As Climate Change Takes a Toll on Mental Health in Africa, Experts Call for More Research and Interventions

Melissa Suran, PhD, MSJ

Teresia Wairimu Thuku, KRCHN, KRPsN, HND, a psychotherapist and psychiatric registered nurse in Kenya, knows well the effects of climate change on mental health in Africa. Across the eastern part of the continent, extremely dry weather has led to prolonged periods of drought and famine that affect not only the body but also the mind.

Earlier this year, Thuku—the charge nurse of the mental health unit at Dagoretti Sub-County Hospital in Nairobi—and her team assisted several children experiencing severe malnutrition who were screened for and diagnosed with mental health complications such as anxiety and depression. A 2011 report by the Kenya National Commission on Human Rights noted that up to 25% of outpatients and 40% of inpatients in the country’s health facilities may have mental health conditions, despite a low clinical detection rate—figures that are still cited today. Although Thuku and her team were able to provide medical and psychosocial support to the children and others in need, not everyone in Africa who requires these services receives them, even after seeking care.

Africa Climate Week (ACW), an annual United Nations (UN) event held in Nairobi this past September, included a session about the effects of climate change on mental health. But despite increasing awareness surrounding the topic, experts say Africa-specific research is sparse and that more clinical interventions are needed.

Part of the challenge is financial. Most African countries invest less than 1% of their gross domestic product into research of any kind, said Caradee Yael Wright, PhD, MSocSc, who leads the Climate Change and Human Health Research Programme at the South African Medical Research Council. And how climate change affects mental health in Africa is a relatively new area of study that has only started to grow, according to Kenya-based psychologist Rosalind Nkirote Kaithuru, PhD, who moderated the ACW session.

Emotional well-being is poorly understood in Africa, Kaithuru said in an interview with JAMA, “so you’ll find many people are receiving treatment for physical illnesses when they should be seeking mental health interventions instead.”

Data on psychological conditions in Africa are also limited because “surveillance is uncommon, and so the extent of the problem of mental health impacts related to a changing climate remains unknown,” Wright explained in an interview. And while “this is slowly starting to change with researchers accessing international funding and conducting research in Africa,” efforts need to be ramped up, she said.

How Climate Changes the Mind

Although there isn’t much high-quality research bridging climate change to mental health, researchers have established a connection, the authors of a recent Viewpoint in JAMA Psychiatry noted. Extreme weather events, which range from acute floods and wildfires to chronic droughts and decreased air quality, can be linked to climate change and are associated with psychological fallout including anxiety, depression, and posttraumatic stress disorder.

Last year’s sixth assessment report of the UN’s Intergovernmental Panel on Climate Change (IPCC) confirmed these links in its chapter dedicated to Africa, noting that “extreme weather events are often severely detrimental to mental health.” The report also emphasized the relationship between farmers’ poor mental health and livestock losses from climate change.

In Africa, many “mental health problems are related to droughts that result in crop failure and loss of domestic animals,” Abraham Haileamlak Mitike, MD, confirmed in an interview. “This was true in Southeastern Ethiopia and Northern Kenya, where there was drought for 5 consecutive seasons.” Family heads found themselves unable to provide for their relatives, leading to severe stress, according to Mitike, the principal of the University of Rwanda’s College of Health Sciences.
of Medicine and Health Sciences and an honorary professor of pediatrics at Jimma University in Ethiopia.

As Wright pointed out, many individuals in Africa rely on rain-fed agriculture for their livelihood. Couple that with daily challenges stemming from poverty as well as inequity, and people find themselves struggling to cope.

Climate change has also caused an uptick in deadly floods, she said, which is another driver of mental health problems: flash floods often result in drowned loved ones and destroyed dwellings, “leaving people hopeless and oftentimes uninsured, with very few options to recover.”

The continuous threat of climate change also results in climate anxiety—also known as ecoanxiety, defined by the American Psychological Association as “a chronic fear of environmental doom”—and ecological grief. Little research related to Africa exists for these emotional responses, explained Wright, who serves as the deputy editor of the *Journal of Health and Pollution*. However, a fairly small 2021 survey that included 46 participants from Algeria, Congo, Gabon, Morocco, and Rwanda found that ecoanxiety in Africa may impede the ability to function in daily life. The effects may be felt more keenly by some. It’s known that certain groups can have a greater vulnerability to climate change-related mental health issues. A 2016 US assessment found that children, women, individuals who are pregnant or postpartum, older adults, and people who are economically disadvantaged or have preexisting mental health conditions are among the most prone to psychological distress from climate- and weather-related disasters.

And as young people call for increased political action against climate change, their engagement with the issue may take a psychological toll. *Survey data* published in 2021 found that about two-thirds of 4500 young-adult respondents from across Africa reported supporting, participating in, or donating to environmental causes; 64% said they were trying to reduce their carbon footprint. But “in so doing, there is a risk of these young people facing burnout and anxiety as they continue to challenge the status quo yet see little change,” Wright said.

**A Lack of Resources**

Even though Africa has only minimally contributed to global emissions of greenhouse gases, it’s home to some of the most climate change-vulnerable countries, according to Mitike. The IPCC report noted growing climate change–related problems pertaining to water shortages, reduced food production, as well as low economic growth. And a struggling economy means fewer resources for mental health.

Africa, for the most part, doesn’t have the funding or infrastructure to provide necessary care for psychological and emotional well-being, Mitike said. Overall, public health care services on the continent are limited.

“Mental health services exist, but they are severely underfunded and poorly managed, leaving people seeking mental health care with little to no support,” added Wright, who also works in South Africa as an adjunct professor of geography at the University of Pretoria and a visiting professor of environmental health at the University of Johannesburg. “Those institutions that do exist are short-staffed [and] lack adequate medication and professional services, such as psychologists.”

More advocacy is needed for public health planning, Kaithuru stressed, because “in Africa, the mental health infrastructure is not so good; we don’t have enough facilities.”

Thuku echoed these sentiments. She said the greatest challenge in treating climate change–related mental health issues is the lack of access to support services. Even when resources are available, people oftentimes cannot pay for them. Because of the extremely dry weather related to climate change, many of her patients can barely afford food during extended stretches of drought and famine, when prices tend to skyrocket.

It doesn’t help that most research and public health efforts around climate change in Africa focus solely on physical effects, resulting in a lack of interventions for mental health, according to Kaithuru, who is also the executive director of the African Coalition of Communities Responsive to Climate Change (ACCRCC) and a lecturer at the Institute for Meteorological Training and Research in Kenya.

“Our policies for disaster risk reduction and humanitarian response don’t speak to mental health issues,” she pointed out. “Often, we find it is physical health that’s being addressed: we provide tents for displaced people, we provide food and shelter, but who is taking care of the mental health of the affected population?”

Even with access to mental health support, Thuku noted that many people in Africa who need psychotropic medications may be unable to afford them, assuming they’re even available.

Another barrier to psychological care is stigma, which often leads to treatment delays. “Stigma associated with mental illness makes it difficult for individuals to seek mental health services,” Thuku said in an interview, especially when friends, family members, and even health care professionals perpetuate negative beliefs. “Mental health impacts of climate change require multidisciplinary action, including collaboration between health care providers, policymakers, stakeholders, and community-based organizations in order to destigmatize individuals and families affected.”

**Customized Care**

According to Kaithuru, innovative solutions are needed on both community-wide and individual levels.

The ACW session that she moderated stressed the importance of mitigating psychological damage before it happens. Advanced notice of an extreme weather event such as drought or flooding can help farmers determine when to plant crops. “Early warning information should be communicated in ways that can be easily understood,” Kaithuru said, “and it should give meaning to the impacts” so that community members understand how extreme events could personally affect them.

For example, the Intergovernmental Authority on Development Climate Prediction and Applications Centre, which provides services across East Africa, helps create and disseminate climate forecasts in collaboration with various stakeholders, including those from agricultural, health, and water sectors. Kaithuru added that national forecasts are also adapted and tailored to various communities. In some cases, translations are available in several languages.

But according to Wright, the most important aspect is one-on-one attention.

“Support for people with mental illness associated with climate change is needed at the individual level,” she emphasized, noting that clinicians should be aware of potential mental health concerns. “Starting a conversation is often a first step on the path towards seeking mental health care.”

© 2023 American Medical Association. All rights reserved.
Some initiatives, like the Eco-Anxiety Africa Project, aim to understand and validate environment-related emotions via research as well as online and in-person support. Kaithuru’s organization, the ACCRCC, educates individuals on mental health services and where to find them. That also means increasing awareness about the risk of developing a psychological condition from exposure to an extreme weather event. And the organization helps people find tools to rebuild their livelihood.

“We engage the farmers who have lost their livestock and now must find another form of work, to help them understand what climate change is doing to them and share ways to help them cope and adapt,” Kaithuru said, adding that it is key to recognize how loss from climate change isn’t personal fault.

Additionally, “we raise awareness, so people understand that what they’re going through is distress from the impacts of climate change,” she continued. That helps patients “develop coping mechanisms and restructure their thought process, because there is that feeling of ‘why me,’ and they blame themselves—they don’t understand what is happening. So as a professional, you work with them so that they can gain insight about what’s actually happening.”

But not all clinicians grasp the connection between climate change and mental health. Thuku suggested that, if possible, clinicians seek out training to learn more about the psychological effects of climate change. They could also join community-based mental health programs that reach out to vulnerable populations, she added.

“Health care professionals working in Africa, not necessarily in the field of mental health, should be conscious of underlying mental illness in their patients and refer them to the appropriate professionals and services,” Wright pointed out.

And clinicians in Africa should “advocate for increased mental health resources and support at the policy level,” Thuku urged. “There is no health without mental health.”

Published Online: October 18, 2023. doi:10.1001/jama.2023.19182

Conflict of Interest Disclosures: None reported.

Note: Source references are available through embedded hyperlinks in the article text online.