SCHOOL OF PUBLIC HEALTH

Department of Global Health and Population

Ensuring a Nurturing Care Environment for Young Children in the Context of Climate Change

Aisha K Yousafzai, PhD Associate Professor of Global Heath

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Impact of Climate Change on Children

- Children are most vulnerable to the effects of climate change, especially those living in already disadvantaged contexts.
- The developing child is more susceptible than an adult to the effects of environmental stressors.
- Urgent action is needed on mitigating climate change and adapting to its impacts.



Every Domain of Nurturing Care is Impacted



A Save the Children report estimated for every year in the next decade, natural disasters will affect 175 million childrenimpacting their health, education, protection and life-long opportunities.



Consequences on Child Wellbeing

Physical Health Risks

- Heat related illnesses, exposure to environmental toxins, infectious illnesses and parasitic diseases more prevalent in warmer temperatures.
- Sudden climate change events (e.g. Floods in Bangladesh) e.g., droughts, rising sea levels) or long-term impacts (e.g., rising sea levels in the Pacific Islands).

Bangladesh

- More than 19 million children in the low-lying country are threatened by environmental disasters such as cyclones and floods (UNICEF, 2019)
- Number of cases of diarrheal illness per week increases by 5.1% for every 10mm above the average rainfall (Gibson, 2014).

- **Psychosocial Health:** Increased risks of depressive symptoms, sleep problems, behavioural problems and cognitive deficits (Garcia and Shaheen, 2016).
- Nutrition: By will be 20% more malnourished children than would be the case without climate change (IFPRI, 2009)
- Education: Direct (e.g., climate change events that can destroy/damage schools) and indirect (e.g., family migration, increased economic hardships, decreased attendance) (PLAN, 2015).
- Safety and Protection: Displacement and migration due to sudden climate change events increases risks for family separation, orphans and exploitation (Gibbons, 2014).
- Care and family functioning: Increased domestic violence documented following climate related disasters (Yun et al., 2010).



Gender Inequalities

- In a study of impacts of floods in Nepal, girls were more likely to be at risk (e.g., less able to swim than their brothers) (Pradhan et al., 2007)
- Following 2010 floods in Pakistan, 73% 10-19 year olds displayed high levels of post-traumatic stress disorder, with great impacts on girls (Gibbons, 2014)

Nurturing Care and Protecting Children's Wellbeing



Pakistan Floods 2010: Early stimulation programme for internally displaced population in Sindh [Aga Khan University]



Reducing Risk of Toxic Stress

Positive

- Normal and necessary
- E.g. Immunization, first day at preschool

Tolerable

- Temporary stress responses buffered by supportive relationships
- E.g. Grief, natural disaster

Toxic

- Prolonged activation of stress in the absence of protective relationships
- E.g. Chronic neglect



Chilean Earthquake, 2010 (Arbour et al., 2016)

Experience of Trauma

- Pre-earthquake:5.5% children
- Post-earthquake:
 - 81% of children experienced 1 stressful event
 - 40% of children experienced 2 or more stressful events

Unmet Needs

| Need | % Unmet Need |
|---|-------------------|
| Caregiver stability | 20% |
| Protection | 21% |
| Health: - Physical - Access to services Housing | 23% 20% 93% |
| Nutrition | 29% |
| Psychosocial - emotional health, - Social conduct | 29% 24% |
| Stimulation | 19.9% |



 Japan earthquake 2011: Children of caregivers who perceived a greater experience of trust and aid reported less trauma (mediated by caregiver's mental health). (Yagi et al., 2016)



Critical: Support caregivers to continue responsive nurturing care:

- Family wellbeing
- Child wellbeing



Promoting Nurturing Care in the Context of Climate Change

- Brain development is most rapid in the early years.
- Experience matters: Quality of brain development is moderated by dynamic interactions between our genetics and environment.
- In adverse contexts protective, early and multisectoral interventions can support children's development.



Nurturing Care and Multi-Sector Coordination & Planning



- Increased diarrheal illness in children <5y in Tamil Nadu (Mertens et al., 2019):
 - 1.5 times higher risk following increased rainfall
 - 26 times higher risk following heavy rain falls
- Draught exposure at ages 5, 8 and 12 years increased risk of poor linear growth in Ethiopia (Bahru et al., 2019).
 - Girls more at risk than boys

Critical: Multi-sector coordination (e.g., WASH, Social Protection)

Nurturing Care and Child Rights



- In an Australian survey of 7-24 year olds (Chiw & Ling, 2019):
 - 96% stated climate change was a serious global issue
 - 89% were worried about the impact of climate change
 - 70% expressed their voices were unheard.

Critical: To have age and developmentally appropriate communication with children about climate change, and to include them in actions.

Rights Frameworks

- The 1992 United Nations Framework Convention on Climate Change (UNFCCC) does not mention of children, even though it calls for preserving the global climate for present and future generations.
 - Wealthier nations have an obligation to support less wealthy nations address consequences of climate change.
- Since 2008, after UN entities collaborated to establish the UN Joint Framework Initiative on Children, Youth and Climate Change, children and young people have been given a voice.

[Gibbons, 2014]



Summary

Nurturing care:

- Strengthening caregiving knowledge and skills, behaviours and attitudes to support children's development.
- Requires creating enabling environment of care that attends to the needs of the caregiver (e.g., their own mental health) and access to resources.
- Supporting resilience in children, caregivers, communities and systems is cannot be lost in actions to mitigate and address climate change:
 - Planning for changing contexts due to climate change
 - Continued attention in climate change event responses with attention to supporting the caregiver-child relationship, multisecotral coordination, child rights and communication are essential.

Thank you

ayousafzai@hsph.harvard.edu