Planetary Health and displacement:
A new inter-disciplinary scientific approach for exploring sustainable development within a healthy environmental

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GOALS

PLANETARY HEALTH

Sustainable development

Environment – displacement – health nexus
What is Planetary Health (PH) Science

Whitmee et al., 2015, The Rockefeller Foundation-Lancet Commission on planetary health

http://www.thelancet.com/commissions/planetary-health
Climate change

Population Health

Migration

Other determinants:
Cultural, social, economic, political, demographic, environmental

Parrish, Zeka et al.,
Case study 1: Hurricane Katrina, USA, 2005

**Climate change**

Increased event likelihood by factor 2-7 (Grinsted et al., 2013)

**Displacement**

1.5 million displaced temporarily
500,000 permanent (Warner et al., 2010)

**Health**

Doubling of serious mental health illnesses
Severe impact on healthcare coverage (Rhodes et al., 2010)

**Diagram:**

- Climate change
- Population Health
- Migration

Other determinants:
Cultural, social, economic, political, demographic, environmental
Case study 2: The Fertile Crescent Drought and the Syrian conflict

- Long-term drying trend partially responsible for 2006-2009 drought in the fertile crescent (Kelley et al., 2015)
- 6,784,000 as of Dec 2017 (IDMC 2018)
- Crowd disease, WaSH, nutritional deficiencies, abuse and violence, mental health, social wellbeing
Case study 3: informal settlements and their implication on environment and health

- Displacement Climate change Displacement Environment and Health impacts
  - e.g. from rural to urban areas and slums
  - Increased vulnerability

- Increased vulnerability
  - Sudden (e.g. flooding) and slow-onset environmental change (e.g. soil erosion)

- Sudden displacement due to disaster
  - Trapping of those unable to evacuate

- High mortality of the most vulnerable communities
  - Infectious disease outbreaks
  - Continued environmental degradation and pollution due to rapid urbanisation

Other determinants: Cultural, social, economic, political, demographic, environmental
Takeaway messages

- Environmental and health factors are important both as a cause and consequence of displacement
- Displacement and environmental migration is rarely monocausal
- Planetary health can be a useful resource
  - holistic, systematic framework
  - interdisciplinary collaborations
  - Facilitate access to data and tools, and approaches that can support effective and durable solutions
Thank you

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