The Association Between Severe Mental Illness and Receipt of Acute Cardiac Care for Myocardial Infarction, and the Impact of the COVID-19 Pandemic

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Aims. To compare receipt of acute cardiac care in people with versus without severe mental illness (SMI) and investigate the impact of the COVID-19 pandemic on any differences in care. We hypothesised that, compared with those without SMI, patients with an SMI are less likely to receive guideline recommended acute cardiac care and that disparities worsened as a result of the pandemic.
Methods. We conducted a cohort study using data from the CVD-COVID-UK resource, which links electronic health data from multiple sources. Our cohort included 95,125 adults with a non-ST-elevation MI (NSTEMI) recorded in the Myocardial Infarction National Audit Programme (MINAP) dataset between 1 November 2019 and 31 March 2022. We defined SMI as schizophrenia, schizoaffective disorders or bipolar disorder (BD), ascertained through recorded diagnosis in primary care or hospital admission records. We examined receipt of cardiac care standards for NSTEMI, including: admission to a cardiac ward; angiogram eligibility; receipt of angiogram (in those eligible); angiogram within 72 hours; secondary prevention medication prescribing at discharge, and arrangement of post-discharge cardiac rehabilitation. We used logistic regression to obtain odds ratios (ORs) for the association between SMI and receipt of each care indicator, adjusting for age, sex and time period. We tested for an interaction between SMI and time period in order to determine if any disparities had changed since the start of the COVID-19 pandemic.
Results. Within our cohort, 620 patients (0.6%) had schizophrenia and 575 (0.6%) had BD. Compared with people without SMI and after adjusting for age, sex and period, patients with an SMI were less likely to receive each of the cardiac care standards. For example, compared with those without SMI, those with SMI were less likely to: be admitted to a cardiac ward (schizophrenia: OR 0.72, 95% CI 0.61–0.85; BD: 0.74, 95% CI 0.63–0.88); be eligible for an angiogram (schizophrenia: 0.37, 95% CI 0.29–0.47; BD: 0.52, 95% CI 0.40–0.68); receive an angiogram (schizophrenia: 0.22, 95% CI 0.18–0.28; BD: 0.51, 95% CI 0.39–0.66); and receive an angiogram within 72 hours (schizophrenia: 0.71, 95% CI 0.56–0.90); BD: 0.80, 95% CI 0.64–1.00). We generally found no evidence that disparities had changed since the start of the COVID-19 pandemic.
Conclusion. We identified marked SMI disparities in receipt of acute cardiac care among people treated in hospital for a NSTEMI. Further research should seek to identify reasons for, and inform interventions to, address these disparities.

Pre-operative Mental Health and Adverse Outcomes Following Total Knee Replacement: A Prospective Cohort Study

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Aims. Total knee replacements (TKRs) are effective procedures for severe osteoarthritis. Some studies suggest that people with common pre-operative mental health problems are more likely to experience complications following joint replacement. This study aimed to determine whether people who described pre-operative anxiety or depression were more likely to report an adverse event, or outcome, following a TKR.
Methods. A prospective cohort of people undergoing TKR at a surgical centre in England between 2012–2013 as part of service evaluation were studied. Following informed consent, participants completed pre-operative sociodemographic questionnaires alongside several patient-reported outcome measures (PROMs): the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC), EuroQoL Five-dimensions Descriptive System (EQ-5D-3L), and the Self-Administered Patient Satisfaction Scale for Primary Knee Arthroplasty. Participants were classified as exposed if they described moderate or extreme problems with anxiety or depression in the mental health subset of the EQ-5D-3L. The primary outcome was the presence of a patient-reported adverse event (bleeding, infection or fracture) at 3 months post-surgery measured through a short postal questionnaire. Repeat PROMs were assessed at 3- and 12-months post-surgery. Logistic regression was used to model the association between pre-operative mental health status and probability of an adverse event, or outcome, occurring following adjustment for age, sex and body mass index.
Results. Of the 206 individuals studied, over a third (n 72/206, 35%) had reported problems with anxiety or depression before surgery. Among those returning completed follow-up questionnaires, 20% (n 34/168) described an adverse event at 3 months. Pre-operative anxiety or depression was not associated with an increased odds of reporting an adverse event (aOR 0.85, 95% CI 0.35–2.05) at 3 months post-surgery. People who described problems with anxiety or depression were more likely to have a greater degree of pre-operative functional impairment. Even after adjusting for a higher pre-operative symptom burden, exposed participants were more likely to report problems with activities of daily living (aOR 2.32, 95% CI 1.09–4.94) and pain or discomfort (aOR 5.58, 95% CI 1.77–17.60) at 3 months post-surgery. However, they did not have an increased odds of describing worse function, reduced health-related quality of life, or being dissatisfied with their TKR at 12 months post-surgery.
Conclusion. Despite having a higher burden of morbidity prior to undergoing surgery, pre-operatively anxious or depressed participants did not have an increased odds of reporting an adverse event at 3 months and went on to experience comparable improvements in PROMs at 12 months post-surgery.

Modafinil in Post-Traumatic Brain Injury Apathy: A Sleeping Giant?

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