

Abstract

Background

Individuals with Gender Identity Disorder (GID) experience discrepancy between their assigned sex at birth and their gender identity, resulting in clinically significant distress or impairment in functioning. Studies showed that individuals with GID have a significant degree of psychopathology. There is a need for a systematic review on the psychiatric comorbidities in this group of vulnerable patients for better allocation of medical resources.

Objectives

The aims of this systematic review and meta-analysis are to summarise the prevalence of psychiatric comorbidities in patients with GID, examine moderators of the prevalence and test the extent of their influence on the prevalence in this group of patients.

Methods

The Excerpta Medica Database (EMBASE), Medical Literature Analysis and Retrieval System Online (MEDLINE), PsycINFO, PsycARTICLES, ProQuest Dissertations & Theses A&I, Global Health and Social Work Abstracts were searched from inception to 31st March 2018. Backward reference search was employed on all included studies and reviews, while forward search was employed on all included studies. Studies were pooled with the random-effects model. Effect sizes were presented by event rate (prevalence). Moderator analysis was performed on natal sex, source of recruitment, assessment method, methodological quality, diagnostic system, age and transition phase.

Results

Thirty-one studies were included in the meta-analysis. GID patients had elevated point prevalence and lifetime prevalence of all psychiatric disorders and elevated prevalence of personality disorders. The commonest psychiatric disorders were mood disorders, anxiety disorders and alcohol and substance abuse disorders. The commonest personality disorder was borderline personality disorder. Prevalence of any personality disorders in GID patients was significantly higher than that in the general population. On moderator analysis, natal females had significantly higher prevalence of antisocial personality disorder than natal males. Patients with GID of non-clinic-based sample had significantly higher point prevalence in mood disorders, depressive disorders, anxiety disorders, post-traumatic stress disorder (PTSD) and alcohol and substance abuse disorders than those of clinic-based sample. The point prevalence of PTSD was significantly higher in the group with non-structured assessments than the group with structured assessments. The point prevalence of any psychiatric disorder, depressive disorders, anxiety disorders, social anxiety disorders, PTSD, alcohol and substance abuse disorders, psychotic disorders and eating disorders in low-quality studies were significantly higher than those in high-quality studies. The point prevalence of depressive disorders, anxiety disorders and alcohol and substance abuse disorders were significantly lower in GID patients diagnosed with the Diagnostic and Statistical Manual of Mental Disorders (DSM) compared to the International Classification of Diseases (ICD).

Conclusion

Patients with GID had a higher point prevalence of mood disorders and alcohol and substance abuse disorders than the general population did. They also had a higher lifetime prevalence of any psychiatric disorder and mood disorders. The

prevalence of any personality disorder, Cluster B personality disorders, Cluster C personality disorders, borderline personality disorder and histrionic personality disorder in patients with GID were higher than those in the general population. Natal sex, source of recruitment, assessment method, methodological quality, and the diagnostic system used were moderators of the psychiatric outcomes.