Epigenetics and trauma: How the Rwanda genocide scarred survivors' yet-to-be-born children

In 1994, one of the most horrific civil wars took place in the rural country of Rwanda. In a period of about 100 days, nearly one million people died. Most of the dead were Tutsi – a minority group that was targeted for extermination by the then government. In the aftermath of the genocide, many survivors were left with mental health problems such as posttraumatic stress disorder (PTSD) and depression.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.
SIGN UP

Published in the January 2022 issue of *Epigenomics*, this study is a first-of-its-kind to examine the epigenomes of Tutsi women who were pregnant during the 1994 attacks and their children versus non-exposed pregnant Tutsi women and their offspring.

…

Previous articles have discussed how DNA methylation can be altered in patients with PTSD and that stress-related epigenetic changes can be passed down to babies born to mothers under extreme stress.

Here, the researchers' epigenome-wide study found that the genocide-exposed mothers and children had significantly differentially methylated regions (DMRs) compared to unexposed mothers and children.

And, several of these methylation differences occurred in genes that are known to be associated with a risk for certain mental disorders like PTSD and depression.

This is an excerpt. Read the original post here.