Holocaust survivors studied to determine if trauma-induced mental illness can be inherited

On April 23, 1945, my father, Gershon Glausiusz, was liberated from the Nazis. He was 10 years old. Two weeks earlier, he and his mother and three surviving brothers had been packed onto a train along with 2,500 other prisoners of Bergen-Belsen, the concentration camp in Germany where my father had been incarcerated since December 6, 1944.

Since late childhood, I have listened to my father describe his wartime suffering — his deportation from his home in Szarvas, Hungary, in June 1944; the death of his grandfather in Bergen-Belsen; and the murders of cousins, uncles, aunts and his other grandfather in the Auschwitz extermination camp.

In 2012, I volunteered to participate in a study of children of Holocaust survivors led by Rachel Yehuda, a neuroscientist and the director of the traumatic stress studies division at Mount Sinai School of Medicine in New York. The study aimed to determine whether the risk of mental illness owing to trauma is biologically passed from one generation to the next.

In particular, the researchers wanted to see whether such risk could be inherited through epigenetic marks — chemical changes or molecular 'tags', such as the binding of methyl groups, or 'methylation,' to DNA nucleotides, that alter the expression of genes without changing the underlying genetic sequence.

Read the full, original story: <u>Searching chromosomes for the legacy of trauma</u>