

mixed pathology. Cocktail therapy targeting various misfolded proteins may be necessary for a cure. DMTs have limited use as most patients are diagnosed with advanced DLB. Sensitive diagnostic biomarkers with high specificity are required for accurate DLB diagnosis in the prodromal phase, a critical window for protein misfolding reversal with DMT.

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Glucagon-Like Peptide-1 Receptor Agonists in Cognitive and Mental Health Disorders: A Comprehensive Review of Pre-Clinical and Clinical Evidence

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Aims: Glucagon-like peptide-1 receptor agonists (GLP-1RAs) such as semaglutide are considered breakthrough drugs in the management of diabetes and obesity. Beyond their metabolic benefits, these pharmacological agents interact with biological pathways that may influence brain function, and are therefore increasingly being investigated for possible repurposing in psychiatric and neurological disorders. This review aims to synthesise pre-clinical and clinical evidence on the effects of GLP-1RAs across a range of cognitive and mental health conditions, comprehensively assessing their therapeutic potential and translational implications for psychiatric practice.

Methods: A systematic literature search was conducted across multiple databases, using a broad search algorithm to maximise the scope of the evidence synthesis. Two researchers independently screened titles and abstracts, assessed full texts for eligibility, and extracted relevant data. Results were considered in a narrative and visual synthesis based on emerging categories: studies were divided into mechanistic and clinical evidence, and organised based on broad diagnostic domains (cognitive disorders, substance use disorders, psychotic disorders, mood and anxiety disorders, and eating disorders). Clinical evidence, including meta-analyses, randomised controlled trials (RCTs), and observational studies, was critically appraised and ranked by hierarchy of evidence.

Results: The main themes emerging from the 280 pre-clinical and 96 clinical studies identified consist of the potential benefits of GLP-1RAs in neurocognitive disorders (reducing dementia risk and cognitive impairment in various cohorts) and in substance use disorders. Mechanistic evidence suggests these are mediated through their multimodal neuroprotective effects (including via anti-inflammatory pathways) and by dopaminergic modulation of reward mechanisms, respectively. In psychotic disorders, GLP-1RAs primarily mitigate antipsychotic-induced metabolic side effects, with minimal evidence for direct effects on psychosis itself. Findings in mood and anxiety disorders are inconclusive, with some studies reporting antidepressant properties while others show no clear benefit. Evidence in eating disorders is scarce, but suggests

GLP-1RAs may influence binge-eating behaviour, aligning with pre-clinical findings on their influence on appetite and reward regulation.

Conclusion: Extensive pre-clinical literature on GLP-1RAs provides strong mechanistic support for their putative benefits in Psychiatry, particularly in cognitive and reward-related disorders. However, clinical studies have yet to fully confirm these effects, highlighting the need for high-quality, targeted trials to distinguish direct mental health effects from secondary metabolic improvements. As enthusiasm about the promise of GLP-1RAs continues to grow in both the scientific community and in the media, it is crucial to approach their adoption in Psychiatry cautiously, and focus on robust translational research to establish their long-term efficacy and safety in patients with mental health conditions.

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Impulse Control Disorders and Other Compulsive Behaviours in Parkinson's Disease – What Is Current Evidence of Treatment?

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Aims: Parkinson's disease (PD) is a progressive neurodegenerative disorder that primarily affects motor function but also impairs cognitive and emotional regulation. Dopaminergic therapy, commonly used to treat motor symptoms, can lead to complications such as impulse control disorders (ICDs), compulsive behaviours, and dopamine dysregulation syndrome (DDS). These complications often result in significant deterioration of patients' quality of life. This dissertation aims to investigate effective interventions for managing ICDs and compulsive behaviours in PD patients on dopaminergic treatment while minimizing the risks of motor symptom deterioration and other neuropsychiatric consequences.

Methods: This systemic literature review examines a wide range of interventions for managing ICDs and compulsive behaviours in PD patients. A comprehensive search was conducted across major medical and psychological databases to identify studies evaluating pharmacological and non-pharmacological treatments. The review focused on interventions such as clonidine, atomoxetine, cognitive behavioural therapy (CBT), and subthalamic nucleus deep brain stimulation (DBS). Inclusion criteria were studies published in peer-reviewed journals within the last two decades that specifically addressed the treatment of ICDs and compulsive behaviours in PD patients receiving dopaminergic therapy.

Results: The review found that several interventions show promise in managing ICDs and compulsive behaviours without exacerbating motor symptoms. Clonidine and atomoxetine, both of which affect norepinephrine pathways, have been identified as potentially effective pharmacological options for controlling impulsivity and compulsive behaviours. CBT has been highlighted as an effective psychological intervention, particularly in improving patients' coping mechanisms and reducing maladaptive behaviours. Additionally, deep brain stimulation of the subthalamic nucleus has demonstrated positive effects on reducing impulsivity in PD