Comparing intentions to reduce substance use and willingness to seek help among transgender and cisgender participants from the global drug survey

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Aims. To describe and compare psychoactive substance misuse help-seeking among transgender (trans) and cisgender (cis) participants from a large multi-national cross-sectional survey.

Background. Trans people experience stressors related to their minority status which have been associated with increased rates of psychoactive substance use and related harm. Despite this, there is a paucity of evidence relating to the treatment needs of trans people who use psychoactive substances, beyond a small body of literature describing a culture of transphobic hostility in general substance misuse services. This paper aims to describe and compare psychoactive substance misuse help-seeking among trans and cis participants from a large multi-national cross-sectional survey.

Method. Over 180,000 participants, recruited from the world's largest annual survey of drug use - the Global Drug Survey (GDS) - during 2018 and 2019, reported use of a range of psychoactive substances in the preceding 12 months. Five gender groups (118,157 cis men, 64,319 cis women, 369 trans men, 353 trans women and 1,857 non-binary people) were compared, using Chi-square and z-tests with Bonferroni correction, on items relating to the desire to use less psychoactive substances and the need to seek help to achieve this. Respondents from GDS 2018 were also assessed for substance dependence. Binary logistic regression was used to compare gender groups on self-reported substance dependence to frame the help-seeking analyses.

Result. Trans respondents (n = 1,710) to GDS 2018 were significantly more likely than cis respondents to report use of illicit substances (OR = 1.66-2.93) and dependence on cannabis (OR = 2.39), alcohol (OR = 3.28) and novel psychoactive substances (OR = 4.60). In the combined GDS 2018 and 2019 dataset, there were no significant differences between trans (n = 2,579) and cis (n = 182,476) participants on the desire to reduce substance use. However, among those who did report wanting to use less, non-binary people and trans women were most likely to want help to achieve this.

Conclusion. Trans respondents reported a greater need for help with reducing substance use than cis respondents. Given the deficit of specialist services for psychoactive substance users who are trans, there is a need for a more thorough understanding of the barriers and facilitators to their engagement in general substance misuse services. In the interim, substance misuse service providers require education about gender minority status to help meet the needs of trans clients.

Prevalence and correlates of substance use among transgender adults: a systematic narrative review

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Aims. To understand the prevalence, patterns and correlates of substance use among transgender adults.

Background. Minority stress theories suggest that the increasing rates of discrimination experienced by transgender people are precipitants of substance use. This is likely exacerbated by an inadequate provision of trans-inclusive substance misuse services. However, the exclusion of transgender people from the general substance misuse literature makes it difficult to determine the extent to which gender minority status influences substance use. A systematic review was undertaken to better understand the prevalence, patterns and correlates of substance use among this group.

Method. In accordance with the PRISMA guidance, a literature search was conducted to 29th May 2019 on PubMed, PsycINFO, EMBASE and Global Health databases. Primary quantitative studies, published in the English language, that reported the prevalence, patterns or correlates/risk factors of substance use by trans people were included, with no restriction on methodological design.

Result. 651 unique records were identified by the search and 40 studies were included in the synthesis. While there was some suggestion of excess risk of substance use among trans people, there was insufficient evidence to estimate prevalence or quantify the risk of substance use among transgender people, relative to a cisgender population. However, this review identified several gender minority related correlates of substance use which are of relevance to clinicians working with transgender patients, including transphobic discrimination or violence, unemployment and sex work, gender dysphoria, high visual gender non-conformity and intersectional sexual minority status.

Conclusion. There are currently significant gaps in the trans substance use literature, relating to the disproportionate investigation of transgender women with multiple intersectional disadvantages, who are not representative of the wider trans community. However, there is sufficient evidence to recommend screening for substance use when individuals report high levels of gender minority stress and to consider the use of integrated trauma-informed psychosocial interventions when managing problematic substance use in the transgender adult.

A clinical inventory of moderators of tic severity in Tourette's Syndrome

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Aims. Changes in the severity of tics in Tourette's syndrome (TS), as seen with variations in the intensity or frequency of tics, can be moderated by a variety of independent factors such as external or internal stimuli. Identifying such moderators has important clinical implications as it can aid clinicians in adjusting interventions. Hence, based on our previous review of tic-severity moderators, we developed a clinical inventory of moderating variables for motor and vocal tics for inclusion in the new version of the Queen Square Proforma for Tourette's Syndrome to aid initial assessments in the National Tourette Syndrome Service's Outpatient Clinic for Adults.

Method. A review of tic-severity moderators was previously carried out by the authors to investigate the kinds of moderators and their worsening, improving or neutral effects on tic severity. Based on this a semantic thematic analysis of the identified

moderators was carried out and themes were developed based on appropriate and relevant MeSH terms in order to create the categories and items of the clinical inventory.

Result. Seventy-three different tic severity moderators were identified, the most common being exercise, sleep, peer victimisation, psychosocial stress, watching TV, academic activities and distraction. Twenty-nine themes emerged from the thematic analysis which were then used to update the clinical inventory of tic severity moderators. The review also highlighted the subjectivity of these moderators' effects on tic severity as some moderators were tic-worsening in some individuals and tic-improving or neutral in others, which is contrary to the current dichotomous understanding.

Conclusion. The updated clinical inventory of tic severity moderators invites researchers and clinicians to be more aware of the existence, variability and subjective effects of these tic severity moderators in individuals with TS, as these have been previously looked in a dichotomous way. By better identifying tic-severity moderators and their worsening, improving or neutral effects on tic severity this clinician rated inventory will have potentially important, direct implications for the management and treatment of tics.

Differentiated white blood cell count measures as a predictor of weight in anorexia nervosa

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Aims. To explore the relationship between weight, BMI and differentiated white cell count in patients with anorexia nervosa that have commenced refeeding protocols.

Hypotheses:

1. Weight and BMI will be positively correlated with differentiated white blood cell measures.
2. Regression analyses will indicate that differentiated white blood cell measures can predict weight and BMI.

Background. Anorexia nervosa is a serious mental illness with the highest psychiatric mortality rate. It is characterised by an extreme overvaluation of body image and a preoccupation with weight loss that is achieved through calorie restriction, purging or laxative abuse. The eventual malnutrition that is as a result of self-starvation causes significant negative physical sequelae. One such consequence is the detrimental effect that starvation has on the immune system, leading to bone marrow suppression and cytopenias. In obesity, weight loss has been shown to cause reductions in differentiated white blood cell counts, which are often reduced in anorexia. No studies to date have explored whether weight is related to white blood cell count in anorexia, despite being a common finding in patients.

Method. All subjects were inpatients or ex-inpatients on an eating disorder unit in the Wirral, NW England. Subjects were assessed according to an inclusion criterion. 12 consecutive weekly weights, BMIs and differentiated white blood cell measures were collected for analysis in SPSS. Correlational and regression analyses were then performed to examine the relationship between variables.

Result. 302 data points from 26 individuals were used in the final analysis. Weight and BMI both moderately positively correlated with white cell count, $r = 0.364$ $p < 0.001$ N = 302 and $r = 0.521$ $p < 0.001$ N = 302, respectively. Weight and BMI also moderately positively correlated with all differentiated measures of white blood cell count. Linear regression revealed a significant regression equation between weight, BMI and white blood cell count: $(F_{(1,301)} = 22.482, p < 0.001)$ $R2 = 0.69$ and $(F_{(1,301)} = 112.244$ $p < 0.001)$ $R2 = 0.272$, respectively.

Conclusion. We have demonstrated that there is a moderately positive relationship between weight, BMI and differentiated white blood cell measures. Furthermore, in line with our hypotheses, differentiated white blood cell measures have some power to predict weight and BMI. This further implicates the effect that starvation and anorexia nervosa have on the immune system. It also highlights the possibility that it might be possible to use immunological markers in order to deduce whether weights have been falsified by those with anorexia nervosa.

The impact of the March 2020 lockdown on the cardiometabolic risk factors of male forensic and rehabilitation patients

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Aims. To explore the impact of the March 2020 lockdown restrictions on the cardiometabolic risk factors of male forensic and rehabilitation inpatients in one NHS trust in the United Kingdom.

Method. Retrospective data from September 2019 to September 2020 (six months before and after the 23 March 2020 lockdown) was collected by evaluating the health records of male patients in a low secure forensic ward and two rehabilitation units.

Result. The number of patients with BMI values within the study period was 34 while the number of patients with blood results was 26. This study showed that the average BMI six months before the start of the March lockdown was 29.8 kg/m2 while the average BMI at the end of six months after the lockdown was 31.8 kg/m2.

The results from the 6-month interval before the March 2020 lockdown (M = 0, SD = 0) and the 6- month interval after the March 2020 lockdown (M = 0.9, SD = 4.16) indicate that the March 2020 lockdown resulted in an increase of BMI, $t_{(5)} = 2.42$, P = 0.036. The result is significant at $p < 0.05$

8.8% of patients had an increase in their doses of antihypertensive agents after the lockdown whereas no patients had an increase of dose before the lockdown. 7.7% of patients had an HBA1c of more than 48 mmol/L after the lockdown compared to 3.8% before the lockdown. The serum triglycerides and total cholesterol levels also increased after the lockdown with an average increase of 0.17 mmol/L and 0.25 mmol/L respectively. The average serum HDL levels decreased after the lockdown with an average decrease of 0.06 mmol/L.

Conclusion. There appears to be a positive correlation between the onset of the March 2020 lockdown and an increase of BMI, worsening of blood pressure, glycemic control and lipid metabolism. Limitations

(1) Waist circumference was not measured during the study period preventing us from examining all of the features of metabolic syndrome.
(2) This study did not look at the levels of physical activity (such as access to section 17 leave) and dietary habits before and after the March 2020 lockdown which may explain the results found.