



Global Perspectives on Climate Change & Humanitarian Health: *What's happening in the research space?*

elrha



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Welcome



Goals:

- Enhance knowledge of the intersections of humanitarian health research & climate change
- Learn from global experts working at this nexus
- Facilitate a discussion on research challenges and opportunities in this space
- Provide an opportunity for engagement and networking

Logistics:

-  Participants are muted
-  Slides and recording will be shared
-  **Q&A:** Ask the panellists questions and upvote questions you'd like to see answered
-  More information

GFH2R: <https://go.nih.gov/GFH2R>

R2HC: <https://bit.ly/48nFZew>

Agenda



Main Webinar | 9:00am – 10:00am ET / 2:00pm – 3:00pm GMT

- Welcome (5 minutes)
- Climate Change & Humanitarian Health Landscape (10 minutes)
- Global Flash Talk Presentations (20 minutes)
- Panel Discussion and Q&A (20 minutes)
- Transition to Break Out Rooms (5 minutes)

Break Out Rooms | 10:00am – 10:30am ET / 3:00pm-3:30pm GMT

- Welcome and Introductions (5 minutes)
- Discussion/Networking (20 minutes)
- Close Out (5 minutes)

Meet your moderator



Jura Augustinavicius

Assistant Professor

*Department of Equity, Ethics, and Policy
School of Population and Global Health
McGill University*

Exploring Linkages Between the Climate Crisis and Humanitarian Health



Katie Bigmore
Humanitarian Practitioner

Climate Crisis Humanitarian Health



Situation Analysis

1. Climate Change concepts – the lingo
2. The Evidence Overview – the landscape
3. Emerging Challenges
4. Actions

Situation Analysis



- The interlinkages between climate crisis and humanitarian health.
 - Vulnerable populations requiring humanitarian assistance
 - Humanitarian settings, where climate acts as a threat multiplier in contexts where concurrent shocks and interconnected risks can lead to a polycrisis.
- Builds understanding of the evidence available and the key issues and stakeholders working across the climate crisis and humanitarian health.
- It involved a narrative review and search of the published articles and reports that focus on Climate-Emergency-Humanitarian-Health.
- Identifies both the available evidence as well as the evidence gaps and presents these at various levels of the evidence pyramid.

1. Climate Change concepts

There are multiple concepts (and constructs) in place within the sphere of Climate-Emergency-Humanitarian-Health.

Mitigation

Action to reduce or prevent greenhouse gas emissions.

Transitioning to renewable energy

Adaptation

Actions to reduce vulnerability to the current or expected impacts of climate change.

Action need to happen at the local level.

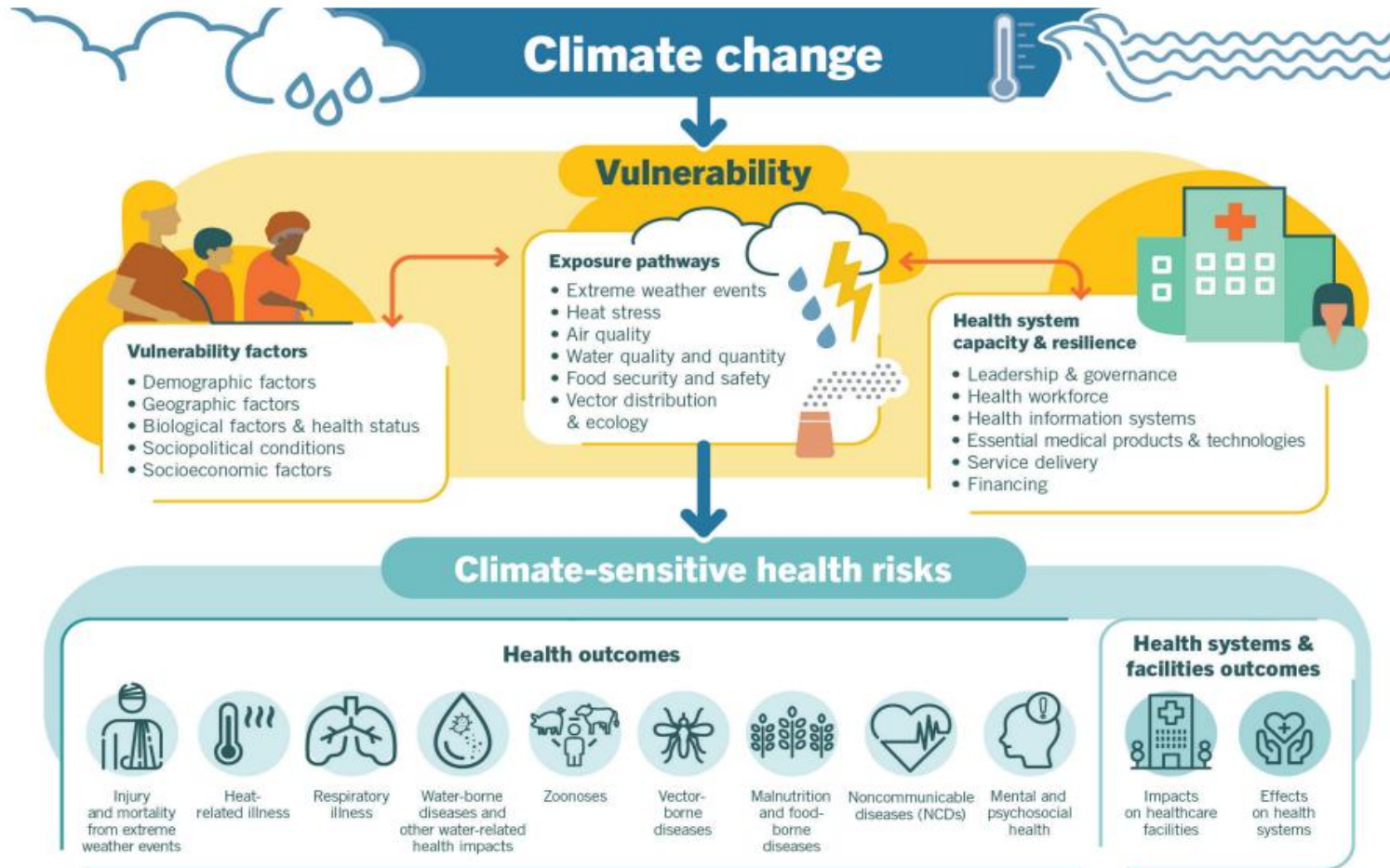
- **Cause and Effect**
- **Risks and Vulnerability**
- **Systems and Resilience**

To brush up on your Climate Concepts see

[The Climate Dictionary | United Nations Development Programme \(undp.org\)](https://www.undp.org/climate-change-dictionary)

Cause and Effect

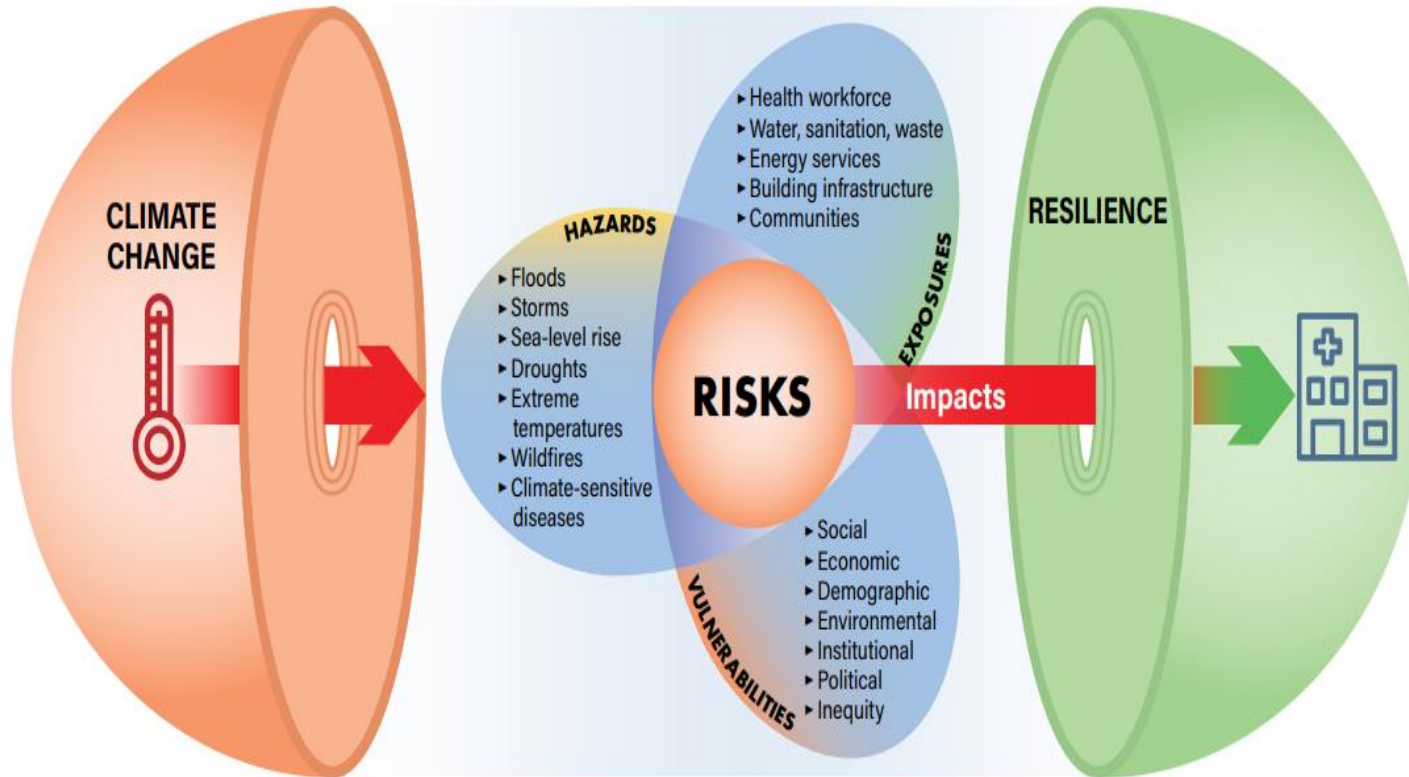
The concept of cause and effect, serves to show that the climate crisis leads to a health crisis.



Source: Quality criteria for health national adaptation plans. Geneva: World Health Organization; 2021.

WHO: An overview of climate-sensitive health risks, their exposure pathways and vulnerability factors. Climate change impacts health both directly and indirectly, and is strongly mediated by environmental, social and public health determinants.

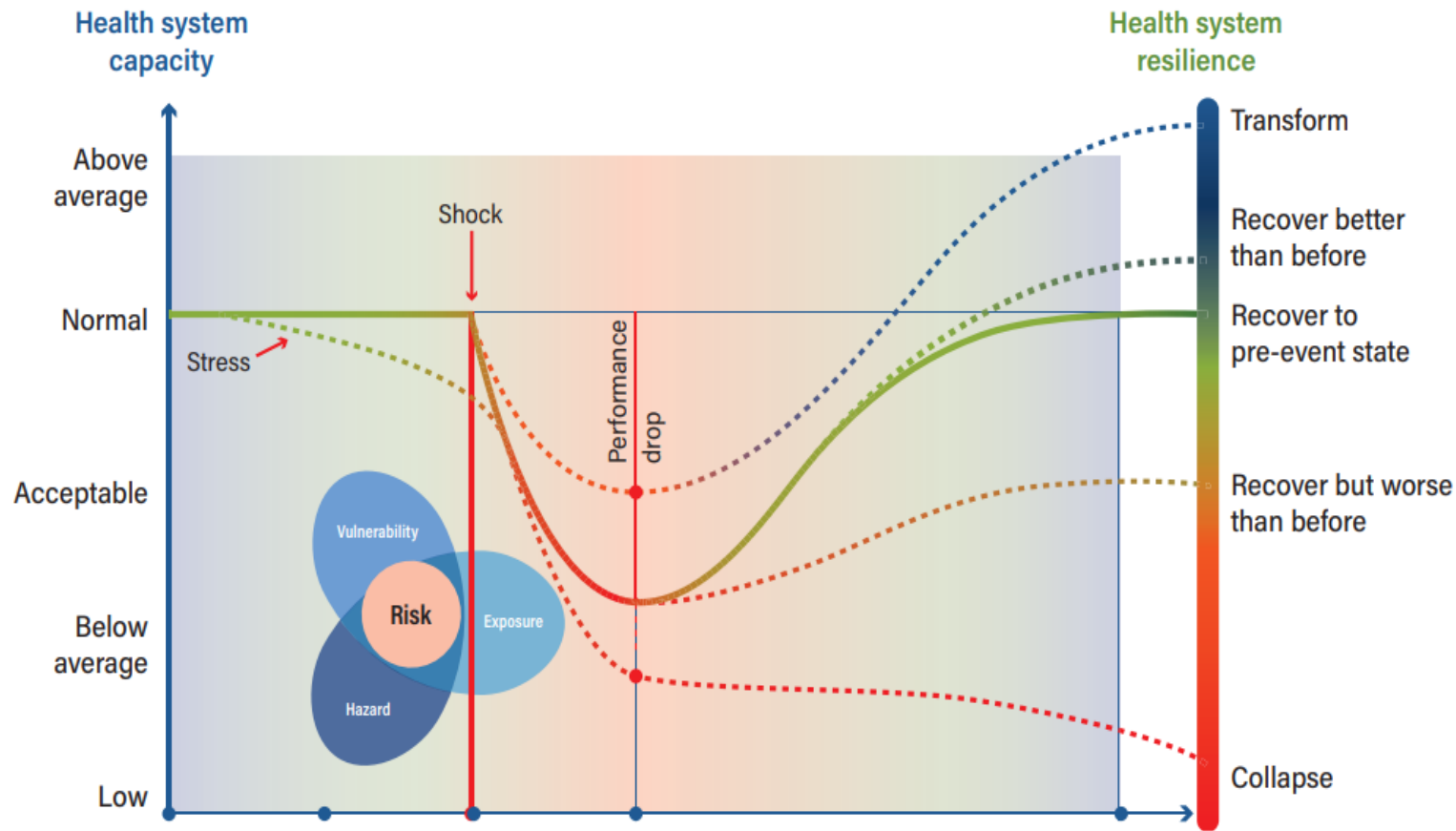
Risks and Vulnerabilities



The concept of risks serves to show how a combination of hazards, vulnerabilities and exposures effect health care and community resilience.

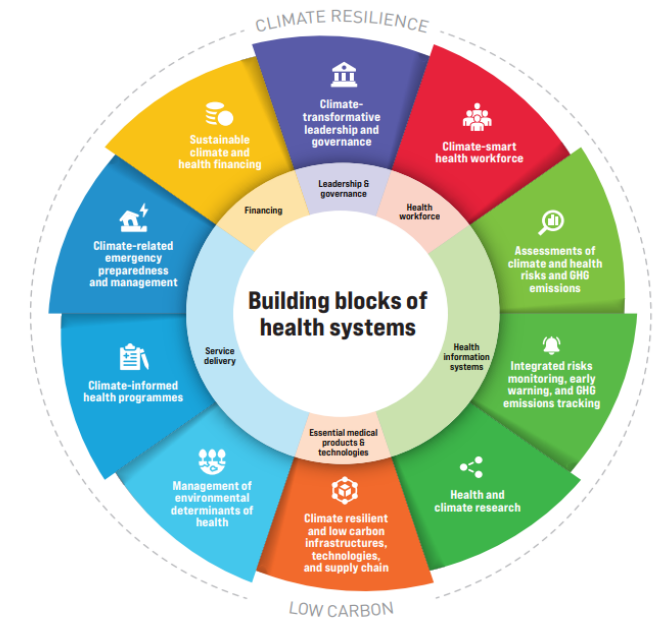
Vulnerabilities include a range of social, economic, institutional and political contextual factors, including demography and inequity.

Impacts of climate related risks on health care resilience.
Exposure, Vulnerabilities, Hazards



Systems and Resilience

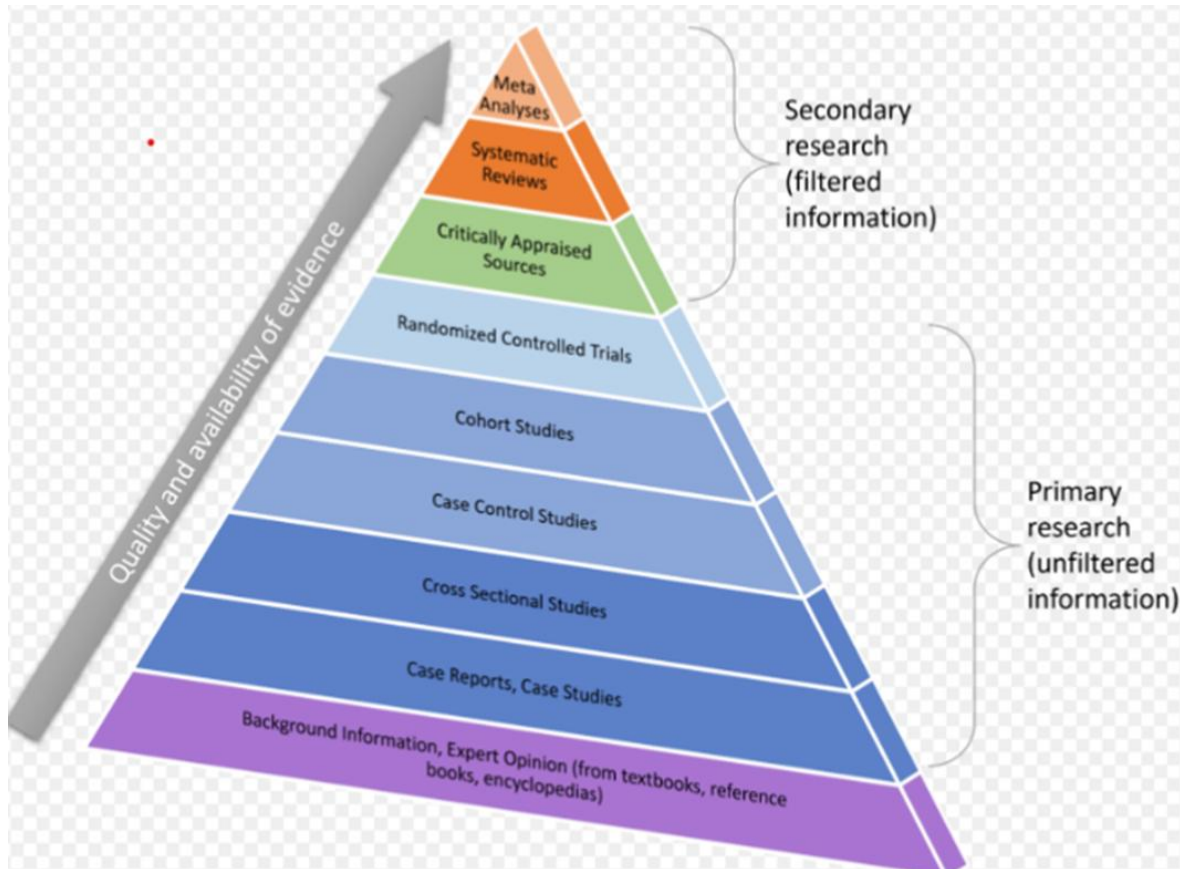
Fig. 1. Operational framework for climate resilient and low carbon health systems



The concept of system resilience to shocks and stresses, shows potential pathways from collapse to transformation. This includes awareness of pre-existing stress prior to the shock event which may affect the capacity of the system to recover.

Climate resilience is the capacity of a community or environment to anticipate and manage climate impacts, minimize their damage, and recover and transform as needed after the initial shock.

2. The Evidence Overview



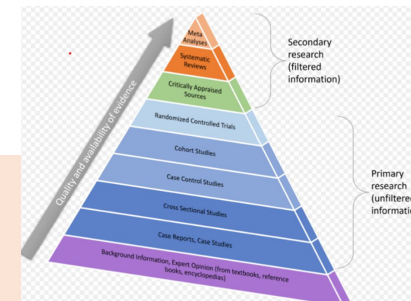
Three Tiers:

Top:
Umbrella + Meta Analysis
(Secondary) 3

Upper Middle:
Systematic Reviews
(Secondary) 22

Lower Middle and Base:
Articles and Reports
(Primary + Grey) 15

The Evidence Types



Top

- **Evidence Type:** Meta Analysis, Umbrella Systematic Review, Evidence Gap Maps
- **Features:** HIC/MIC, Modelled Data, Aggregating impact of the effects of CC on Health
- ***No evidence from particular humanitarian populations or contexts***

Middle

- **Evidence Type:** Critically Appraised, Systematic Reviews, Case Control, Case Studies, Cohort, Causal
- **Features:** MIC, mix UMC+LMC, Impact of effects of CC on separate sub disciplines in Health
- ***Weak evidence from particular humanitarian populations or contexts***

Base

- **Evidence Type:** Grey literature, Reports, Expert Opinion, Case Reports, Case Studies.
- **Features:** Effects of CC in LIC (plus MIC), Climate justice focus,
- ***Some limited evidence from particular humanitarian populations or contexts***

The Evidence Findings

Top

- The global evidence base has been driven by the need to demonstrate causation between climate crisis-health crisis, to understand pathways and package knowledge to inform high level global decision making.
- A large part of the global evidence is generated by models and focused on specific health risks affected by climate change.
- Big literature/science is using evidence synthesis, to critically appraise and summarise the evidence base and gaps.

Middle

- Many published systematic reviews have focussed on a single sector, discipline, and/or category of impact. Some Health Sub areas have received a lot of attention – Heat.
- Research on climate and health takes place across various disciplines and silos, representing a fragmented landscape of niche discourses that hinders efforts to gain key insights and identify trends and evidence gaps.

Base

- Humanitarian organisations are documenting and generating evidence on the health implications of the climate crisis in Humanitarian settings. There are interesting lessons from individual case studies generated however there are (or seem to be) no strong messages emerging from primary research.
- The evidence generated is not reaching a large audience or influencing wider policy.

3. Emerging Challenges

- There is a scarce and uneven distribution of the evidence. Little evidence specific to humanitarian populations.
- There are high levels of uncertainty (amongst funders and knowledge brokers) on what to do about the evidence gap for populations already affected by humanitarian crisis.
- For policies and practice to be evidence driven – there are significant (2+yrs) time lags from when research is designed, funded, and when academic literature is peer reviewed, shared, critically appraised and systematically reviewed.
- There is a need to speed up evidence sharing from base of the pyramid, including rapid evidence reviews and draw on grey literature and use this to inform policy. More focus is required to engage humanitarian practitioners to generate primary research from the base of the evidence pyramid, to demonstrate what works.
- This is a fast-moving area, with a diverse and growing group of stakeholders, however in the research-policy space, humanitarian stakeholders are not well represented.
- There is a need for increased advocacy on the experience and requirements of the humanitarian sector in discussions, if plans and funding are to support these needs.

4. Action

Challenges to overcome:

- A. Shift from Global to Local**
- B. Evidence Time Lag**
- C. Siloed Research**
- D. Sharing from Humanitarian settings**

Put Humanitarian Health at the heart of Climate Research and Action

- A. Need more learning and sharing from practice of what works.
- B. Speed up evidence sharing from the base of the pyramid, including rapid evidence reviews and draw on grey literature.
- C. Need transdisciplinary research to address – multiple dimensional connections, pathways, risks and vulnerabilities.
- D. Join up the evidence and data - use common messages and reporting across CC and health. Consistently demonstrate the effects of CC adaptation interventions on health outcomes.

Flash Talk Presentations



Junaid Razzak

- Director, Centre of Excellence for Trauma and Emergencies, Aga Khan University



Elizabeth Kimani-Murage

- Public Health Nutrition Specialist and Senior Research Scientist, African Population & Health Research Center



Wael Al-Delaimy

- Professor, Herbert Wertheim School of Public Health & Human Longevity Science, UC San Diego



Irene Torres

- Strategic Advisor, Inter-American Institute for Global Change Research



HEALTH SYSTEM RESPONSE TO EXTREME HEAT

Dr. Junaid A. Razzak

Aga Khan University/Weill Cornell Medicine

South Asia (Pakistan)



Research Interests



- Confluence of Population Health and Emergency Care
 - **DIAGNOSIS:** In regions with high incidence of febrile illnesses, how does one recognize and treat heat illnesses?
 - **PROGNOSIS:** What's the relationship between individual exposure, individual vulnerabilities and individual risk of developing severe heat illness such as heat stroke?
 - **EMERGENCY TREATMENT:** During mass casualty scenario, what treatment strategies are going to save most lives?
- Implementation Science
 - Effective implementation of known effective interventions in LMICs



Major Challenges in Pakistan

- Lack of clarity on locally relevant and effective interventions
- Lack of specific diagnostic criteria and treatment strategies relevant to the low resource settings
- Lack of public health and emergency care training and research training in climate related emergencies

Emerging Opportunities



- Research topics
 - Translation and clinical research to develop diagnostic tools and criteria
 - Measuring individual exposure, especially amongst the most vulnerable and predict potential for severe heat illness
- Research/Policy capacity building
 - Research capacity building in LMICs focused on climate change and health
 - Educational programs targeting health providers
 - Training material for mid-level policy makers

Research Interests, Challenges and Opportunities in Climate Change Affected Humanitarian Contexts in Africa

Dr Elizabeth Kimani-Murage

African Population and Health Research Center (APHRC)

Africa





Research Interests

- Understanding the impact of climate change on health in drylands
 - Attributable impacts
 - Lived experiences
- Generating evidence on relationships between climate change and nutrition-related health outcomes in humanitarian settings
- Testing interventions to help adapt and build resilience
 - *Use of indigenous/local knowledge
- Generating evidence on mitigation actions with climate and health co-benefits



Major Challenges in Africa



- Very high levels of vulnerability; limited adaptive capacity
- Limited level of understanding and appreciation of human-induced climate change and impacts
- Limited reliable evidence – Attribution, documented lived experience, quantified impact of interventions on climate and health
- Difficult research environment due to conflicts, migrations
- Limited resources



Emerging Opportunities



- Emerging methodologies:
 - Attribution science methodologies
 - Lived experience methodologies
- Global momentum for action - To generate evidence and intervene
- Greater appreciation of local/indigenous knowledge in development of interventions





Community Engagement in Climate Change Research

Wael Al-Delaimy

University of California San Diego

South Western Asia/Middle East and North Africa



Research Interests



- Climate Change in the context of Global Health
- Vulnerable populations globally and locally
- Action oriented research that leads to solutions

Major Challenges in the Region



- Lack of Data
- Lack of Human Capacity
- Limited infrastructure and resources at the local level
- Poor interest and understanding by communities

Emerging Opportunities



- Collaborations globally
- Training the next generation
- Advancing the field and state of the art in relation to climate change
- Growing interest in this field by international funding bodies

Priorities and challenges in Latin America



Irene Torres

Main research interests

- Extreme weather events from a school-based health promotion perspective
- Governance of health systems relevant to climate change-related responses in humanitarian settings

Main challenges in the region

- Lack of interoperable data
- No research protocols and mechanisms in place to collect event data
- "Disaster" perspectives/frameworks and timelines

Research pathways

- Better understanding of climate change-related health impacts on “crisis/distress” mobility
- Better understanding of health responses in climate change-related “crisis/distress” mobility
- Mental health of both mobile population and health workers working with these populations in climate change-affected settings



Panel Discussion and Q&A



Thank you!

- Thank you for joining the first part of the webinar! We will now be transitioning to informal breakout sessions (*details on next slide*)

We want your feedback!

Please complete the survey following this QR code:



Transition to Breakouts!



Please join new Zoom meetings for 30-minute informal breakout sessions.

Please use the links in the chat to select one of the following breakout rooms to join:

Room 1: Evidence generation and research methodologies in climate change and humanitarian health research

Discussants: Elizabeth Kimani-Murage,
Jura Augustinavicius

Room 2: Ethics, partnerships, and community-driven research at the intersection of climate change and humanitarian health

Discussants: Irene Torres,
Wael Al-Delaimy

Room 3: Evidence use and translation to climate and humanitarian health policy and practice

Discussants: Junaid Razzak,
Katie Bigmore

BREAK OUT ROOM 1



Welcome & Introductions

Evidence generation and research methodologies in climate change and humanitarian health research

Discussants: Elizabeth Kimani-Murage, Jura Augustinavicius

Facilitators: Jenna Durham (NIH), Claudia Winn (Elrha)

How to participate today



Use the chat function to introduce yourself and tell us which part of the world you're joining us from today



Use the chat function to ask questions, share comments or reflections



Feel free to put your camera on, and stay muted. You may be invited to unmute and contribute verbally



Network, share tools and resources



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Discussion Launch

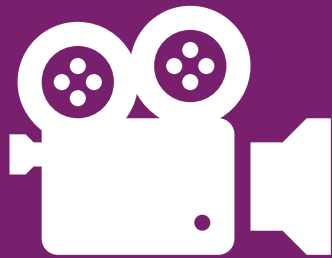


- Can you share an example of a particularly exciting or innovative methodology or approach to evidence generation in climate and humanitarian health that you think has the potential to drive this research space forward?
- What is the most important lesson you have learned about adapting research methodologies to climate-related or humanitarian-related research?
- Are there specific tools or resources that you would recommend for researchers who are new to climate or humanitarian health research?

Thank you!



Slides and recording from
the main session will be
shared.



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BREAK OUT ROOM 2



Welcome & Introductions

Ethics, partnerships, and community-driven research at the intersection of climate change and humanitarian health

Discussants: Irene Torres, Wael Al-Delaimy

Facilitators: Ann Liu (NIH), Amit Mistry (NIH), Phoebe Jamieson (Elrha)

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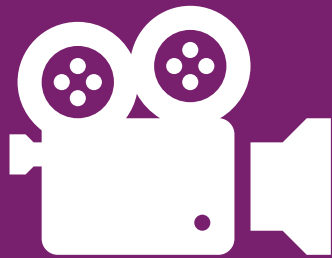


- What are some of the ethical issues that you think aren't yet being well addressed in climate change and humanitarian health research? What can we do as a community to work on these?
- Can you share an example of a partnership that worked well? It could be a partnership across disciplines (i.e., bringing climate scientists together with health researchers) or organizations (i.e., bringing academic researchers together with local health ministries).
- What have you learned about engaging with and partnership with communities in your experience across climate and humanitarian health?
- Are there specific tools or resources that you would recommend for researchers who are new to climate or humanitarian health research?

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BREAK OUT ROOM 3



Welcome & Introductions

Evidence use and translation to climate and humanitarian health policy and practice

Discussants: Junaid Razzak, Katie Bigmore

Facilitators: Gillian McKay (Elrha), Blythe Beecroft (NIH)

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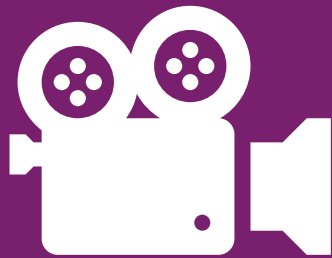


- What needs to be done to bring together researchers, policy-makers, and humanitarian health practitioners to address the threat of climate change to the populations we all serve?
- Can you share an example of evidence being translated into policy or practice for the benefit of populations affected by humanitarian crises and/or climate change?
- What advice do you have for early career scientists on how to ensure that their research is translated into policy and/or practice?
- Are there specific tools or resources that you would recommend for researchers who are new to climate or humanitarian health research?

Thank you!



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