

Issue 28 January 2020

News

Happy New Year

Happy New Year to all group members! We hope you all had a lovely Christmas and New Year and we look forward to continuing to work with you all throughout 2020.

CRIS Blog

Dr Kate Polling, Wellcome Doctoral Research Fellow at King's College London, is conducting a program of work looking at self-harm using mental health data from CRIS linked to general hospital data from [Hospital Episode Statistics](#) (HES). She has written a CRIS blog describing a recent publication where she mapped rates of self-harm in South East London using both emergency department and hospital admissions data, you can read the blog [here](#) and if you would like to follow her on Twitter she tweets from [@katepolling](#).

Research Spotlight

In each newsletter we will highlight recent research that has been conducted using linked data, if you would like to know more about any particular piece of work please let us know.

Predictors of Cerebrovascular Event Reoccurrence in Patients with Depression: A Retrospective Cohort Study

Wa Cai, Christoph Mueller, Hitesh Shetty, Gayan Perera & Robert Stewart

Depression is common in individuals with Cerebrovascular Diseases' (CBVD), such as stroke, aneurysms, and vascular malformations, and predicts negative outcomes such as physical limitations, poor quality of life, and higher healthcare costs. Very few studies have explored the recurrence of stroke in stroke survivors with depression and studies that have explored stroke recurrence in this population have found inconsistent results. Furthermore, a number of previous studies have reported possible risk factors of initial or recurrent CBVD, such as older age, physical illness, and medications, however, few have looked specifically at individuals with both depression and CBVD. Given this gap in the literature, the study team decided to investigate potential predictors of CBVD recurrence in a cohort of individuals with depression and a history of CBVD.

The team used mental health data from CRIS to identify a cohort of 10,892 people, aged 50 and over, who had received a diagnosis of depressive disorder between 1st January 2008 and 31st March 2017. They then used linked hospital data from [Hospital Episode Statistics](#) (HES) to restrict the cohort to only those who had also had a hospitalisation for a CBVD prior to their depression diagnosis. The final cohort was made up of 1,292 patients. These patients were followed-up from the date of depression diagnosis to either hospitalisation because of recurrence of CBVD (established from HES) or death from CBVD (established from linked Office of National Statistics death certificate data).

Predictor variables (i.e. factors which may help to predict recurrence of CBVD in a statistical analysis) such as gender, age, ethnicity, and mental, physical or functional problems were extracted from CRIS and analysed.

Using CRIS data linked to HES enabled the team to include a relatively large sample of people in their study with near complete hospitalisation and mortality follow-up data. The team found that during the follow-up period 1 in 5 patients experienced a recurrence of CBVD. Factors that predicted an increased risk of recurrence were older age, moderate to severe physical illness/disability, and anticoagulant medication. Whereas, antipsychotic medication was associated with a lower risk of recurrence. The team also found that the severity of depression did not predict whether somebody would experience a recurrence of CBVD.

The team concluded that, given the potential for preventing CBVD recurrence, it may be appropriate to focus on improving physical health in people with depression or at least focusing known stroke prevention initiatives on groups of individuals with worse general health.

If you would like to read the article in full, it is available [here](#).

Upcoming

Next Meeting

The next meeting will be held on **Thursday 5th March**, from **4-6pm**, in the BRC Nucleus Meeting Room. We look forward to seeing you then!

Future Newsletters

If there is anything that you would like to see in future newsletters or if you would like more information about something mentioned in a newsletter, you can contact Amelia or Megan via email: amelia.jewell@slam.nhs.uk / megan.pritchard@kcl.ac.uk, or phone: 020 3228 8554.