rTMS treatment were identified using a seed-based functional connectivity analysis with the left dorsolateral prefrontal cortex and bilateral amygdalae as regions of interest. Functional connectivity differences were analysed using t-contrasts in a mixed ANOVA (flexible factorial analysis) to assess interactions between treatment group (real rTMS vs sham) and time-point (pre or post TMS).

Result. No statistically significant changes in resting-state functional connectivity were observed post-rTMS compared to baseline in participants receiving active rTMS compared to sham. Increased functional connectivity between the left amygdala and left pre-supplementary motor area was observed to reach cluster-wise significance (PFWE < 0.05). However, after Bonferroni correction for multiple comparisons (3 seed regions), this did not reach the significance threshold PFWE <0.017.

Conclusion. This study highlights the need for further investigation of neurophysiological mechanisms, including resting-state functional connectivity modulation, resulting from rTMS to the dorsolateral prefrontal cortex in SE-AN patients. This requires higher powered studies to account for heterogeneity in treatment response. We have provided some indication that high frequency rTMS may have therapeutic benefit in SE-AN by modification of functional connectivity between prefrontal and limbic brain regions, resulting in improved top-down cognitive control over emotional processing and ability to enact goal-directed behaviours, enabling secondary reductions in eating disorder behaviours.

Depression, perceived stress, social support, substance use and related sociodemographic risk factors in medical school residents in Nairobi, Kenya

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doi: 10.1192/bjo.2021.181

Aims. Little is known about mental health risk factors in medical residents and doctors in Sub-Saharan Africa. Residents are at a greater risk of developing depression, stress and substance abuse than the general public owing to the stressful nature of their medical training. Poor mental health in residents leads to decreased clinical efficiency and training satisfaction; it can also lead to substance dependence, self-harm and suicide.Our primary aim was to ascertain depression prevalence among medical residents in Kenya's largest national teaching and referral hospital. Secondary aims were to analyze how depression was associated with perceived stress, perceived social support, substance use, and educational environment.

Method. Self report questionnaires were administered in this cross-sectional survey to 338 residents covering eight specialties (Medicine, Psychiatry, Paediatrics, Obstetrics/Gynaecology, Anaesthesia, General Surgery, Cardiothoracic Surgery, and Ear Nose Throat Surgery). In addition to key sociodemographics, the Centres for Epidemiology Depression Scale - Revised, Perceived Stress Scale, Multidimensional Scale of Perceived Social Support, Alcohol, Smoking and Substance Involvement Screening Test, and Postgraduate Hospital Educational Environment Measure were used.

Result. The mean participant age was 31.8 years and 53.4% were males. Most residents (70.4%) reported mild/no depressive symptoms 12.7% had moderate, and 16.9% had severe symptoms.High social support (71.8%) and moderate stress (61.6%) were reported by most residents. Almost half (46.3%) rated their educational environment as being more positive than negative. Out of 238 respondents 11.3% were at moderate risk of health and other problems due to cocaine use, while 13.3% (out of 240 respondents) were at risk due to alcohol. On bivariate analyses, we found significant correlations between depression, perceived stress, substance use, perceived social support, and educational environment. Multivariate analysis revealed that depression was strongly associated with: fewer hours of sleep ($\beta = -0.683$, $p = 0.002$), high perceived stress ($\beta = 0.709$, $p < 0.001$) and low perceived social support ($\beta = -2.19$, $p < 0.001$).

Conclusion. High perceived social support, low perceived stress, and less sleep were significantly associated with lower depression scores. A large proportion of residents were at risk of developing depression (29.6%). There were high levels of perceived social support (71.8%). A concerning proportion of residents used substances like alcohol and cocaine. This work is one of few that describe the mental health of an important and understudied population group in an LMIC. Priority must be given to protect and promote the mental health of such a vulnerable group.

Data collection and analysis were funded by Kenyatta National Hospital.

Acute mania with psychotic symptom in post COVID-19 patient

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doi: 10.1192/bjo.2021.182

Aims. COVID-19 is an on-going pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Recent evidence suggests that SARS-CoV-2 may be associated with various neuropsychiatric symptoms, including mania. We present a case of a middle aged man presenting with acute mania with psychotic symptoms 20 days post COVID infection in the absence of prior psychiatric illness. This report highlights the need for rigorous neuropsychiatric assessment in patient with symptoms of SARS-CoV-2 infection.

Method. A 52-year-old man of West African origin with past history of hypertension and no previous history of mental health illness presented with acute manic symptoms on background of two weeks of high fever, diarrhoea, mild headache, dry cough and anosmia. He was tested positive for SARS-CoV-2 infection on COVID PCR test. He was under self-isolation along with his family members who exhibited mild symptoms of SARS-CoV-2, none of them required hospital admission. He was initially fearful to seek medical attention but was brought in by family after exhibiting behaviour changes, obsession with toilet cleaning, reckless spending and getting aggressive approximately two weeks after the onset of acute upper respiratory symptoms. He presented elated in mood with pressure of speech and grandiose ideas. Investigations like neuroimaging and bloods were unremarkable. Initial psychiatric assessment found symptoms consistent with acute mania and he was detained under the Mental Health Act. During admission, he was sexually disinhibited and agitated on the ward requiring IM antipsychotics. He was treated with high dose of Olanzapine and Sodium valproate and his symptoms subsided within two weeks.

Result. This case emphasises the manifestation of neuropsychiatric illness post COVID-19 without a background of psychiatric illness, hypoxemia and cerebral infarction.

Based on the CORONERVE Programme and latest retrospective Lancet cohort studies, the period between 14 and 90 days after diagnosis, 5.8% COVID-19 survivors had their first recorded diagnosis of psychiatric illness.

It is also important to consider other organic disease given the simultaneous diagnosis of COVID-19. Although it is not yet possible to confirm here due to the lack of a validated CSF-PCR assay, previous reports have implicated SARS-CoV-2 in the development of viral encephalitis, and this remains an important differential.

Conclusion. Clinicians should be alert to the possibility of patients with COVID-19 developing neuropsychiatric complications post SARS-CoV-2 infection, mandating the need for vigilant initial neuropsychiatric assessment and possibly follow-up care in 3 months.

The effectiveness of telepsychiatry: a thematic review

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doi: 10.1192/bjo.2021.183

Aims. The authors conducted a thematic review on the effectiveness of Telepsychiatry in light of the COVID-19 pandemic. The study aimed to clarify the effectiveness of Telepsychiatry, providing an evidence base for the growing use of Telepsychiatry.

Method. The authors searched three databases - Cochrane, PubMed and PsychINFO - using the terms virtual consultation/ telepsychiatry/video consultation AND psychiatry/mental illness.

The authors excluded all papers that were not in English and that did not focus on the psychiatric consultation.

Result. 961 papers were identified, reduced to 321 using exclusion criteria and removal of duplicates. Using thematic analysis the authors found five themes that occurred across all papers in relation to the effectiveness of Telepsychiatry.

Patient & Clinician Satisfaction

There is consistently high patient satisfaction with telepsychiatry but lower clinician satisfaction, often as a result of cynicism and a lack of familiarity. Clinician satisfaction increases when clinicians trial Telepsychiatry and become more positive about its uses.

Diagnostic Reliability

Telepsychiatry was found to have high levels of inter-rater reliability equivalent to face-to-face consultations for common disorders including mood and psychotic disorders, substance misuse and dementia. It was also found to have high levels of diagnostic reliability across age groups.

Outcomes

Telepsychiatry has been found to reduce symptoms of common psychiatric disorders and improve quality of life in a variety of environments including emergency departments, inpatient units and prisons. Telepsychiatry increases access to specialised services resulting in quicker access to treatment and reduction in admissions.

Technology

Without adequate internet connectivity clinicians are unable to conduct an appropriate mental state examination and the therapeutic relationship becomes challenging. Inadequate technology can impact the effectiveness of Telepsychiatry amongst those who are socioeconomically disadvantaged and may not have access to appropriate technology.

Professional Guidance

There is a concerning lack of guidance around the use of Telepsychiatry. Without clear protocols there is a lack of standardisation and clinicians are unwilling to integrate Telepsychiatry into their practice. Main concerns raised are around confidentiality, consent, the appropriateness of certain patient groups and emergencies.

Conclusion. This review found evidence for the effectiveness of Telepsychiatry with greatest emphasis on technology and patient satisfaction. The main barrier is the reluctance amongst clinicians to facilitate Telepsychiatry into their practice, often due to cynicism and a lack of familiarity. The authors recommend training in the uses of Telepsychiatry and the provision of professional guidance from medical bodies to allay concerns and provide clear standards.

Working in the woodlands: a mixed methods evaluation of Green Care in first episode psychosis

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doi: 10.1192/bjo.2021.184

Aims. Recognition of the essential role of nature-based activities for general wellbeing is expanding. Previous evaluation of nature-based activities has shown that those with greater mental health needs may benefit proportionally more compared to the general population. Currently, there is limited evidence of the benefits of green care for those with severe and enduring mental illness, including psychosis.

We aim to establish benefits and difficulties encountered during a 10-session green care programme for 18-30 year olds who have experienced first episode of psychosis (FEP) using a mixed methods approach.

Method. This was a service evaluation of the Woodland Group, run by Circle of Life Rediscovery (CLR) and commissioned by Sussex Partnership NHS Foundation Trust in Autumn 2019 for 10 half-day sessions. All participants were aged 18–30 years, referred from Early Intervention in Psychosis service and had experienced FEP. Patients were supported by EIS staff with a ratio of at least 3:1. Sessions consisted of a welcome and agenda setting, ice-breaking activity, core nature-based activity (such as roasting chestnuts, maintaining the woodland area) and a 'sense meditation'.

Quantitative data for this evaluation were collected through routinely collected 15-item Questionnaire on the Process of Recovery (QPR), and a semi-structured intervention experience questionnaire. Qualitative data were collected via a focus group within the final session of the Woodlands Group. Thematic analysis was performed by the three co-authors.

Result. Session attendance ranged between 3-15. 4/8 patients showed reliable improvement on QPR outcome measures, 1 showed deterioration and 3 showed no change. Mean QPR scores showed modest increase from average 3.4 (week 1) to 3.8 (week 10). 100% of respondents would recommend this group to others. Thematic analysis identified themes of connection with nature and others, development of a sense of wellbeing and 'peacefulness' and new perspectives on psychotic experience.

Conclusion. This small, retrospective evaluation is the first to investigate green care interventions for young people experiencing FEP. Our results reflect the positive informal feedback from participants and supporting staff following attendance at the Woodlands Group. Limitations include small sample size, incomplete data, and reliance on patient-reported outcomes. These findings show promise for green care activities within EIS and represents a sustainable intervention in mental health care.