The Acute and Slow-Moving Impacts of Climate Change

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How Does Climate Change Impact Mental Health?

- Extreme Weather
- EcoAnxieties
- Neuropsychiatric impacts (Stroke, nutrition, infectious disease)
- Heat Stress
- Geopolitical Conflict
- Air Pollution
How Does Climate Change Impact Mental Health?

- Air pollution
- Infection/nutrition
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- Heat Stress
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Extreme Weather
Mental Health Effects of Disasters

Trauma related disorders
- In developing countries, studies report PTSD rates after disaster 2.9% – 90% (Rataj et al 2016)
- 24% who applied for disaster assistance after CA wildfire had probable PTSD at 3 month F/U (Marshall et al, 2007)
- 30.3% PTSD in New Orleans metro area residents after hurricane, (Galea et al, 2007)
- 62% of evacuees from Hurricane Katrina met criteria for acute stress disorder (Mills et al, 2007)

Clinically significant anxiety, depression, also reported following disaster.
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Air Pollution
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Heat Stress
Heat Effects

Particular vulnerability of psychiatric populations to general health effects of heat

General health effects of heat
- Heat stroke, dehydration, new onset renal failure
- Complications of chronic illnesses – COPD, DM, CAD, Asthma
Climate change is associated with collective violence, generally in combination with other causal factors, e.g. scarcities of cropland and other resources (Levy, et al., 2016; Zhang et al, 2007, 2007, 2011)

Heat is associated with interpersonal violence, (reviews – Anderson, 2001; Burke, 2015)
- Heat wave associated with 13% increase in assault injuries in Adelaide (Nitschke et al, 2007)
- Heat related retaliation in baseball (Larrick et al, 2011)
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Eco-Anxiety
The “Eco-Anxieties” (Psycho-terratic Syndromes)

• Ecological worry not usually pathological, but documented cases and populations where of clinical significance

• “Solastalgia” – nostalgia while still at home, when environment no longer offers the same solace

• “Nature Deficit Disorder”

• Enactments reported by psychoanalysts (e.g. Bodnar)
Other Slow Moving Impacts

• Chronic and Repeated Stressors
• Environmental refugees - Acculturative Stress
• Interpretation of environmental trauma as human-caused via climate change – Will we see more chronic PTSD?