

the USA 4%-6%. Existing studies have reported that people are switching to vaping because it is felt to be safer than smoking.

However there is also emerging evidence that this mode of consumption is increasingly being used as it is discreet and much less easy to detect, hence sometimes referred to as stealth-vaping. This appears to be driving a switch to vaping to administer substances other than nicotine, notably, but not exclusively cannabis, including concentrated forms of Tetrahydrocannabinol (THC) and synthetic cannabinoids. Anecdotally this practice is known to be occurring in psychiatric inpatient settings.

This is against a backdrop of the uncertain long-term effects of vaping and the emergence of case reports of the death of otherwise healthy young persons after using ENDS to consume cannabis.

**Method.** Search strategy: MEDLINE, EMBASE, Cochrane Database of Systematic Reviews, Grey Literature using Medical Subject Headings (MeSH), text words relating to vaping of drugs and hand searching journals.

Statistical methods: Synthesis of data was performed using inverse variance with double arcsine transformation in MetaXL. Heterogeneity was assessed with the Cochran's Q and I<sup>2</sup>.

**Result.** From 970 abstracts, 61 papers were selected for full text review, 18 met the inclusion criteria. The total study population for the outcome of ENDS nicotine users who also use ENDS for the consumption of illicit substances was 9098. There was significant heterogeneity with a random effects model prevalence of 17% (95%CI 7%-32%). The total study population for the outcome of cannabis users who use ENDS to consume cannabis was 52708. There was significant heterogeneity with a random effects model prevalence of 23% (95%CI 12%-37%).

**Conclusion.** The use of ENDS to consume illicit substances is concerning as it appears to be relatively common practice. This was most notable in studies of existing cannabis users, younger people and medical marijuana users.

Given the uncertainty of long term health consequences and poor understanding of sudden death in some users, this study highlights an emerging and substantial public health concern.

Currently there is a paucity of primary studies to elucidate the impact on health.

### Self-harm on a specialist adult eating disorder unit: a retrospective cohort study of patient characteristics and outcomes

Leah Holm-Mercer\*, Douglas Kohler and Agnes Ayton

Oxford Health NHS Foundation Trust

\*Corresponding author.

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**Aims.** Deliberate self-harm (DSH) is common but rarely studied among inpatients with eating disorders. We sought to investigate the frequency of DSH among inpatients in a specialist adult eating disorders unit, and the association of DSH with comorbidities and treatment outcomes. We also investigated changes in these parameters during the pandemic.

**Method.** We included the records of 70 patients consecutively admitted to Cotswold House in Oxford between April 2018 and November 2020. Data were analysed using Microsoft Excel using descriptive statistics. For comparisons, student T-tests were used for continuous variables and Chi-square tests used for categorical variables.

**Result.** 99% of patients were female; their ages ranged from 17 to 67 years (mean 30.7). 81% had a primary diagnosis of anorexia nervosa, and 67% had a history of DSH prior to admission.

There was a total of 100 incidences of DSH, of which 12% required transfer to a general hospital for medical treatment.

Frequency of self-harm decreased with time throughout admission (17% self-harming on admission, vs 7% at discharge,  $p = 0.043$ ).

Compared to those with no history of DSH, patients who self-harmed during admission were more likely to be detained under the Mental Health Act (45% vs 17.4%,  $p = 0.003$ ), and to have psychiatric comorbidities (85% vs 35%,  $p = 0.001$ ). Patients whose self-harm required transfer for general hospital treatment had a lower mean discharge BMI (18.18kg/m<sup>2</sup> vs 20.23kg/m<sup>2</sup>,  $p = 0.039$ ), longer admission (105.9 days vs 78.1 days,  $p = 0.037$ ), and gained weight at a slower rate (0.26kg/m<sup>2</sup>/week vs 0.43kg/m<sup>2</sup>/week,  $p = 0.048$ ) than those who did not require transfer.

During the pandemic, the frequency of DSH doubled on the ward. Overall outcomes were similar, however mean length of admission was lower during the pandemic (67.83 vs 89.94 days,  $p = 0.046$ ), and patients regained weight more rapidly (0.43kg/m<sup>2</sup>/week vs 0.28kg/m<sup>2</sup>/week,  $p = 0.003$ ) than prior to it.

**Conclusion.** Self-harm during admission was seen in 29% of patients and was associated with the presence of comorbid psychiatric diagnoses. The frequency of DSH much reduced between admission and discharge, suggesting a beneficial effect of treatment. Medical transfer for DSH, considered as a proxy measure for severity, predicted poorer outcomes in weight restoration. We also noted an increase in rates of DSH during the pandemic, which may have resulted from a combination of increased psychosocial stressors and a reduction in admission capacity in eating disorder units.

### Psychiatric presentations of patients with COVID-19: a retrospective review of 100 consecutive patients seen by liaison psychiatry services

Yousaf Iqbal<sup>1\*</sup>, Peter Haddad<sup>2</sup>, Javed Latoo<sup>2</sup>, Majid Alabdulla<sup>2</sup>, Sultan Albrahim<sup>1</sup>, Rajeev Kumar<sup>2</sup> and Ovais Wadoo<sup>1</sup>

<sup>1</sup>Hamad medical corporation and <sup>2</sup>Hamad medical corporation, Qatar University

\*Corresponding author.

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**Aims.** Coronavirus disease 2019 (COVID-19) is associated with higher rates of psychiatric morbidity due to various factors, including quarantine, social isolation, stigma, financial difficulties and direct and indirect central nervous system impact of severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2).

This study aimed to describe the psychiatric morbidity of patients with COVID-19 referred to liaison psychiatry services in Qatar.

**Method.** This study was a retrospective review of patient records of the first 100 consecutive SARS-Cov-2 positive patients referred to liaison psychiatry services. The study was approved by the Hamad Medical Corporation Institutional Review Board (IRB) (MRC-05-072). Data were analysed using descriptive statistics.

**Result.** The majority ( $n = 92$ ) of 100 included patients were male and median age was 43 years. Patients were of diverse background with majority of South Asian (Indian, Pakistani, Bengali, Nepalese, and Afghan) ( $n = 60$ ), followed by Qatari ( $n = 18$ ) background. Mean length of hospital stay was 26.51 days.

35 patients had severe or critical COVID-19 pneumonia, and 67 had at least one underlying physical comorbidity. Significant psychosocial stressors other than positive SARS-Cov-2 status, including lockdown, quarantine, finances and relationships issues were identified in 48 patients.

A total of 35 patients had a positive past psychiatric history, out of which 17 were on maintenance psychotropic medications. Insomnia was the commonest psychiatric symptom ( $n = 65$ ), followed by anxiety ( $n = 52$ ), agitation ( $n = 42$ ), depression ( $n = 39$ ), changes in appetite ( $n = 32$ ) and irritability ( $n = 30$ ). The principal psychiatric diagnoses made were delirium ( $n = 29$ ), acute stress reaction or adjustment disorder ( $n = 25$ ), depression ( $n = 16$ ), mania ( $n = 15$ ), anxiety ( $n = 14$ ), non-affective psychosis ( $n = 13$ ), and dementia ( $n = 6$ ). Approximately half of the patients with mania or non-affective psychosis had it as their first-onset disorder. **Conclusion.** SARS-CoV-2, in both symptomatic and asymptomatic patients, is associated with a wide range of psychiatric morbidity which emphasizes clinicians' vigilance for psychiatric symptoms. Insomnia was the commonest neuropsychiatric symptom which may have clinical practice and potential preventive strategies implications.

Delirium, the commonest diagnosis in the study carries high morbidity and mortality and may reflect SARS-Cov-2 propensity to affect the brain directly and indirectly through a cytokine storm, organ failure, and prothrombotic state. Patients can also present with new-onset mania or non-affective psychosis. It is noteworthy that about two-thirds of the patients had no past psychiatric history.

This study, along with expanding body of evidence may assist with resource allocation and liaison psychiatry services planning. It also underscores the importance of designing future studies to better understand longer-term psychiatric sequelae of COVID-19.

### Impact of COVID-19 on the mental health of healthcare workers in different regions of the world

Mahfuja Islam<sup>1\*</sup>, Philip George<sup>2</sup>, Sindhu Sankaran<sup>3</sup>, Janet Leu Su Hui<sup>2</sup> and Tzun Kit<sup>2</sup>

<sup>1</sup>Ashford and St Peter's NHS Foundation Trust; <sup>2</sup>International Medical University and <sup>3</sup>All India Institute of Medical Sciences  
\*Corresponding author.

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**Aims.** The global health system is facing a serious challenge after the recent outbreak of COVID-19 coronavirus infection which was first identified in Wuhan, China in November 2019 and declared as a pandemic in March 2020 by WHO. There is a wide consensus that this pandemic has negative psychosocial consequences as well as unforeseeable provision of mental health care services and just not on physical health alone. The aim of this research study is to determine the prevalence of psychological distress and to identify the sociodemographic variables with the main attributable factors associated with the psychological distress among healthcare workers and suggestions on how to reduce the impact on the mental health of healthcare workers during the COVID-19 pandemic in different regions of the world.

**Method.** We performed a cross-sectional study from September–November 2020. We used a self-administered survey tool which was distributed electronically to healthcare workers across the globe. The data were stored on an online database with password protected devices where survey responses were restricted to investigators exclusively.

Data collected were: 1) Socio-demographic data (age, gender, marital status, ethnicity, religion, role in the healthcare, region of practice); 2) Psychological General Well-Being Index (PGWBI) questionnaire which contains 22 standardized items. This is a subjective assessment to score the degree of psychological well-being by focusing on 6 domains: depression; anxiety; positive-well-being; self-control; vitality and general health; 3)

Subjective assessment from respondents of the main attributable factors causing psychological distress and suggested methods to help reduce the impact on mental health on health care workers.

**Result.** Majority out of the 217 respondents were from a younger age group; females and married/domestic partnership, mainly from Western Pacific Region, South East Asian and the African Region. More than half the respondents were moderate-severely psychologically distressed and the three main attributable factors causing psychological distress were: fear of family/friends contracting COVID-19 followed by lack of PPE and discomfort caused by wearing PPE for long hours. Respondents suggested that the distress would be reduced if: more resources were provided in hospital; protocols and guidelines were implemented and counselling facilities with recreational activities were available to frontline workers.

**Conclusion.** This study showed that the COVID-19 pandemic has affected the mental health of healthcare workers and more support or strategies need to come in place to protect frontline workers at the time of crises.

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