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News

How the eLIXIR research database helps reduce risk of health problems in mothers and children

The eLIXIR programme was created with the aim of reducing the risk of health problems in mothers and children. It is doing this by enabling research into pregnancy and the postpartum period using linked maternity and neonatal (meaning newborns) data from Guy's and St Thomas' and King's College Hospital NHS Trusts, and mental health data from CRIS. Dr Lauren Carson has written a blog post to coincide with the publication of the first eLIXIR journal paper describing the creation of the linked database. You can view the blog and access the paper [here](#).

CRIS COVID-19 Publications Updates

To view the latest research, including pre-print publications, coming out of the CRIS COVID work check out the 'CRIS COVID-19 Publications' page [here](#).

Research Spotlight

Educational attainment trajectories among children and adolescents with depression, and the role of sociodemographic characteristics: longitudinal data-linkage study

Alice Wickersham, Hannah Dickson, Rebecca Jones, Megan Pritchard, Robert Stewart, Tamsin Ford and Johnny Downs

Depression, characterised by symptoms such as low mood, irritability, reduced energy, and cognitive problems, is a common mental disorder among children and adolescents. Previous studies have found an association between depression and subsequent educational attainment, for example, children with more symptoms of depression receive lower grades, are less likely to complete secondary education, and less likely to enrol in college. However, attainment can change throughout a child's school career and little is known about the relationship between depression and changes in attainment. Furthermore, patterns in attainment may not be the same for all children with symptoms of depression. Sociodemographic factors (such as gender, ethnicity, and socioeconomic status) have previously been found to predict both attainment and the presence of emotion disorders in the general population. Therefore, a team at King's College London university set out to explore the education attainment trajectories of children who had received a diagnosis of depression and to investigate whether these trajectories varied according to their sociodemographic characteristics.

In order to conduct the study, the team used mental health data from CRIS linked to education data from the Department for Education's (DfE) National Pupil Database (NPD). The NPD holds a wide range of information about students who attend schools and colleges in England, including examination results, school characteristics, Key Stage attainment data, and Schools Census data. Data from the NPD has been linked to CRIS to provide a resource for investigating the relationship between mental health and educational outcome. More information on this linkage is available [here](#).

Using the linked CRIS-NPD data, the team identified a cohort of 1,492 individuals who had received a first diagnosis of depression whilst under the age of 18 during the study window and who had attainment data available. Within the sample the median age of a depression diagnosis was 15 years old. The team found that those who received a depression diagnosis during their school career showed a drop in attainment, specifically, performance on tests was found to be stable between Year 2 and Year 6 but significantly declined in Year 11. This pattern of decline was found across many different sociodemographic groups. Although, attainment was consistently lower among males and those eligible for free school meals. Furthermore, some ethnic groups followed slightly different attainment trajectories, for example, Black ethnic groups showed lower attainment than White ethnic groups between schools Years 2 and 6 but showed a less pronounced drop in attainment at Year 11.

The team concluded that the identification and treatment of depression prior to key educational milestones may be critical to improving attainment. Additionally, gender, ethnicity, and socioeconomic status may help to predict more vulnerable subgroups within this clinical population, who might benefit from additional educational support or more intensive treatment.

If you would like to read the article in full, it is available [here](#). A CRIS blog has also been written about the study which is available to read [here](#).

Upcoming

Next Meeting

The next meeting will be held on **Thursday 3rd December**, from **4-6pm**. The meeting will be held virtually via Zoom and we will send out the details nearer the time.

Future Newsletters

We are still working remotely so 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 us via email: amelia.jewell@slam.nhs.uk / megan.pritchard@kcl.ac.uk.