Methods: The study involved 7,473 G6PD-deficient patients and 29,892 matched case-controls (selected at a 1:4 ratio) from a cohort of 1,031,354 within the Leumit Health Services database. Clinical characteristics were analyzed using Fisher's Exact Tests for categorical variables and Mann-Whitney U tests for continuous variables.
Results: The average age of patients was 29.2 ± 22.3 years, with 68.7% being male. The mean follow-up duration was 14.3 ± 6.2 years. Individuals with G6PD deficiency showed a significant 16% higher risk of being diagnosed with ADHD (Odds Ratio (OR) = 1.16 [95% CI, 1.08-1.25], $p < 0.001$) on follow up. Furthermore, G6PD deficiency was associated with a 30% greater likelihood of seeking care from adult neurologists (OR = 1.30 [95% CI, 1.22-1.38], $p < 0.001$) and a 12% higher probability of consulting adult psychiatrists (OR = 1.12 [95% CI, 1.01-1.24], $p = 0.048$). The use of stimulant medications among G6PD deficient individuals was 17% higher for methylphenidate class drugs (OR = 1.17 [95% CI, 1.08, 1.27], $p < 0.001$), and use of amphetamines elevated by 16% (OR = 1.16 [95% CI, 1.03, 1.37], $p = 0.047$).
Conclusion: This study establishes a significant association between G6PD deficiency and an increased risk of ADHD diagnoses. These findings suggest potential opportunities for the development of culturally sensitive interventions.

Disclosure of Interest: None Declared

SP105

Smoking and mental health - impacts and implementation opportunities

J. Campion

SOUTH LONDON AND MAUDSLEY NHS FOUNDATION TRUST, London, United Kingdom
doi: 10.1192/j.eurpsy.2025.187

Abstract: Jonathan will present the impacts of smoking on physical and mental health, the impact of smoking cessation on mental health and the need to reduce doses of some psychotropic medications after cessation in order to prevent toxicity. He will set out the low population coverage of evidence-based interventions for smoking cessation and prevention uptake particularly for people with mental health conditions, and the reasons for this. He will then outline implementable opportunities to scale up coordinated coverage of interventions by different sectors

Disclosure of Interest: None Declared

SP106

Public mental health: Required actions to support implementation

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Abstract: Jonathan will begin by outlining the impact of mental disorder and wellbeing. He will summarise effective public mental health interventions to treat mental disorder, prevent associated impacts, prevent mental disorder, and promote mental wellbeing and resilience. He will outline the scale of implementation failure of such interventions and the reasons for this. He will then set out required actions and real-world solutions to support scale implementation of public mental health interventions leading to sustainable reduction of the impact of mental disorder and the promotion of mental wellbeing.

Disclosure of Interest: None Declared

SP107

Hypermobility, immune dysfunction and dysautonomia cluster in ADHD

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Abstract: Emerging research reveals a striking overlap between ADHD, hypermobility syndromes, immune dysfunction, and autonomic dysregulation. Studies suggest that approximately half of individuals with ADHD are hypermobile, while ADHD is significantly over-represented in those with hypermobility syndromes, such as Hypermobile Ehlers-Danlos Syndrome (hEDS) and Hypermobility Spectrum Disorder (HSD). Unlike benign joint hypermobility, these syndromes involve multisystem pathology, often accompanied by dysautonomia (e.g., postural orthostatic tachycardia syndrome, POTS), mast cell activation disease (MCAD), and autoimmune conditions.
This 'somatic super-syndrome' encompasses many of ADHD's under-recognised somatic comorbidities, including hypermobility, allergy and autoimmunity, POTS, fatigue and pain syndromes (Chronic Fatigue Syndrome and Fibromyalgia Syndrome), and sensory processing issues, amongst others. A small but growing body of evidence suggests that mast cells - 'first responder' immune cells involved in allergic and inflammatory responses - play a critical role in neurocognitive function and that their excessive activation has been associated with a range of neurological and psychiatric/neurodevelopmental conditions. Could a similar issue with aberrant mast cell activation be contributing to the pathophysiology of ADHD.
Dr. James Kustow, consultant psychiatrist and adult ADHD specialist, will present the latest insights into this complex interplay between connective tissue dysfunction, chronic low-level inflammation, and autonomic dysregulation. He will explore how these factors may, in some, drive an ADHD-like syndrome and discuss emerging research on neuroimmune mechanisms linking ADHD with inflammatory disorders such as infections, asthma, rhinitis, and food allergies.
By illuminating these connections and reviewing the available evidence, this presentation will encourage a broader, integrative approach to understanding and managing ADHD. It will also consider how future research might inform novel therapeutic strategies targeting immune dysregulation and autonomic dysfunction in ADHD.

Disclosure of Interest: J. Kustow Consultant of: I have done some consultancy work for a couple of pharmaceutical companies but not for over 3 years, Speakers bureau of: I have previously spoken at and chaired events organised by pharmaceutical companies (but I dont speak on the subject of ADHD medication).

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