PHRN Population Health Research Network

Influence of Early Childhood Burns on School Performance: An Australian Population Study

NCRIS National Research Infrastructure for Australia
An Australian Government Initiative

www.phrn.org.au

The Challenge

The challenge of this project was to find out whether burn injuries effected children's performance in school tests. It was noted that burn injuries are more common in children from a socioeconomic disadvantaged background. The researched looked to see if severe and more extensive burns increased the risk of poor school outcomes as well as addressing how children with burn injuries should be supported even after the burns have physically healed.

HOW THE PHRN INFRASTRUCTURE HELPED

This was a population linkage study using routinely collected data from health and educational records for all children born between 2000 and 2006 in the state of NSW, Australia, and who were hospitalised for a burn injury in this period. The Centre for Health Record Linkage (CHeReL) performed the data linkage required for this study.

THE RESULT

The project findings indicated that the majority of childhood burn injuries occur before the start of formal schooling and that children who are hospitalised for burns perform more poorly in curriculum based testing even after accounting for family and socioeconomic disadvantage.
The researchers concluded that the rehabilitation of children with burn injuries must address school performance to decrease any longterm adverse societal impact of burns.

REFERENCE

Azzam N, Oei J, Adams S, et al. Influence of early childhood burns on school performance: an Australian population study. Archives of Disease in Childhood 2018;103:444-451.
https://adc.bmj.com/content/103/5/444

Privacy and security

Privacy protection and data security lie at the heart of the Population Health Research Network. The collection, use and disclosure of personal information by government agencies and other agencies are bound by strict legislative and regulatory conditions. Researchers wishing to access linked data must also adhere to stringent conditions, including ethics approval, data custodian approval and the development of a detailed data security plan.

Researchers are typically given access to a linked data set put together to meet the specific needs of their project. This de-identified data includes only the minimum information required for the research, such as age rather than date of birth.

Government agencies handle personal information in highly-secure environments. Data is delivered to researchers through a secure remote access facility, ensuring no information is stored on the researcher's personal computer or their institutional network. Researchers cannot export raw data from this system, only their analyses, and these are checked.

Researchers must only use the data for the approved purpose and are not allowed to link any other information. At the conclusion of the project, all data must be destroyed or returned.

Penalties for researchers and government employees can include criminal conviction, jail time or substantial fines. In the more than ten years since the network began, there has never been a breach.

CC BY NC ND