International Journal of Population Data Science

Environmental Risk Factors on Suicide of Children and Young People

John, A[1], del Pozo Banos, M[2], and Lloyd, K[2]

[1]Swansea University
[2]Swansea University Medical School

Introduction

The World Health Organization recognizes suicide as a public health priority. Recent studies have focused on health care contacts for those who complete suicide to highlight opportunities for intervention. In Wales, electronic health records (EHR) are routinely collected, providing an invaluable opportunity for researching suicide risk factors.

Objectives and Approach

We aim at linking primary and secondary EHRs to identify suicide risk factors for those between 10 and 24 years of age. We linked 7 different demographic and health datasets from the Secure Anonymised Information Linkage Databank UK, and identified a total of 471 cases between 2001 and 2015, 10 matched controls of same gender and age (± 1 year), as well as cases' and controls' mothers. We measured a number of factors from primary and secondary care including self-harm, mental health issues and drugs and alcohol misuse. We used conditional logistic regression to conduct our analyses.

Results

Preliminary results suggest that environmental factors extracted from cohabitants and mothers have a statistically significant effect even after adjusting for deprivation. Self-harm, possible maltreatment and alcohol and drugs misuse seem to be strongest factors of those studied. Factors related to mental health have smaller and more complex effects when adjusting for deprivation.

Conclusion/Implications

Our preliminary analysis indicate that EHR can be linked to study the effect of the environment on suicide risk. Once completed, we hope this study will help to identify other suicide risk factors, improve our knowledge of the mechanisms underlying suicide and help to identify opportunities for intervention and improve care.