

Study shows childhood cancers not on the rise in parts of Australia, but disparity remains for Indigenous children

June 21 2024



Credit: Unsplash/CC0 Public Domain

Despite national and global reports of rising incidences of cancer affecting children and young people, a new analysis has found rates of

childhood cancer have remained unchanged over the last 30 years in South Australia and the Northern Territory.

"This is a reassuring finding and highlights that childhood and young adult cancers have different underlying causes," says lead author Dr. Suzanne Mashtoub from Flinders University's College of Medicine and Public Health and the University of Adelaide's Faculty of Health and Medical Sciences.

"A previous analysis of South Australian Cancer Registry data noted significantly increased rates of young-onset adult cancers over the same time period. The stable childhood [cancer](#) rates lead us to infer that perinatal (the period before conception and just after giving birth) factors are less likely, on their own, to play a major role in the rise of young-onset adult cancers.

"With the underlying causes for early-onset cancer remaining largely speculative, this supports the PELICan hypothesis by my co-authors Barreto and Pandol. In 2021, they proposed that in addition to perinatal factors, additional effects of early life (adolescent and young adult) stressors were essential for the development of young-onset adult cancers."

The [recently published collaborative study](#) included clinicians and researchers from Flinders Health and Medical Research Institute, the Telethon Kids Institute and the University of Adelaide, as well as leading pediatric oncologists and scientists from the Menzies Research institute in Darwin, UniSA, the Women's and Children's Hospital, the Hebrew University of Jerusalem, and Cedars-Sinai Medical Center, Los Angeles. The research is published in the journal *Cancers*.

The analysis focused on cancer incidence and survival in children 19 years or younger in South Australia and the Northern Territory from

1990 to 2017.

The authors found cancer incidence had significantly decreased over time among non-Indigenous children and remained unchanged among Aboriginal and Torres Strait Islander children, with lymphocytic leukemia being the most diagnosed cancer.

Overall survival improved in South Australia and remained steady in the Northern Territory, but while survival rates of Aboriginal and Torres Strait Islander children significantly improved in the last 20 years, the analysis showed they still remained lower than the non-Indigenous cohort.

"These results highlight that there is still an unacceptable disparity in cancer survival rates for Indigenous kids in the Northern Territory," says study co-author Dr. Justine Clark, an Indigenous cancer researcher with the Telethon Kids Institute. "Every Australian child should have access to world-class cancer care and the best possible cancer outcomes."

She adds, "From previous studies, we know that Indigenous families faced with a childhood cancer diagnosis in the NT experience issues related to timely diagnosis and commencement of care, often profound financial and logistical barriers, and issues of cultural safety within cancer services.

"To improve cancer outcomes for Indigenous kids in the NT, the health care system must address the problems raised by Indigenous Australians and their families."

Overall, the authors say there is a clear need for a concerted global effort aimed at understanding the risk factors that contribute to how cancer is formed in childhood and early adulthood.

"If we can identify the [risk factors](#), we could support the development of biomarkers to aid in early detection of cancers, at a stage when cure is possible," says Dr. Mashtoub.

More information: Suzanne Mashtoub et al, Childhood Cancer Incidence and Survival in South Australia and the Northern Territory, 1990–2017, with Emphasis on Indigenous Peoples, *Cancers* (2024). [DOI: 10.3390/cancers16112057](https://doi.org/10.3390/cancers16112057)

Provided by Flinders University

Citation: Study shows childhood cancers not on the rise in parts of Australia, but disparity remains for Indigenous children (2024, June 21) retrieved 27 June 2024 from <https://medicalxpress.com/news/2024-06-childhood-cancers-australia-disparity-indigenous.html>

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.