

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 25cm<sup>2</sup> 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,