A thematic analysis of the top 100 most popular uploaded videos featuring the #CAMHS was conducted. The number of likes, views and shares of the videos featuring each theme was recorded.

**Result.** Videos with the hashtag #CAMHS had 203.9 million views, followed by: #camshsmemes totalling 43.1 million views, #camshjokes with 21.6 million views and #camshkids, 12.5 million views. The top 100 most popular videos represented 24% of total viewed videos with the hashtag #CAMHS.

The most popular recurrent themes associated with the hashtag #CAMHS in our sample were: raising awareness of mental health symptoms and management (40% of videos), reference to self-harm (27% of videos) and negative perception of CAMHS (27% of videos).

Raising awareness of mental health symptoms and management had the most likes (3,694,700) and views (17,435,900). This was followed by videos with themes of reference to self-harm (3,006,300 likes and 14,382,700 views). The most shared themes were: reference to suicide (shared 56,763 times) and videos which portrayed a theme of negative perception of CAMHS (40,628 shares). Videos with themes of a negative perception of CAMHS also garnered 1,762,500 likes and 8,666,900 views.

**Conclusion.** CAMHS is actively represented on TikTok through freely accessible unregulated videos. Videos with themes of raising awareness of mental health symptoms and management can potentially allow young people to share their experiences. Nonetheless, popular hashtags such as #CAMHSmemes and #CAMHSjokes, as well as videos featuring themes of negative perception of CAMHS, could potentially undermine the reputation of CAMHS to existing and future service users. The content of these videos should be taken seriously by CAMHS clinicians as it can potentially provide an insight into service users’ experiences of CAMHS on a scale that has not been observed before. Presently these videos are not screened or modulated by the NHS CAMHS service.

**Case series suggesting an association between sertraline and urinary side effects in a Sheffield child and adolescent mental health services (CAMHS) population**

Sidra Chaudhry1* and Nisha Alex2

1Sheffield Health and Social Care NHS Foundation Trust and 2Sheffield CAMHS

*Corresponding author.

doi: 10.1192/bjo.2021.646

**Aims.** To suggest a link between sertraline and urinary side effects in a Sheffield Child and Adolescent Mental Health Service population.

**Background.** Evidence suggests that Serotonin has an important role in bladder control through central and peripheral neurological pathways. Increased serotonergic activity leads to parasympathetic inhibition, which results in urine retention. It is through this mechanism of action and their effect on pre-synaptic serotonin 1A and peripheral 5-HT3 receptors that SSRIs were observed to have anti-enuretic effect. At low 5-HT concentrations, micturition is inhibited whereas at high levels, an excitatory effect is achieved. This may suggest a dose-dependent relationship between Sertraline and urinary side effects.

**Method.** Inclusion criteria:
- Under 18 years of age
- On Sertraline

Exclusion criteria:
- Above 18 years
- Not on Sertraline
- Associated urinary problems

**Result.** Three cases were identified in the authors’ clinical practice at Sheffield CAMHS that were suggestive of a link between sertraline and urinary side effects.

**Conclusion.** It’s important for clinicians to bear in mind the genitourinary side effects of SSRIs, which may be debilitating for patients in the CAMHS population. It’s equally important for us as clinicians to educate young people and their parents about these potential side effects and how they can be managed.

It has also been observed that higher doses of Sertraline have shown a possible link between onset of urinary side effects.

**Impact of psychiatric comorbidities on emergency surgical patients’ outcomes**

Hongying Chen*, Michael Devine, Waqar Khan, Iqbal Z Khan, Ronan P Waldron and Michael Kevin Barry

Department of Surgery, Mayo University Hospital, Ireland

*Corresponding author.

doi: 10.1192/bjo.2021.647

**Aims.** Psychiatric disorders are increasingly prevalent and present as a comorbidity in many hospitalized patients. Studies have demonstrated that the presence of comorbid psychiatric conditions (CPC) is associated with worsened inpatient outcomes. Emergency surgical admissions and the impact of CPC on their outcomes has not been studied in Ireland to date. This study aims to provide a comprehensive analyses of the relationship between a wide range of psychiatric comorbidities and surgical presentations.

**Method.** The Hospital In-Patient Enquiry (HIPE) and prospectively maintained electronic patient records were used to identify all surgical emergency admissions between 31st August 2019 and 1st September 2020 to Mayo University Hospital, Ireland. Patient demographics, comorbidities, primary diagnoses, length of stay (LoS), discharge destination, and surgical interventions were recorded. Subgroup analyses were performed examining LoS variation in the type of surgical presentation. Physical comorbidities were scored using the Charlson Comorbidity Index (CCI). Statistical calculations were performed using SPSS.

**Result.** A total of 995 admissions were recorded. The presence of CPC increased the overall mean LoS by 1.9 days (p = .002). This trend was observed in both operative and conservative management. Significant increase in LoS was noted in patients with a comorbid depression (2.4 days, p = .003), dementia (2.8 days, p = .019), and intellectual disability (6.7 days, p = .007). Subgroup analysis revealed greater LoS in patients with CPC diagnosed with non-specific abdominal pain (1.4 days, p = .019), skin and soft tissue infections (2.5 days, p = .040), bowel obstruction (4.3 days, p = .047), and medical disorders (18.6 days, p = .010). The odds of nursing home or convalescence as a discharge destination was 2.44 (95% CI: 1.37–4.35, p = .002) in patients with CPC and the odds of self-discharge against medical advice in this population was 4.89 (95% CI: 1.43–16.70, p = .005). No significant difference was observed in mortality and readmission rates.

**Conclusion.** Psychiatric comorbidities significantly impact length of hospital stay and influence discharge planning in surgical inpatients. Greater vigilance is required in providing care for patients.
with psychiatric comorbidities, particularly those with depression, dementia and intellectual disability. Better optimisation of facilities and a more personalised approach to patients with CPC are required to improve inpatient outcomes and resource allocation.

Impairments in theory of mind following traumatic brain injury: a systematic review

Radhika Chikramane
Westmead Hospital
doi: 10.1192/bjo.2021.648

Aims. To assess the nature and extent of Theory of Mind (ToM) impairments post-TBI.

Method. Electronic databases searches included PubMed/MEDLINE, PubMed Central, Scopus, PsychArticles, PsychINFO, Web of Science, ProQuest Central, and Wiley Online Library databases. Only studies conducted on adult patients with TBI compared with healthy controls published in English in peer-reviewed journals were considered. Reference lists were manually checked for additional studies. 19 studies were identified.

Result. Marked moderate-to-severe ToM deficits in adults post-TBI were observed across all severities of injury and chronicity. ToM deficits were documented across tasks and reflected a hierarchy where performance worsened significantly as tasks progressed in complexity. Despite supportive factors, certain aspects of ToM impairment, such as ability to detect and interpret non-literal speech and judge appropriateness of context remained affected in the subjects.

Conclusion. ToM deficits represent a robust finding in adults with TBI. The chronicity of TBI requires a long-term view and is complicated by the fact that ToM deficits are invisible and difficult to understand. Perceptive-taking deficits faced by TBI sufferers has bio-socio-economic implications. This review also discusses implications for basic and clinical neuropsychology and rehabilitation efforts. Further research is needed, particularly in the form of large, longitudinal studies that mimic day-to-day interactions, to inform/support rehabilitation programs.

Predictors of cognitive, behavioural and academic difficulties in NF1

Kavitha Chinnappa Ramamurthy1*, Marie-Maude Geoffray2, Louise Robinson1, Lauren Manderson1, Julieta O’Flaherty1, Annukka Lehtonen1, Grace Vassallo1, Shruti Garg1 and Jonathan Green4

1Department of Child and Adolescent Psychiatry, Manchester University Foundation Trust; 2Centre hospitalier le Vinatier; 3Manchester Centre for Genomic Medicine, Manchester University NHS Foundation Trust, Manchester Academic Health Sciences Centre, Department of Child and Adolescent Psychiatry, Manchester University Foundation Trust and 4Division of Neuroscience and Experimental Psychology, Faculty of Biological Medical & Health Sciences, University of Manchester, Manchester Academic Health Sciences Centre, Department of Child and Adolescent Psychiatry, Manchester University Foundation Trust

*Corresponding author.
doi: 10.1192/bjo.2021.649

Aims. The aim of this study is to systematically investigate the demographic and disease predictors of cognitive and behavioural phenotype in the largest cohort of children with NF1 published to date. Based on previously published research, we examine the potential role of demographic predictors such as age, sex, SES, parental NF1 status as well as the neurological complications such as epilepsy and brain tumours in NF1 associated cognitive/behavioural impairments.

Method. In this cross-sectional study design, participant data were drawn from two large databases which included (i) A clinical database of all patients with NF1 seen in a clinical psychological service from 2010 to 2019 and (ii) A research dataset from two previously published studies (2,8). The complex National NF1 service based within Manchester regional genetic services is set up for individuals with complex NF1 (https://www.mangen.co.uk/healthcare-professionals/clinical-genomic-services/nf1/) in the North of the UK. Children were referred to the psychological services by NF1 clinicians if psychological assessment was warranted based on parental reports. In order to reduce clinic referral bias, the clinical sample was supplemented by including participants that were seen solely for the purposes of research studies within our centre.

Result. Relative to population norms, 90% of the NF1 sample demonstrated significantly lower scores in at least one cognitive or behavioral domain. Family history of NF1 and lower SES were independently associated with poorer cognitive, behavioral and academic outcomes. Neurological problems such as epilepsy and hydrocephalus were associated with lower IQ and academic skills.

Conclusion. Cognitive and behavioural phenotypes commonly emerge via a complex interplay between genes and environmental factors, and this is true also of a monogenic condition such as NF1. Early interventions and remedial education may be targeted to risk groups such those with familial NF1, families with lower SES and those with associated neurological comorbidities.

Investigating the association between depressive disorders and cerebral haemodynamics

Tamara Chithiramohan1*, Ivalant Parekh2, Lucy Beishon1, Golo Kronenberg1, Victoria Haunton1, Jatinder Minhas1, Thompson Robinson1 and Ronney Panerai1

1University of Leicester, Department of Cardiovascular Sciences and 2University Hospitals of Leicester

*Corresponding author.
doi: 10.1192/bjo.2021.650

Aims. Alterations in cerebral blood flow (CBF) may contribute to the development of depression, and serve as a novel biomarker. The aim of this review is to summarise and synthesise the available evidence on alterations in cerebral haemodynamics in depressive disorders relative to healthy control populations.

Method. MEDLINE (1946–present), EMBASE (1947–present), Web of Science (1970–present), PsycINFO (1984–present), CINAHL (1976–present) and CENTRAL were searched using a predefined search strategy. Studies which compared the cerebral haemodynamics of adult patients (>18 years old) with depressive disorders against healthy controls (HC), by any imagining modalities, were included. Studies with varying severity and chronicity of depressive disorder were included. A meta-analysis was conducted in four groups: 1) CBF (ml/min/100g) 2) Cerebral blood flow velocity (CBFv) (cm/s) 3) Combined CBF and CBFv 4) Ratio of uptake of radiotracer. A random effects model was used and heterogeneity and publication bias were assessed. Data are presented as mean difference (MD) or standardised mean difference (SMD) and 95% confidence interval (95% CI). A narrative synthesis of the remaining studies was performed.

Result. 87 studies met the inclusion criteria. CBF (ml/min/100g) was significantly reduced in patients with depression compared to