

For immediate release — Tuesday, March 5, 2019

U of L research examines the impact of residential schools on biological health in the next generation

A new study from the University of Lethbridge provides evidence that a mother's experience of residential school may have biological impacts on her children.

The research, published in the journal [SSM Population Health](#), found that adult children of mothers who attended residential school had increased impairment in biological regulation compared to those whose mothers had not attended residential school.



“Most research has looked at the psychological impacts of residential school experiences on survivors and their children,” says Kat Chief Moon-Riley (BSc '14, MSc '17), who conducted the research for her Master of Science thesis. “As an undergraduate student in neuroscience, I noticed there was limited information published about the biological impacts of residential school on the next generation, although emerging epigenetic research in other populations suggested there could be a link.”

Chief Moon-Riley was working under the supervision of Drs. Cheryl Currie, Gerlinde Metz and Jennifer Copeland when she served as research coordinator for a [study](#) funded by the Canadian Institutes of Health Research (CIHR). The study examined how social and economic stressors affect Indigenous health.

“I appreciated the opportunity to add questions that mattered to me for my MSc thesis,” says Chief Moon-Riley, a member of the Kainai First Nation. “I had two grandparents attend residential school so I learned about how it affected not only them, but my mother and her siblings, as well as their grandchildren.”

Chief Moon-Riley, who's now a medical student at the University of Saskatchewan, analyzed data collected from 90 First Nations and Métis adults. Overall, 43 per cent of the sample had a mother attend residential school.

“These adults had moderate impairments in measures of biological regulation, such as increased blood pressure and inflammation, compared to those who did not have a mother attend residential school,” she says.

“The findings speak to the importance of the Truth and Reconciliation Commission Calls to Action,” says Currie, associate professor of public health at the U of L. “The TRC calls for acknowledging that the current state of Indigenous health in Canada is a direct result of previous Canadian government policies, including residential schools. Ms. Chief Moon-Riley’s findings underline the importance of this assertion by demonstrating how the residential school experience may get under the skin to impact health in the next generation.”

“Stressful experiences are an inevitable part of life,” says Copeland, an associate professor in kinesiology. “But repeated and chronic exposure to uncontrollable stressors, like those experienced by children in residential school, can disrupt the function of neuroendocrine, cardiovascular and immune systems, which can have long-term health consequences.”

“Our findings suggest the residential school experience may have been biologically embedded and passed to subsequent generations through epigenetic mechanisms,” says Metz, a professor of neuroscience. “But it is important to note that we did not collect blood or DNA samples, so further research would be needed to confirm this hypothesis.”

“People need to recognize the impact of residential schools on past and present generations,” says Chief Moon-Riley. “These include impacts that go beyond the mind to impact the body, not only among those who attended the schools, but later among their own children. Our findings highlight how the effects of residential school are still being felt even though the last residential schools closed in the 1990s. It’s not something people can just get over. Further research is certainly needed.”

This news release can be found at [Residential Schools and Biological Health](#).

—30—

Contact

Caroline Zentner, public affairs adviser

403-394-3975 or 403-795-5403 (cell)

caroline.zentner@uleth.ca