

**York University's 7th Lillian Meighen Wright Maternal-Child Health Learning Academy:
Impacts of Natural Disasters on Maternal-Child Health**

Attia Khan
Faculty of Health, York University

This is an invited Commentary

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On 15 and 17 July 2024, the Office of Women's Health Research Chair in Mental Health held its 7th Lillian Meighen Wright (LMW) Maternal-Child Health Learning Academy focussing on the Impacts of Natural Disasters on Maternal-Child Health. In a joint Call for Action the United Nations agencies urged countries around the globe to protect maternal, newborn and child health from the impacts of climate change (World Health Organization, 2023). The World Health Organization reports the impacts of climate crisis on pregnant women and children has been largely overlooked and underreported in the research literature even though they bear the most serious consequences due to their vulnerabilities (World Health Organization, 2023). The purpose of this year's Learning Academy was to draw attention to the impact of the ongoing global climate change on maternal and child health and to call for local, national and global action on climate-related threats. Academics, researchers, students, policy makers, service providers, and community members from East to West coast of Canada, the USA, Great Britain, Norway, Rwanda and Ethiopia participated in the two-day virtual LMW Learning Academy. Panel and poster presenters addressed impacts of climate change and climate initiatives in the global North and South on diverse and vulnerable populations living in urban, rural and coastal communities.

The Lillian Meighen Wright Learning Institute/Academy first began as a knowledge sharing

event in 2011. The goal was to provide a platform where diverse sectors could showcase innovative research and knowledge on topics related to maternal-child health. Since then, the Learning Academy is held biennially and has transformed from an in-person event to an online event after the COVID-19 Pandemic. Some of the past LMW Learning Academy themes have included *international context of disabilities on parenting, gender-based violence and trauma-informed approaches*; and *maternal-child health during a global pandemic*. Dr. Nazilla Khanlou (Academic Lead for the Lillian Meighen Wright Maternal-Child Health Scholars Program at York University and the Women's Health Research Chair in Mental Health) organizes the event every other year with members of the Planning Committee. This year's Planning Committee members included Student Co-Chairs of the Lillian Meighen Wright Scholars Program, Meaghan Hall and Lojain Hamwi, and the Office affiliates Dr. Luz Maria Vazquez and Dr. Attia Khan, who helped in event planning, and provided technical and knowledge translation support. The LMW Learning Institute/Academy receives financial support from the Lillian Meighen and Don Wright Foundation and the Women's Health Research Chair in Mental Health Office, and the Faculty of Health.

The first day of the LMW Learning Academy commenced with York University's Land Acknowledgment statement and Dr. Khanlou warmly

welcoming everyone. She briefly went over the format of the day. Dr. Karin Page-Cuttrara, Associate Dean, Learning, Teaching & Academic Programs, Faculty of Health, York University greeted the attendees on behalf of Dean David Peters. She noted that the Learning Academy's focus on promoting women's health and well-being, identifying risk factors among marginalized populations, and prioritizing the involvement of community members aligns with the "research focus of the Faculty of Health's strategic plan." The day's event was organized as panel presentations, live rapid poster presentations and discussion sessions.

The first panel presentation *Earth, Water, Air, and Fire: Early Life Brain Development in Disaster Zones* by Dr. Kam Sripada from Norwegian University of Science and Technology was presented by student Meaghan Hall from York University. While pointing to the bright red spots on a global heat map on a slide, she explained that over a billion children lived in these extremely high-risk zones impacted by climate change. She also noted that "children from these countries contribute the least to climate change but suffer the greatest consequences." The next panel presentation was by Dr. Nirupama Agrawal from York University on *Impacts of Hurricanes and Floods on Maternal-Child Health*. In her presentation Dr. Agrawal noted that children who were in the womb during the Superstorm Sandy, a massive hurricane, later on in adolescence and adult life experienced behavioral disorders.

Dr. Ranjan Datta from Mount Royal University in Alberta accompanied with his youth activist daughter presented on the *Effects of Disasters on Racialized Immigrant Youth and Community-Led Adaptation Initiatives*. The father daughter duo shared their experiences of indigenous land-based learning as climate action, and cross-cultural anti-racism among immigrant youth. They spoke about the many ways the indigenous ways of knowing can guide climate change initiatives in our lives, for example by conceptualizing the importance of "all living things and non-living things, including water animals, plants, insects, sun, everything deserves respect." Dr. Lara Pierce from York University presented on *Contributions of Stress and Socioeconomic Status to Early Neural and Language Development*. Dr. Pierce

explained how early adverse exposures, variation in the early environment, stress and adversity and harmful experiences can shape the foundations of the developing brain, such as language abilities and executive function.

The second part of the event entailed live rapid poster presentations, and the topics included: 1) *Access to Mental Healthcare Services for Black Women During Perinatal Period – A Scoping Review*, presented by Dr. Mary Asirifi from MacEwan University in Alberta; 2) *Mothering during the COVID-19 Pandemic: Social Support to Promote the Wellbeing of Racialized Mothers of Youth with Developmental Disabilities* presented by Dr. Attia Khan from York University; and 3) *Exploring the Future: The Role of Fathers in Strengthening Maternal-Child Health During Disasters* presented by Josephine Francis Xavier from York University.

On the second day of the LMW Learning Academy Dr. Khanlou welcomed the panelists, poster presenters and the attendees. The first panelists were Dr. Nelly Oelke and Dr. Carolyn Szostak, from the University of British Columbia, Okanagan, who presented on *Mental Health Impacts of Climate Change Events in Rural British Columbia*. In their talk Dr. Oelke and Dr. Szostak discussed the aftermath of climate change and events on individuals and communities in rural and remote communities in British Columbia. In their study they found climate change events including evacuation orders/alerts, smoke and fire impacted people in multiple ways such as anxiety, physical and mental exhaustion. The next panelist was Dr. Afroza Sultana from York University who presented on *Impact of Water Insecurity on Haudenosaunee Mothers' Health and Well-being*. Dr. Sultana discussed the impact of water insecurity (e.g., lack of clean water) on the holistic health and well-being of mothers and their families in the Haudenosaunee Six Nations of the Grand River.

After a short break, Dr. Bree Akesson from Wilfrid Laurier University presented on *The Perinatal Experiences of Families in the Climate-Conflict-Displacement Nexus*. Dr. Akesson noted that "climate change was a threat multiplier." She elaborated that "climate change related disasters, war and political violence displacement really ruptures families and

protective systems, exacerbates food insecurity, water scarcity, resource competition, while also disrupting livelihoods and spurring migration.” She provided examples from her ongoing research with displaced and stateless Rohingya refugees in Bangladesh. The last panel presentation was by Dr. Luz Maria Vazquez from York University. In her presentation on *Gender and Climate Change: Vulnerability and Adaptation in Coastal Communities in Costa Rica*, Dr. Vazquez revealed how loss of biodiversity or climate change were threatening local communities, and that conservation initiatives were a contentious process worldwide that required local community involvement in planning. Dr. Vazquez further highlighted “Women are disproportionately affected because of the roles in the reproductive processes, and the sustenance of their livelihoods.” Specifically focussing on the coastal communities, she said “the most important phenomena facing coastal communities worldwide is coastal erosion, which in some context is explained as a climate change impact because of sea level rise.”

The rapid poster presentations for the second day covered topics including: 1) *The Coping Strategies towards Post-Traumatic Stress after Acute Onset Earthquake on Children* presented by Dr. Susan Chang Su from Brandon University and Amanda Chen from Western University; 2) *Impacts of Collective Trauma on Women and Children* presented by Dr. Negar Alamdar from York University and Dr. Ezat Mossallanejad from the Canadian Center for Victims of Torture; and 3) *The Mental Health of Pregnant Mothers Following Natural Disasters: An Evidence Analysis* presented by Danielle Washington from York University.

Before the event’s conclusion, participants asked the panelists questions, and the event ended after a stimulating discussion on climate change and actions needed. Collectively the presenters highlighted vulnerabilities to climate change that are determined or exacerbated by pre-existing inequalities in various forms and types. Dr. Khanlou noted that “through co-learning the Learning Academy has addressed the prevailing global issue of climate change and crisis and impacts on the health and wellbeing of families and communities, moving the field forward with specific focus on maternal-child health.”

The 7th Lillian Meighen Wright Maternal-Child Health Learning Academy on the Impacts of Natural Disasters on Maternal-Child Health provided a virtual discussion space to share research and personal experiences on climate change effects on maternal and child health. We hope the learnings from the event have taken us one step closer to acting and addressing the impact of climate change.

All participants’ bios and abstracts (including panelists and poster presenters) are available in the event booklet on our Office’s website: York University’s **7th Lillian Meighen Wright Maternal-Child Health Learning Academy: Impacts of Natural Disasters on Maternal-Child Health**. July 15 and 17, 2024. [Booklet LMW 7th Learning Academy July 2024](#).

Corresponding author: Attia Khan
York University
Email: attiakh2@yorku.ca

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York University, 4700 Keele Street

Toronto, ON, Canada, M3J 1P3

Website: <https://inyi.journals.yorku.ca/>

Email: inyi.journal@gmail.com

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