each case) having no depression were selected as controls. The cases and controls were studied and matched for a myriad of sociodemographic factors. The various risk factors for depression were evaluated using univariate and multivariate binary logistics analysis.

Result. The significant risk factors for depression among hemodialysis patients were age (OR = 1.79, CI = 0.47–3.81), comorbidities (OR = 2.13, CI = 0.51–3.96), duration of renal disease (OR = 2.54, CI 0.63–4.28), duration of hemodialysis (OR = 2.36, CI = 0.89–4.11), unemployment (OR = 2.33, CI = 0.79–3.88), and being unmarried (OR = 1.93, CI = 0.44–3.53). Prospect of survival, financial instability, social stigmatization, and effect of comorbidities on ESRD were major concerns for the cases that attributed to their depressive symptoms.

Conclusion. The factors that herald the onset of depression among hemodialysis patients include increasing age, presence of comorbidities, unemployment being unmarried, and increasing duration of hemodialysis. These factors will aid the clinicians to identify high-risk patients that require psychiatric consultation. We recommend prompt psychiatric intervention (pharmacologic or non-pharmacologic) and appropriate patient counseling so that the depressive symptoms can be alleviated and dismal disease prognosis can be prevented among such high-risk patients.

Lifetime depression and age-related changes in body composition, cardiovascular function, grip strength and lung function: sex-specific analyses in the UK Biobank

Julian Mutz[1]* and Cathryn M Lewis[2]

[1]Social, Genetic & Developmental Psychiatry Centre, Institute of Psychiatry, Psychology & Neuroscience, King's College London and [2]Social, Genetic & Developmental Psychiatry Centre, Institute of Psychiatry, Psychology & Neuroscience, King's College London, Department of Medical and Molecular Genetics, Faculty of Life Sciences & Medicine, King's College London
*Corresponding author.

Aims. Individuals with mental disorders, on average, die prematurely, have higher levels of physical comorbidities and may experience accelerated ageing. In individuals with lifetime depression and healthy controls, we examined associations between age and multiple physiological measures.

Method. The UK Biobank study recruited >500,000 participants, aged 37–73 years, between 2006–2010. Generalised additive models were used to examine associations between age and grip strength, cardiovascular function, body composition, lung function and bone mineral density. Analyses were conducted separately in males and females with depression compared to healthy controls.

Result. Analytical samples included up to 342,393 adults (mean age = 55.87 years; 52.61% females). We found statistically significant differences between individuals with depression and healthy controls for most physiological measures, with standardised mean differences between -0.145 and 0.156. There was some evidence that age-related changes in body composition, cardiovascular function, lung function and heel bone mineral density followed different trajectories in individuals with depression. These differences did not uniformly narrow or widen with age. For example, BMI in female cases was 1.1 kg/m2 higher at age 40 and this difference narrowed to 0.4 kg/m2 at age 70. In males, systolic blood pressure was 1 mmHg lower in cases at age 45 and this difference widened to 2.5 mmHg at age 65.

Conclusion. Individuals with depression differed from healthy controls across a broad range of physiological measures. Differences in ageing trajectories differed by sex and were not uniform across physiological measures, with evidence of both age-related narrowing and widening of case-control differences.

Psychiatric presentations in acute illness with COVID-19: a retrospective analysis

Elizabeth Nelmes* and Audrey Ng
West London NHS Trust
*Corresponding author.

Aims. To assess the psychiatric presentations in patients with a diagnosis of COVID-19 referred to a liaison psychiatry department during a one month period in the peak of the global pandemic.

Method. A retrospective analysis of the patients referred to liaison psychiatry during January 2021 who also had a diagnosis of COVID-19. Confirmed cases of COVID-19 were defined as those confirmed by COVID-19 PCR in respiratory samples or clinically suspected cases from chest radiograph or CT. Severe COVID-19 was defined as those requiring supplementary oxygen due to saturations of 93% or less.

Result. During January 2021, a total of 24 patients were referred to liaison psychiatry with concurrent COVID-19 infection. Out of these patients, 63% had a previous mental health diagnosis. The most common reason for referral was low mood (37.5%), followed by agitation (25%) and psychosis (25%). When considering first psychiatric presentations with concurrent COVID-19 infection, the most common presentation was psychosis (44%). The time course of psychosis was most frequently seen in the seven days prior to a positive swab. In one case a patient was sectioned under the Mental Health Act for psychosis two days prior to developing symptoms. Two of these patients were worked up for possible encephalitis including radiological imaging and lumbar puncture. For patients defined as having severe COVID-19, the most common referral was low mood. In those referred for low mood, 66% had a history of an affective disorder. In two cases low mood was complicated by an acute stress reaction to recent bereavement. For one patient this included the bereavement of two relatives to COVID-19. For patients admitted to intensive care and intubated for respiratory support the most common referrals were low mood and agitation. These factors we found a barrier to successful rehabilitation following periods of significant illness.

Conclusion. The impact of COVID-19 on psychiatric presentations extends beyond the socio-economic factors precipitating crises across the nation. Our findings of acute psychiatric illness in the prodromal phase of the viral illness suggest a neuropsychiatric pathogenesis to COVID-19.

Contribution of birth weight to mental health, cognitive, and socioeconomic outcomes: a two-sample Mendelian randomisation

Massimiliano Orri[1]*, Jean-Baptiste Pingault[2], Gustavo Turecki[3], Anne-Monique Nuyt[4], Richard E Tremblay[4], Sylvana M Côté[4] and Marie-Claude Geoffroy[3]

[1]Bordeaux Population Health Research Centre, Mcgill University; [2]University College London; [3]Mcgill University and [4]University of Montreal
*Corresponding author.