

## ACT-Based Online Intervention for Obsessive-Compulsive Traits, Anxiety, and Depression in Medical Students: A Pilot Study

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**Aims:** It is estimated that the prevalence of obsessive-compulsive disorder (OCD) in the UK is 2–3%, with a lifetime prevalence of anxiety and/or depression being reportedly much higher (estimated at 20–25%). Prevalence rates within medical students have, however, been reported by numerous studies and systematic reviews to exceed those identified in the general population. The primary aim of the current pilot study was to investigate the efficacy of an Acceptance and Commitment Therapy (ACT)-based online intervention in reducing symptom severity within a sample of medical students screened for OCD, anxiety and depressive traits and symptoms. The hypothesis was that the ACT-based online intervention would reduce symptom severity in participants.

**Methods:** Participants were recruited from Cardiff University's School of Medicine and were required to complete baseline screening measures for OCD, anxiety, and depressive traits using the Obsessive-Compulsive Inventory-Revised version (OCI-R), the State Trait Anxiety Inventory (STAI), and the Beck Depression Inventory-Revised version (BDI-II), respectively. A total of 11 medical students were recruited following screening and completed two parts of an online ACT-based intervention over a two-week period. Participants were required to complete the same measures post-intervention and were debriefed following their participation. Ethical approval for this study was provided by the university's School of Medicine Research Ethics Committee.

**Results:** Data collated was analysed to measure for any differences pre and post intervention. A reduction in OCD symptom severity was reported, however with findings approaching significance ( $z = -1.362$ ,  $p > 0.05$ ). A significant difference in pre and post intervention scores was not revealed for depressive traits, however a significant reduction in anxiety was revealed using the STAI measure pre and post intervention, ( $z = -2.59$ ,  $p < 0.01$ ).

**Conclusion:** The findings of the current pilot highlight the efficacy of our ACT-based online intervention in significantly reducing anxiety in a cohort of medical students. Whilst a small sample was recruited for this pilot, the results warrant further investigation and consideration by university student services in adopting the intervention for students.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

## Effects of Ashwagandha Supplements on Cortisol, Stress, and Anxiety Levels in Adults: A Systematic Review and Meta-Analysis

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**Aims:** *Withania somnifera* widely known as “Ashwagandha”, is a key treatment herb in the Indian system of medicine that has been used for thousands of years. It has anti-inflammatory, neuro-protective, adaptogenic, and immunomodulatory activities.

**Methods:** From inception through September 8, 2024, we searched for randomized clinical trials investigating the effect of ashwagandha on adults. The literature search involved PubMed, Web of Science, Scopus, and Cochrane databases. We included all randomized controlled trials that met the following criteria: (1) conducted on adult participants with stress and/or anxiety; (2) investigated the effects of ashwagandha supplementation compared with a placebo or other active treatments; (3) reported outcomes using validated measures of stress and anxiety. Two reviewers independently extracted the relevant data from the included studies using an Excel sheet. The analysis was carried out using R (version 4.4.1) and the metafor package (version 4.6.0).

**Results:** A total of 15 studies were included with a combined sample size of 873 patients. We found that ashwagandha supplementation significantly reduced anxiety compared with placebo according to the Hamilton Anxiety Rating Scale (HAM-A) before  $\mu = -1.55$  (95% CI:  $-2.45$  to  $-0.65$ ,  $p = 0.0007$ ) and at 8 weeks of treatment  $\mu = -3.52$  (95% CI:  $-6.00$  to  $-1.04$ ,  $p = 0.0053$ ). It has also showed a significant effect in reducing both stress (Perceived Stress Scale (PSS)  $\mu = -4.88$  (95% CI:  $-7.84$  to  $-1.91$ ,  $p = 0.0013$ )) and cortisol levels  $\mu = -2.3626$  (95% CI:  $-3.2622$  to  $-1.4629$ ),  $p < 0.0001$ ) at 8 weeks of treatment. On the other hand, no improvement in the quality of life has been observed  $\mu = -1.7618$  (95% CI:  $-5.6118$  to  $2.0881$ ,  $p = 0.3698$ ).

**Conclusion:** Ashwagandha supplementation is safe and effective in reducing stress and anxiety in adult patients. In our study, it resulted in a statistically significant reduction of cortisol levels, PSS scale, and HAM-A scale. However, it showed no statistically significant improvement in the quality of life of participants receiving it.

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## Are Sex and Gender Dimensions Accounted for in NICE and SIGN Psychiatry Guidelines? A Systematic Review

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**Aims:** Sex and gender are critical determinants in the diagnosis, progression, and management of psychiatric conditions, influencing disease epidemiology, symptom presentation, treatment responses, and access to care. However, the extent to which these factors are systematically incorporated into UK psychiatric clinical guidelines has been unclear. To date, no review has assessed how sex and gender considerations are addressed in guidelines produced by the National Institute for Health and Care Excellence (NICE) or the Scottish Intercollegiate Guidelines Network (SIGN).

This study aimed to evaluate the extent of sex and gender integration within psychiatric guidelines. It is the first to systematically assess these dimensions across NICE's “*Mental health, behavioural, and neurodevelopmental conditions*” category

and SIGN's "Mental health and behavioural conditions" category, which encompass psychiatric and related conditions.

**Methods:** A systematic review of all NICE and SIGN psychiatry guidelines was conducted to assess how sex and gender considerations were incorporated across key areas: epidemiology, clinical presentation, investigations, and management. The gender composition of guideline committee chairs was also evaluated. Psychiatry guidelines were ranked relative to other medical specialties to determine their comparative performance.

**Results:** This review identified significant gaps in the integration of sex and gender considerations across NICE and SIGN psychiatry guidelines. Across NICE psychiatry guidelines, only 72% referenced sex and/or gender, and just 28% addressed these factors beyond reproductive contexts. While differential disease management (52%) and epidemiology (28%) were the most frequently considered aspects, investigations (17%) and clinical presentation (7%) were rarely discussed.

Psychiatry ranked second among NICE specialty categories for integrating sex and gender considerations, and scored second-best for women committee chair representation. This is significant because guidelines chaired by women tended to incorporate sex and gender considerations more comprehensively than those chaired by men. Results from SIGN psychiatry guidelines demonstrated similar trends.

Thematic analysis revealed that NICE and SIGN psychiatry guidelines were more likely than other specialties to acknowledge gendered challenges in accessing care, caregiving roles, social support networks, and current evidence gaps.

**Conclusion:** As a specialty in which both biological and social determinants are central to diagnosis and treatment, psychiatry is well-positioned to lead improvements in sex and gender-sensitive clinical guidance. Despite psychiatry's relatively strong performance compared with other specialties, significant gaps remain, particularly in differentiated clinical presentations. NICE and SIGN must establish robust mechanisms to embed sex and gender disaggregated evidence into guidelines. Psychiatrists have a critical opportunity to drive improvements to enhance equity and patient outcomes.

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## Investigating the Gender Differences in Children and Adolescents with Autism Spectrum Disorder: A Literature Review

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**Aims:** It is estimated that 1 in 100 individuals in the UK population are on the autistic spectrum. There is known to be a marked gender difference, with a male to female ratio of about 3:1. Previously, this diagnostic discrepancy was attributed to autism spectrum disorder (ASD) being known as a "male-dominant" condition, but in recent years this concept has been disproven and the prevalence of ASD in females is thought to be similar to that of males. This literature review aims to explore current research investigating the gender differences in the clinical presentation of ASD, and how this may contribute to the challenges many girls and women experience in receiving a timely diagnosis.

**Methods:** Three databases (PubMed, Scopus, and Medline) were searched for studies on the gender differences in the presentation of ASD in children and adolescents. In the screening process, an exclusion criterion was applied to the records according to relevance to the research question. The studies identified were then assessed for eligibility against a final inclusion criterion, resulting in six studies being included in the final review.

**Results:** Results showed that girls with ASD typically received a diagnosis at an older age than their male counterparts. Girls were also more likely to receive an alternative diagnosis to ASD, often mental health-related, before being given an ASD diagnosis. Repeated and Restricted Behaviours and Interests (RRBIs), which are considered as characteristic and often diagnostic features in ASD, were more prevalent in boys in early childhood. Girls with ASD often had to present with more severe deficits in intellectual ability (IQ), social and communicative skills, or speech and language skills, to be diagnosed with ASD in comparison with their male counterparts.

**Conclusion:** The studies included in this literature review demonstrated that, whilst in some cases differences in clinical presentation of ASD in boys and in girls may be mild, there are undoubtedly differences present. This is not surprising considering the heterogeneity of ASD as a spectrum disorder. Research investigating the various phenotypes of ASD is hugely beneficial in widening the perception from the traditional concept of ASD being viewed as a "male disorder". There is a clear need for more research to be done to close the gender gap in the diagnosis of ASD and facilitate more timely diagnosis in girls and women and appropriate interventions at an earlier stage, thereby improving quality of life.

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## Augmentation of Clozapine in Treatment Resistant Schizophrenia – Is There a Superior Strategy?

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**Aims:** Schizophrenia affects approximately 20 million people worldwide, with 30% of cases being classified as treatment resistant schizophrenia (TRS) cases. Clozapine remains the gold standard for managing TRS, but around 40% of patients treated with clozapine fail to demonstrate optimal treatment response. This literature review aims to evaluate various augmentation strategies used to enhance clozapine's effectiveness for TRS, assessing data from systematic reviews and meta-analyses published between 2010 and 2024, the aim of which is to identify whether there is a consensus surrounding augmentation strategies used, whilst simultaneously assessing the quality of the existing research, and recommending where further research could guide future clinical practice and prescribing in TRS.

**Methods:** A systematic search was conducted in February 2024 across Ovid and PubMed databases using the keywords "schizophrenia", "clozapine", and "augmentation". Inclusion criteria were: studies focusing on clozapine augmentation with another pharmacological agent, systematic reviews or meta-analyses published between 2010 and 2024, and studies from credible peer-reviewed sources. Case reports, single-agent studies, and non-peer-reviewed sources were excluded. A total of 181 papers were screened and, after applying inclusion and exclusion criteria, three systematic reviews