

Prevalence and course of anxiety and depression among patients selected for bariatric surgery

Jonathan Gibb^{1*}, Chris Rogers², Eleanor Gidman², Graziella Mazza², Jane Blazeby³ and Paul Moran¹

¹Centre for Academic Mental Health, Population Health Sciences, Bristol Medical School, University of Bristol; ²Bristol Trials Centre (CTEU), Bristol Medical School, University of Bristol, Level 7, Zone A, Bristol Royal Infirmary and ³Centre for Surgical Research, Bristol Medical School, Population Health Sciences, University of Bristol
*Corresponding author.

doi: 10.1192/bjo.2021.120

Aims. To determine the prevalence of anxiety and depression amongst participants with severe or complex obesity randomised and selected for bariatric surgery in a large multi-centre trial.

To describe the change in prevalence of anxiety and depression amongst participants who had undergone bariatric surgery, within 6 months of randomisation and at 12 months post-randomisation. **Method.** The By-Band-Sleeve (BBS) study is a multi-site randomised controlled trial evaluating the surgical management of severe or complex obesity and is the largest trial of its kind. Participants completed the Hospital Anxiety and Depression Scale (HADS) on study enrolment (pre-randomisation) and at 12 months post-randomisation. In this sub-study, we describe provisional data concerning the baseline prevalence of anxiety and depression along with change in median HADS symptom score amongst those who actually underwent bariatric surgery.

Result. 758 participants met the criteria for study inclusion with 716 (94.46%) and 712 (93.93%) individuals fully completing questionnaires for HADS-A and HADS-D. At pre-randomisation, the prevalence of possible (HADS A/D = 8-10) and probable (HADS A/D >11) anxiety or depression was 46.19% (n 330/716) and 48.17% (n 48.17%) respectively. Paired and complete HADS-A and HADS-D questionnaires were available for 70.25% (n 503/716) and 69.94% (n 498/712) participants. There was a highly statistically significant decrease in median HADS-A and HADS-D scores at 12 months post-randomisation (Wilcoxon signed-rank test $p < 0.001$). This was coupled with a statistically significant reduction in the proportion of cases with possible and probable anxiety (−9.54%, $p < 0.001$) and also depression (−22.21%, $p < 0.001$) at 12 months post-randomisation.

Conclusion. Our results characterise the high rate of psychological comorbidity amongst patients with severe or complex obesity selected for bariatric surgery. Whilst bariatric surgery remains the most clinically effective treatment for severe obesity, its effects on long-term post-operative mental health outcomes are less clear. These findings contribute to the growing body of evidence calling for increased pre/post-operative mental health surveillance and integrated care for this cohort of patients.

Confusion and a cough: an experience of COVID-19 in dementia patients

Emily Giles
NHS Lanarkshire

doi: 10.1192/bjo.2021.121

Aims. To assess the clinical presentation and outcomes of COVID-19 positive patients with dementia and to evaluate the suitability of the “4C mortality score.” Older adults with dementia are a vulnerable patient group therefore it was predicted that this patient demographic would have poorer outcomes and high mortality rates. Ward 24 is an organic old age psychiatry ward in

University Hospital Monklands, Lanarkshire for patients with advanced dementia. Older adults have been found to have atypical presentations and non-specific symptoms in COVID-19, however given COVID is still a new and evolving disease, little is known about the impact on dementia patients. The 4C mortality score was designed to predict in-hospital mortality for hospitalised COVID-19 patients using a number of clinical parameters.

Method. Data were collected retrospectively from all inpatients on ward 24 testing positive for COVID-19 between October and December 2020. Data were collected using online MIDIS entries, paper notes, NEWS charts and Clinical Portal. A 4C mortality score was calculated for each patient using an online calculator based on the data collected.

Result. 15 patients tested positive for COVID-19; 47% male and 53% female, age range between 64 and 92 years old. 67% of patients had 3 or more comorbidities and 89% had either a high or very high 4C mortality score. Mortality from COVID-19 was 13% and 20% of patients required oxygen. 27% of patients were asymptomatic, these patients also had the lower risk mortality scores. 67% presented with pyrexia, 33% had a cough and 13% had breathlessness. Non-specific symptoms were also seen; 53% had fatigue, 20% had diarrhoea and 20% had unresponsive episodes. Post COVID delirium was seen in 20% of patients.

Conclusion. Mortality rates were lower than expected, indicating that the 4C mortality score might not be appropriate to use in this patient demographic due to confounding factors. Atypical symptoms were common in patients, with a variability of clinical presentations within the patient demographic. These findings suggest the importance of having a low threshold for COVID-19 infection even in the absence of typical symptoms. Development of an alternative risk stratification tool would be beneficial for this patient group, with further studies needed on a larger scale to facilitate this.

Heart rate variability and emotion regulation in adults with eating disorders or obesity: a systematic review

Chloe Gilkinson^{1*}, Ulrike Schmidt², Lucy Gallop³ and Michaela Flynn⁴

¹Institute of Psychiatry, Psychology and Neuroscience, King's College London; ²South London and Maudsley NHS Foundation Trust, Department of Psychological Medicine, Institute of Psychiatry, Psychology and Neuroscience (IoPPN), King's College London; ³NIHR Maudsley Biomedical Research Centre PhD student and ⁴Research Student, Department of Psychological Medicine, Institute of Psychiatry

*Corresponding author.

doi: 10.1192/bjo.2021.122

Aims. Emotion regulation (ER) impairments are central trans-diagnostic phenomena across the spectrum of eating disorders (EDs) and obesity, where maladaptive eating behaviors act to suppress negative emotions. Self-report assessments are the most commonly used tools for assessing an individual's ER capacity, however, subjective self-reporting is limited by a tendency toward response bias and issues with common method variance. Prior empirical and theoretical research supports the use of heart rate variability (HRV) to objectively assess individual differences in ER capacity. Several studies have examined the association between HRV and ER in EDs and obesity. However, to date, no review synthesising the overall findings exists. This review aimed to summarise the empirical evidence that has examined the relationship between ER and HRV in adults with EDs/obesity, in addition to assessing the validity of HRV as a physiological biomarker of ER in these populations.