fuels whenever possible.

How philanthropy can aid the health sector and climate

- We heard that many of the breakthroughs that have occurred at the intersection of climate, health, and planetary sciences in the past few years have been due to research supported by philanthropy.
- We heard that one of the best ways philanthropy can assist is through building capacity within the healthcare system in the MENA regions through infrastructure development, identifying climate risks and warning systems for said risks, developing new guidelines and standards, developing disease surveillance systems, and the advancement of climate resilient development.
- We heard that another role philanthropy can play is to help build local communication strategies that frame health as the human face of climate change, as this makes the issues of health and climate more personal, relevant, and more manageable. Making climate more relevant and personal to people can make it easier to promote awareness, and education and behavioural change.
- We heard that there are currently no health system models in the MENA region that are working on developing low carbon or sustainable delivery models. Building a case for how low carbon healthcare systems can be beneficial would also be a valuable route for philanthropy to go down.
- We heard that it is important to connect regional and international actors working on different sectors associated with climate adaptation, and help to foster collaborations and having a wider range of shared experiences available.
- We heard that when asked about what kind of support a pharmaceutical company, or other corporations in the healthcare sector can give to the intersection of health and climate, Mohamed Kamal gave the suggestion to support research for how a healthcare system can respond and be better adapted to facing climate disasters. If a healthcare system is more prepared and able to respond better, then more lives can be saved.
    - In practical terms, introducing climate into healthcare is not about providing new areas to fund, but instead new avenues for funding to support the healthcare system. In general, the healthcare system has been struggling with funding for a long time, and by including climate as a funding stream, this provides new options for the system to develop and become more resilient.
- We heard that, at the moment, the majority of governmental and civil decisions are predominantly based on economic and capitalism oriented indicators, and solutions that do not have a clear business model are unlikely to succeed. This is why climate change solutions tend to be very slow, as climate doesn't have a well articulated business case.
- We heard that in regard to prioritising what solutions to take with a limited timeframe, each country has its own set of priorities based on their own circumstances. No one adaptation solution will work globally. However, whilst solutions may be more varied, putting a stop to damaging the environment through pollution, destruction of habitats or emissions should be the most urgent step taken.
- We heard that since the topic of climate and health is so broad, it is easy to be overwhelmed and this leads to inaction in the funding space. However, funding health systems and their ability to adapt to climate tends to involve funding established systems that are already in place, which helps to take away some of the worries, whilst also providing relatability by putting human healthcare as the face of climate issues.