

Quakes impact on substance use and mental health quantified

July 17 2014, by Kim Thomas



Aerial photo of the San Andreas Fault in the Carrizo Plain, northwest of Los Angeles. Credit: Wikipedia.

(Medical Xpress)—Cantabrians who experienced serious quake-related adversity are twice as likely to be addicted to smoking and 40 per cent more likely to have mental health conditions such as major depression and post-traumatic stress disorder than people who did not experience the earthquakes, new research shows.

However for Cantabrians who experienced minimal trauma, loss or ongoing disruption associated with the quakes, the [psychological impact](#) was less strong.

This information is contained in a paper by University of Otago, Christchurch, researchers, published in the latest edition of the prestigious *JAMA Psychiatry* Journal.

The researchers are in a unique position to gather facts on the psychological impact of quakes. For more than 30 years Professor David Fergusson and his Christchurch Health and Development Study colleagues have collected in-depth data on the mental health of a group of more than 1000 people born in Canterbury during 1977. By chance, just over half of [study participants](#) were in Canterbury for the majority of the earthquakes.

The team found:

- Cantabrians who experienced serious adversity, both through earthquake events and following consequences, were 40 per cent more likely than those living outside the region to have at least one of several kinds of disorder including: [major depression](#), [post-traumatic stress disorder](#) or anxiety disorder.
- Rates of clinically significant nicotine dependence were 1.9 times higher in the group of people most affected by earthquakes compared to those not affected by quakes.
- Rates of drinking and illicit drug taking did not increase significantly in those adversely affected by earthquakes.
- Professor Fergusson says: "These findings are likely to apply to other areas affected by major disasters and highlight the need to provide increased support to those most severely affected by these disasters. It is also clear, however, that the majority of those facing disasters are resilient and do not develop [mental](#)

[health](#) problems."

Professor Fergusson says it appears the psychological impact of the quakes could have been worse if community spirit were not so strong.

"A key consideration (in studying the impact of Canterbury quakes) is the well-organised and responsive way in which the Canterbury community responded to these disasters with widespread support for those families affected by the disasters. This is likely to have acted as a protective factor in mitigating the consequence for those with high levels of exposure to earthquake-related adversity."

The findings of Professor Fergusson's study relate to those aged in their early 30s (study participants) and are less informative for older or younger people.

More information: Fergusson DM, Horwood L, Boden JM, Mulder RT. "Impact of a Major Disaster on the Mental Health of a Well-Studied Cohort." *JAMA Psychiatry*. Published online July 16, 2014. [DOI: 10.1001/jamapsychiatry.2014.652](https://doi.org/10.1001/jamapsychiatry.2014.652).

Provided by University of Otago

Citation: Quakes impact on substance use and mental health quantified (2014, July 17) retrieved 20 March 2024 from

<https://medicalxpress.com/news/2014-07-quakes-impact-substance-mental-health.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--