



THE AGA KHAN UNIVERSITY

Climate Change, Health Implications & Healthcare System

Prof. Fauziah Rabbani

Course Director, C&H Course, MSHM Programme
Professor Public Health, Department of Community Health Sciences
Chief Implementation Science & Innovation, Brain and Mind Institute
Aga Khan University, Karachi

Course Outline

What does this course entail?



Course Rationale & Goal

- Course Description

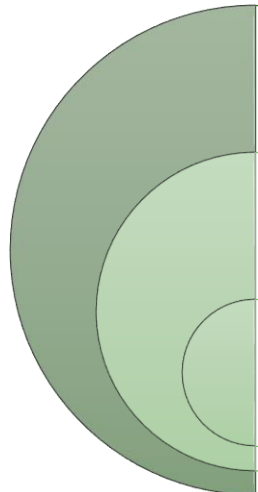
- **Climate change creates health impacts:** *Increases health risks, creates new challenges, and reduces healthcare system capacity.*
- **Skill Gap:** *Healthcare/hospital managers lack training in addressing climate change impacts on health systems.*
- **Course Goal:** *This course emphasizes the **impact of climate change on human health and healthcare systems**, focusing on hospitals. It covers **risk assessment, hazard identification, and disaster management**. Students will apply existing frameworks to analyze climate change effects and develop hospital **health plans** emphasizing **preparedness, risk mitigation, and resilience in healthcare delivery**.*

Course Aims & Objectives

Course Aim

To provide students becoming healthcare managers with the knowledge and tools to understand and address the health and healthcare challenges posed by climate change, fostering sustainable and resilient healthcare systems.

Course Objectives



1. Evaluate the impact of climate change on health and health care systems
2. Apply existing frameworks and literature to understand impact of climate change on health and health care delivery systems
3. Apply concepts of system preparedness, risk mitigation and resilience building for addressing climate change implications on hospital delivery systems.

Course Outcomes & Pedagogies



1. Critical Thinking & Problem-Solving



2. Effective Communication Skills



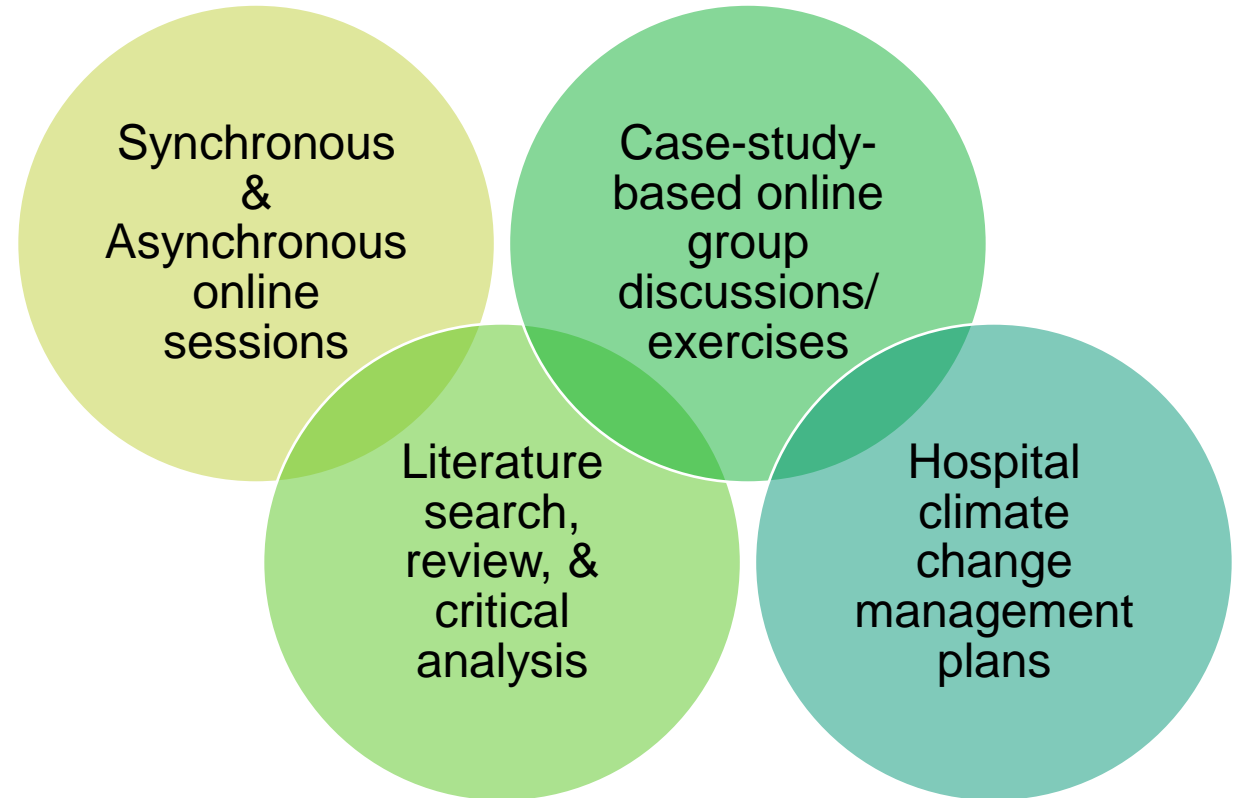
3. Social Accountability & Advocacy



4. Research Skills



5. Technical Skills



Guest Sessions by World-Renowned Speakers

Speakers and Profile

Guest Speaker: Renzo Guinto



- MD, DrPH, Associate Professor of Global and Planetary Health, SingHealth Duke-NUS Global Health Institute, Singapore
- Member, WHO's Technical Advisory Group on ethics of climate change
- Chair, Thematic Working Group on Climate Resilient and Sustainable Health Systems

“Climate Change and Resilient Health Systems of Low- and Middle-Income Countries”

Session Objectives

To assess the readiness of LMIC health systems and hospitals to address climate change related health impacts

To identify gaps and areas for improvement in health systems preparedness for disasters related to climate change

To discuss strategies for enhancing health systems and hospital resilience in the face of climate-related challenges

Guest Speaker: Miriam Kugule



- Director, Office of Environment and Sustainability, AKU
- Lecturer, Faculty of Arts and Sciences, AKU Pakistan

“Health care systems impact on climate change: Global discourse and local experiences on keeping people and planet healthy”

Guest Speaker: Hameed Ravaghi



- PhD, Regional Advisor/Hospital Care & Management, World Health Organization Eastern Mediterranean Regional Office (EMRO), Cairo, Egypt

*“Resilience of Hospitals to deal with the impact of Climate Change:
The case of EMR”*

Session Objectives

To assess the readiness of hospitals in the WHO EMR to address climate change related health impacts

To identify gaps and areas for improvement in hospital preparedness for disasters related to climate change in the WHO EMR

To discuss strategies for enhancing hospital resilience in the face of climate-related challenges in the WHO EMR

Guest Speaker: Ahson Rabbani



- BE, MS, MBA, PhD
- CEO Child Life Foundation, a leading non-profit in pediatric healthcare, Pakistan

*“Preparedness and response to climate change disasters in a pediatric emergency hospital setting:
The case of Child Life”*

Session Objectives

To assess the readiness of a paediatric emergency hospital to address climate change related health impacts

To identify gaps and areas for improvement in hospital preparedness for disasters related to climate change in the paediatric emergency hospital (Child Life)

To discuss strategies for enhancing hospital resilience in the face of climate-related challenges in the Child Life context

Guest Speaker: Mairaj Shah



- MBBS, MBA, CHFP, FACHE,
- COO, AKU Secondary Hospitals, Karachi, Pakistan

“Mitigation and adaptation measures and hospital systems response to climate change: A case study of AKUH”

Session Objectives

To assess the readiness of AKUH to address climate change related health impacts

To identify gaps and areas for improvement in hospital preparedness for disasters related to climate change in the AKUH context

To discuss strategies for enhancing hospital resilience in the face of climate-related challenges in the AKUH context

Featured Case Study: mPareshan

- Responding to Mental Health Challenges of Flood-Affected Communities through Technology-Driven Local Solutions in Pakistan
- Case study featured on Wellcome Trust-funded #ConnectingClimateMinds global online platform: hub.connectingclimateminds.org/research-and-action/case-studies/14



Course Facilitator Details

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Prof. Fauziah Rabbani

Biography



- **Course Director**
- Chief Implementation Science & Innovation at Brain & Mind Institute (BMI) & Professor of Public Health at Department of Community Health Sciences (CHS), Aga Khan University (AKU).
- Former Associate Vice Provost for Research at AKU (2017-2022), overseeing research administration across multiple AKU geographies.
- Former Chair, Department of Community Health Sciences, AKU (2009-2017)
- PI/Co-PI on grants from Bill & Melinda Gates Foundation, MRC-UK, WHO, Wellcome Trust, Grand Challenges Canada
- Focus on health systems, mental health, policy analysis, non-communicable diseases, women's mental health, & vulnerable populations.

Dr. Ather Akhlaq

Biography



- **Course Co-Director**
- Associate Professor of Health Management, Dept. of Community Health Sciences, Aga Khan University.
- Former Acting Head, Health & Hospital Management, IoBM, Director, ORIC & OGS, IoBM.
- PhD, University of Edinburgh, UK.
- Research experience in digital health, diffusion of innovation, child abuse, asthma, & digital business.
- Published in The Lancet—Regional Health Europe & other top journals.
- PI/Consultant on projects funded by HEC Pakistan, Synergy Pharmaceuticals (USA), ICMEC (USA), & University of Central Lancashire (UK).

Amna Siddiqui

Biography



- **Teaching Assistant**
- Research Fellow at Brain & Mind Institute (BMI), Aga Khan University (AKU).
- Master's in Neurosciences (NEURASMUS) – VU Amsterdam & Charité Universitätsmedizin Berlin; BS Biosciences, COMSATS Islamabad.
- Research experience: mental health implementation research, old-age psychiatry, epileptology, genetic association studies.
- Currently working on a migrant health project with University of Edinburgh (funded through Wellcome Trust), and a community-based mental health screening and referral intervention for flood-affected women in Sindh (funded through Grand Challenges Canada).
- Previous work: Research & development, and digital magazine editor for a digital mental health start-up. Also consulted with AKU on a systematic review of mental health interventions in the EMR.