

a validated, computerised assessment tool (THINC-IT). Psychiatric status and medication status were self-reported, and where possible, disorder severity measured using a rating scale (CGI-S).

Results. Participants with depression had a significantly higher COMPASS-31 and VAFS scores (higher being more severe), with effect sizes being medium to large. Medication did not fully explain the associations observed. Overall, participants with mental health disorders, when compared to healthy controls, had significantly higher levels of cognitive impairment. Levels of ANS dysfunction significantly and positively correlated with cognitive impairment. The severity of the psychiatric disorder significantly correlated with both ANS dysfunction ($p < 0.001$) and cognitive impairment. These results were found across all cognitive tests ($p < 0.05$), other than reaction times in the N-back test, a measure of working memory.

Conclusion. Our results show significant association between ANS dysfunction, psychiatric disorders and cognitive impairments. This is consistent with previously published data. There is now a need to understand the underlying mechanisms and the directionality of the associations. If these mechanisms are shared and relate to autonomic dysfunction, targeted treatments addressing this directly could be helpful with mental health disorders and associated burdensome symptoms, such as cognitive impairments and fatigue. This study is part of a wider project assessing cognitive ability and autonomic functioning in psychiatric populations, and investigating treatments that directly address autonomic dysfunction in psychiatric samples, such as non-invasive transauricular vagus nerve stimulation (taVNS).

Mind and Spirit. Chaplaincy and Spiritual Care in Inpatient Psychiatry – a Qualitative Study

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Aims. Introduction. Despite society's secularisation, as of 2019 only 38.4% of the population of England and Wales identified as "No Religion". The integration of chaplaincy and spiritual care teams into health services varies widely and we undertook this qualitative research to better understand the spiritual needs on psychiatric wards.

Methods. Between October 2021 and January 2022, we carried out semi-structured interviews with 10 patients and 10 staff-members, convenience sampled from acute General Adult Wards. The interviews were approximately 10–15 minutes long, documented in shorthand, compiled, and analysed thematically.

Results. Themes (P = patient, S = staff member)

1. Religion and belief, or lack of it, defies categorisation

P1 (36M) identified as Christian but didn't really believe, whilst S2 (Nurse Clinical Team Leader) professed no religion but prayed that her sister would be healed. P7 (59F) was brought up Christian but thought religion was a fantasy. P2(21M) identified as Wiccan but thought all religions hold truth.

2. An incarnational, embodied service

P9 (33F) wished chaplains wandered around the wards and S10 (F1 Junior Doctor) praised their presence in general hospitals. P1 wanted a "prayer circle" and S5 (Student Nurse) suggested weekly worship services.

3. Space to "be"

S10 liked an empty chapel to think in and P4 (29M) said he was Lacking space for reflection and meditation.

4. Unmet needs

P9 felt abandoned by God during the admission and her vicar had recently died. She wanted someone to sit, pray with her and point her to helpful scriptures but was not aware of the existence of chaplaincy. Of the patients, only P3 knew how to contact the service and S8 said it was rarely discussed by the MDT.

5. Caution, ignorance and suspicion

S1 and S8 said chaplaincy visits are sometimes distressing for patients preoccupied with devils and demons and P5 (26M) was worried they'd judge him.

6. Links with wider faith communities

P6 (46F) would like to attend church with her family, P4(29M) would like to know where he could go to worship and S2 was also curious of what's available outside hospital.

Conclusion. Discussion and clinical implications

Despite limitations of small size and recruitment bias, the themes emphasise the complexity of understanding someone's spirituality. It highlights a call for a more visible presence and thoughtful consideration of what a spiritual need is and how it can be met.

Ward visits should be prioritised, having recently been limited by COVID-19 restrictions. Patient information and staff education regarding chaplaincy and spiritual care is urgently needed on psychiatric inpatient wards.

Examining the Levels of Violence in Mental Health Trusts

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Aims. A recent NICE report stated that there were 68,683 assaults reported by NHS staff between 2013 and 2014. 69% of these were in the mental health or learning disability setting. We sought to explore the number of violent incidents within mental health trusts across England and to understand whether the levels of violence against staff have increased, decreased, or remained the same between the years 2014 to 2019. We also looked at whether a change in bed numbers correlated with the levels of violence experienced.

Methods. Mental Health Trusts in England were identified, and Freedom of Information requests were sent to them. We asked for the numbers of sexual and physical violence between the years 2014 and 2020, broken down by outpatient and inpatient setting. Using bed data from NHS England we looked at whether there was a correlation with violence.

Results. Out of the 53 trusts we approached with freedom of information requests, 43 returned responses with data that could be used for analysis. Data sets were often incomplete, especially for the earlier years requested. The total number of violent incidents from the 43 trusts was 24,393, in the year 2014. There was an increase to 37,907 by the year 2019, which may, in part, be explained by more complete data. Over the same time period, there was a decrease in bed numbers. Average number of episodes of violence per bed increased over 2014 to 2019 from 2 to 2.5, but the increase was not statistically significant. From our data, a correlation between the decrease in bed numbers and increase in rates of violence cannot be drawn.

Conclusion. The high number of violent incidents within the mental health setting remain troubling, particularly when taking into account that this analysis represented only a partial data

set. This limitation, together other data robustness issues, including the probability of under reporting by staff mean that firm conclusions cannot be drawn. This remains an area where urgent further research is needed, both to identify the extent of the problem, and to probe the impact violence has on staff and patients.

Understanding the Developmental Pathways and Onset of Bipolar Disorder and Borderline Personality Disorder in Young People: A Systematic Review of Reviews

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Aims. There is still an ongoing debate on the nosological position of Bipolar Disorder (BD) and Borderline Personality Disorder (BPD). Identifying the unique and shared risks and developmental pathways in emerging BD and BPD could help the field refine aetiological hypotheses of these disorders. The study aims were to systematically synthesise the available evidence from systematic reviews and meta-analyses concerning environmental, psychosocial, biological, and clinical factors leading to the emergence of BD and BPD to identify the main differences and common characteristics between the two disorders to characterise their complex interplay whilst highlighting remaining evidence gaps.

Methods. A literature search was conducted PubMed, PsychINFO, EMBASE, Cochrane, CINAHL, MEDLINE, and ISI Web of Science as the data sources. 19 systematic reviews and meta-analyses involving 217 prospective studies met eligibility criteria.

Results. Results demonstrated that family history of psychopathology, affective instability, attention deficit hyperactivity disorder, anxiety disorders, depression, sleep disturbances, substance abuse, psychotic symptoms, suicidality, childhood adversity and temperament dimensions were common predisposing factors across both disorders. There are also many distinct variables that could be found early in the course of both disorders. Most of the factors should be considered as a general, nonspecific precursor signs and symptoms of both BPD and BD, apart from subsyndromal depression, subsyndromal hypomania, cyclothymia disorder, psychotic symptoms, age at onset of major depression and frequency and loading of affective symptoms.

Conclusion. Although the findings of this review may lead to support the view of BD and BPD as two distinct disorders, there is not sufficient data to either indicate that BD and BPD are separate nosological entities or that BPD should be considered as an extension of BD disorders. Future research is required to increase our understanding of the aetiology of BD and BPD onset and their complex interplay by conducting prospective studies which concurrently examine multiple measures including biological, environmental, psychosocial and clinical factors in BD and BPD at-risk populations. Large, multilevel data sets will enable deep phenotyping and distinguish pathophysiological pathways.

Transcranial Direct Current Stimulation in the Treatment of Post-Laminectomy Syndrome: A Clinical Trial

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Aims. To evaluate the effectiveness of Transcranial Direct Current Stimulation (tDCS) in treatment of post-laminectomy syndrome.

Methods. Twenty-four patients were randomized in three groups to receive active or sham anodic stimulation (1.5 mA, 20 minutes for five consecutive days, with 25cm² electrodes) in two different areas (primary motor cortex (M1) vs. dorsolateral prefrontal cortex (DLPFC), according to lateralization of pain. Brief Pain Inventory (BPI) and Visual Analogue Scale (VAS) were instruments used to assess pain, while Clinical Global Impression Scale (CGI) was applied to measure severity disease and clinical response. Additionally, the quality of life assessment was based on World Health Organization Quality-of-Life Scale (WHOQOL-BREF). In order to identify psychiatric comorbidities, Beck's Depression Inventory (BDI) and Beck's Anxiety Inventory (BAI) tests were applied. Comparisons between groups were performed using one-way ANOVA, ANOVA-Welch, Kruskal-Wallis, Man-Whitney, and Fisher's test.

Results. It is observed that there was a statistically significant difference (difference 0,15† [95% CI, 7,07 ± 1,39]) in the way individuals assess their quality of life and the improvement in pain intensity by VAS, especially in M1. The assessment of quality of life among those who showed improvement was higher than those who did not improved.

Conclusion. Application of tDCS in primary motor cortex (M1) produced an improvement in pain pattern in patients with post-laminectomy syndrome. Our data suggest that tDCS - a low-cost, technically simple and highly tolerable technique, is a promising technique for management chronic pain in disorders such as post-laminectomy syndrome.

Exploring School Students' Knowledge and Expectations of Careers in Psychology, Psychiatry and Mental Health Nursing: A Thematic Analysis

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Aims. Attracting more doctors and nurses to mental health careers is vital to support the growing demand for mental health services. Despite low numbers of doctors choosing psychiatry, and a shortage of mental health nurses, psychology degrees remain a popular choice. This study explores the understanding and knowledge students studying psychology A Level have about mental health careers, and the careers guidance they have received. We ask 'are students who are interested in studying psychology at university an untapped resource for recruitment to psychiatry and mental health nursing?'

Methods. Focus groups were held with A-Level psychology students considering applying to university to study psychology. Focus group discussions were recorded, transcribed and anonymised and were analysed using thematic analysis.

Results. Three key themes were identified. Firstly, student interest in psychology as a degree subject (with mental illness, neurobiology and human behaviour cited as key interests). Secondly,