supporting the use of the medications for the three aforementioned disorders.

Result. D-cycloserine: accelerates the process of associative emotional learning, enhancing exposure therapy in the treatment of various anxiety disorders, including obsessive-compulsive disorder and posttraumatic stress disorder. Limited studies are available on efficacy in treating SUDs.

Intranasal oxytocin: accelerates memory retrieval-extinction procedures used in posttraumatic stress disorder, and promotes prosocial cognition and behaviour, facilitating a therapeutic alliance. Sufficiently powered studies and safety studies are required before strong conclusions can be made.

Propranolol: interrupts the reconsolidation of memories (leading to maladaptive learned responses) involved in posttraumatic stress disorder during memory-reactivation therapy sessions, but there is little evidence that this drug can be used for depression or SUDs.

Psychedelics: may effect the brain's default mode network, engendering a transformative experience that is often followed by a reduction in psychiatric symptoms. 3,4-methylenedioxymethamphetamine may additionally modulate the amygdala response in a way that allows for reprocessing of traumatic memories, and improves the therapeutic alliance. Anxiety, mood, and SUDs appear to be positively influence by traditional and non-traditional (ketamine) psychedelics.

Conclusion. Although the efficacy of the medically-assisted psychotherapies reviewed is still under investigation, we propose that these novel treatment approaches may be preferred over traditional psychopharmacological treatments due to the presence of fewer chronic side effects, as well less toxicity and abuse potential. Furthermore, these adjunctive pharmacotherapies may help to reinforce the psychotherapeutic alliance and may ultimately yield better long-term treatment outcomes. If at least some of the adjunctive pharmacotherapies outlined in this review are found to be clinically efficacious and safe, patients will benefit from having more treatment options available to them in the future.

Potential drug targets in the kynurenine pathway to treat acute schizophrenia

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Aims. Schizophrenia is a serious developmental psychiatric disorder with a neurodegenerative component that causes marked deterioration in social relationships and ability to work. Present treatments are not satisfactory. Meta-analysis of placebo-controlled studies in acute schizophrenia shows that only a minority of patients have a good response to current antipsychotic medications. Therefore, there is a need for more effective psychopharmacologic treatments for this disorder.

Method. The purpose of this paper is to provide new interpretations of existing data to provide a scaffolding for the development of novel drug targets for the treatment of schizophrenia. The causes of schizophrenia are most likely heterogeneous and involve both genetic and environmental factors. The authors examined a wide range of purported causes of schizophrenia to identify a common biochemical pathway that would contribute to this disorder. This review specifically did not consider pathways that supported the dopamine hypothesis of schizophrenia since historically drugs focused on dopaminergic mechanism, as noted in the aims, have not been successful for many patients with schizophrenia.

Result. Two prominent schizophrenia-associated factors that have been widely studied with significant supporting evidence are stress and inflammation. Stress and inflammation share a common biochemical pathway that converges on the kynurenine pathway of the metabolism of tryptophan, an essential amino acid. At one end of the pathway, recently hospitalized patients with schizophrenia have been found to have low plasma tryptophan levels, whereas chronic schizophrenics have not, suggesting stress- and/or inflammation-induced increased metabolism of tryptophan. At the other end of the pathway, there is increased level of cerebrospinal fluid kynurenic acid in patients with schizophrenia as compared with healthy controls. Salivary kynurenic acid is associated with stress intolerance in schizophrenia. Importantly, natural occurring compounds in this pathway have significant CNS effects that include neurotoxicity and altered neural transmitter behavior.

Conclusion. Stress and inflammation, both associated as causes of schizophrenia, are linked by a common biochemical pathway involving kynurenine. Examination of specific elements of the kynurenine pathway may aid in the identification of drug targets for schizophrenia.

A narrative review of the pharmacological management of psychosis in Alzheimer's disease

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Aims. Dementia is estimated to affect 50 million people worldwide, with around 60% of these cases attributable to Alzheimer's disease (AD). One of the common behavioural and psychological symptoms associated with AD is psychosis. Psychosis, experiencing delusions or hallucinations, can be one of the most distressing ordeals for patients with AD, as well as those around them. Effectively managing these symptoms can lead to a vast improvement in life quality. Currently, there are no medications specifically licensed in the UK for the treatment of psychosis in AD. To help guide clinical practice, we reviewed the evidence underpinning the pharmacological treatment of psychosis in AD. The aim of the study was to positively influence clinical practice and thereby improve the life quality of this patient group.

Method. An advanced PubMed search was used to identify studies which investigated the pharmacological treatments for acute psychosis in people with AD. Papers included were double blind, placebo controlled, randomised controlled trials specifically for AD dementia. Papers must have reported their findings using a specific psychosis subscale (PS); examples being "Behavioural Pathology in AD" (BEHAVE-AD-PS), "Brief Psychiatric Rating Scale" (BPRS-PS), and "Neuropsychiatric Inventory - Nursing Home Version" (NPI-NH-PS). Populations of both outpatients and residential patients were accepted. 14 papers, comprising some 3237 patients, were included and critically analysed in the final review.

Result. Risperidone (BEHAVE-AD-PS: -1.3 [$p = 0.004$] & -1.9 [$p = 0.039$]; BPRS-PS: -0.5 [$p = 0.08$]) and aripiprazole (NPI-NH-PS: -1.0 [$p = 0.169$] & -1.8 [$p = 0.013$]) successfully reduced psychosis symptoms in patient populations. However, these medications were associated with a statistical increase in severe adverse