

## **PUBLIC HEALTH IMPACTS OF A HOSPITAL-BASED RESEARCH STUDY INTO ALCOHOL-RELATED BRAIN INJURY**

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**Introduction and Aims:** Alcohol-related brain injury including Wernicke-Korsakoff syndrome (WKS) may be avoided with thiamine treatment. A randomised controlled trial (RCT) was conducted at Alice Springs Hospital to determine the optimum dose of thiamine for prevention and treatment of WKS. Observations of how socio-political changes over the study duration impacted the research, and public health impacts of the research itself are explored here.

**Design and Methods:** Cognitive and biomedical data were collected over five years from 2014 to 2019 from over 253 participants at risk of developing WKS and 81 participants symptomatic of WKS. Multiple innovative communication and data collection strategies ensured effective engagement in the clinical and cross cultural environment of a small regional hospital. These included monthly educational quiz posters, nursing education sessions, newsletters and non-monetary rewards for referrals for hospital staff; guidance from an Indigenous reference group; a suite of local Aboriginal language videos and audio recordings for informed consent and cognitive testing; and a culturally adapted memory test.

**Results:** During the study timeframe, changes in Government policy and related legislation across medical and judicial systems directly impacted alcohol control and supply, treatment and use behaviours. Recruitment rates for WKS were reduced in later years of the research impacting study design and outcomes. As result of the study, medical staff were trained to recognise and treat those at risk. Community awareness increased such that patients began to request treatment. Referrals from other services increased and clinicians reported applying treatments while working in other jurisdictions.

**Discussions and Conclusions:** Research on a substantial contemporary public health issue sensitive to shifting socio-political landscapes may impact study design and outcomes. The research itself also has the potential to serve as an intervention.

**Implications for Practice or Policy:** Consider that research changes the landscape and is changed by the landscape.

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