

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:  $(F(1,301) = 22.482, p < 0.001)$   $R^2 = 0.69$  and  $(F(1,301) = 112.244, p < 0.001)$   $R^2 = 0.272$ , 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/m<sup>2</sup> while the average BMI at the end of six months after the lockdown was 31.8 kg/m<sup>2</sup>.

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.

## Recommendations

To raise metabolic awareness of the impact of the lockdown restrictions on cardiometabolic risk in people with SMI and the general public.

## Who wants to be a psychiatrist? Northern Ireland foundation doctors (2006 - 2018) positive towards psychiatry as career choice

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**Aims.** Recruitment into psychiatry remains a major issue nationally despite recent progress with the #choose psychiatry scheme. Here we look to establish why Northern Ireland (NI) has been able to have 100% fill rates by speaking to the people who have work in the frontline of psychiatry. What is done differently in NI and are there lessons that could benefit other regions?

**Background.** NI presents itself as an anomaly – In a region that only attracts 31.8% of F2s to enter into any training programme, Core psychiatry has been consistently oversubscribed for many years. One difference is the allocation of trainees in the Foundation programme. NI offers psychiatry placements to 33% of F2 doctors with none in the F1 year.

**Method.** All doctors of any grade working in psychiatry who had been through the Foundation programme since 2006 were asked to complete a survey on their foundation experience and reasons for choosing a career in psychiatry using SurveyMonkey technology. Qualitative and quantitative data was collected and analysed.

**Result.** In total 67 doctors from CT1 to Consultant and SAS doctors responded, including over 60% of all current trainees, providing a huge amount of information. Remarkably, 45% of psychiatry doctors working in NI surveyed hadn't considered a career in psychiatry until their foundation placement. NI is the only region in the UK that does not have an F1 placement in Psychiatry. Over 80% of doctors here feel that this is a positive. White space answers revealed other aspects of training that positively influenced them to choose psychiatry including a reputation for high quality training, as well as close links between the local medical school, the local branch of the Royal College of Psychiatrists and the NI deanery.

**Conclusion.** This study is the first to examine the reasons behind psychiatry's success in NI. The quality of the training scheme locally and presence of an excellent training to service provision balance were also mentioned. This study supports the presence of psychiatry in the F2 year only.

## Anxiety levels among health care workers within Irish mental health services during COVID-19: a survey

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**Aims.** The aim of this survey was to assess any fluctuations in anxiety levels experienced by mental health workers during the

COVID-19 pandemic and the association between these changes and variables of information dissemination, risk management, and managerial support.

**Method.** A survey was created to assess variables of information dissemination, risk management, and managerial support. The GAD-7 was employed as measure for anxiety during and pre the pandemic. The survey was conducted online via an anonymised questionnaire and disseminated by management through the heads of various disciplines within the mental health work force, using the local email portal in the Cork region. It was made available for research participation for a period of one month (JULY).

Following this stage, the reported data were analysed utilizing paired samples t-test, Pearson's correlations, and a hierarchical regression. Demographic variables were controlled for during analysis.

**Result.** 102 mental health healthcare workers participated in the survey (81.2% Female, 18.8% Male). The mean GAD-7 total scores for Pre-COVID-19 doubled in the during COVID-19 condition. The largest effect can be seen on the GAD-7 facet of "feeling afraid as if something awful might happen" with pre-COVID-19 GAD-7 mean scores more than quadrupling during COVID-19 conditions.

Managerial support had a moderate negative relationship with GAD-7 scores during the COVID-19 pandemic. Information dissemination total scores also had a moderate positive correlation with managerial support total scores and perceived risk/safety total scores. There was no correlation found between the GAD-7 total scores during COVID-19 pandemic and Information dissemination total scores nor Risk/safety total scores. Childcare was a concern for 64% of staff that it was applicable to; 45% of these staff considered altering work hours; 17% reported issues from management regarding these requests.

**Conclusion.** Mental health workers have seen a dramatic increase in anxiety since the COVID-19 pandemic, particularly in the context of expecting something bad to happen. Managerial support appears to be a protective factor for increased anxiety levels in this population. Childcare has been a predominant concern and altering working hours to accommodate this has been problematic for almost 1 in 5 mental health workers. Staff satisfaction with information dissemination positively affects perceived managerial support and perceived risk management.

This study is limited by the utilization of a novel self-created measure for examining variables specific to the COVID-19 pandemic and to the employment of a retrospective measure to obtain baseline anxiety scores of staff members before the pandemic.

## Metabolic profiles differences of overweight patients on olanzapine, clozapine and risperidone

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**Aims.** We set out to examine the differences in metabolic profiles of at risk (overweight) patients across commonly used atypical antipsychotics (Olanzapine, Risperidone, Clozapine). We hypothesized that Olanzapine and Clozapine group will have more metabolic abnormalities compared to Risperidone.

**Background.** Cardiovascular diseases remain the leading cause of morbidity and mortality among people with schizophrenia. Since