

Hormone Therapy in Gender Dysphoria with Concurrent Mental Health Diagnoses: National Data

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INTRODUCTION

The prevalence of patients identifying as transgender is increasing (recent estimate of 0.6% in the U.S.¹). Transgender populations have increased rates of psychiatric diagnoses, and gender-affirming hormonal therapy (HT) can improve their mental health and quality of life.² This study investigated psychiatric comorbidities in patients with gender dysphoria (GD) and the association of HT and GD across age and lifetime rates of psychiatric diagnoses.

METHODS

A retrospective cohort study was conducted using electronic medical records from a global federated health research network, accessing data from participating healthcare organizations in the United States. The TriNetX database (>212 million persons) was queried on March 30, 2022 using ICD-10 code F64.X for gender dysphoria. Sub-group analyses compared GD and HT use by youth (age<18) vs. adults (age>18) across lifetime diagnoses of depressive episode/major depressive disorder (F32.X/F33.X), bipolar disorder (F31.X), psychotic disorder (F20-29), and borderline personality disorder (BPD, F60.3). We analyzed the percentage of patients prescribed at least once a hormonal therapy of estrogen, androgen, or progestin.

RESULTS

Of 134,813 GD patients, 54% recorded as assigned female, mean age 35±16[SD], of whom 24,179 (18%) were youth. Overall rates of lifetime disorders were: 37% depression, 13% bipolar disorder, 7% psychotic disorders, and 5% BPD, with 50% having none of these diagnoses recorded. More cases of youth with GD had depression compared to adults (50% vs. 35%). Figure 1 provides breakdowns by psychiatric diagnosis.

Data on HT showed a minority of all GD patients have lifetime use of HT: 19% androgens, 21% estrogens, and 10% progestins. Figure 2 shows that among youth with GD, rates of HT were generally lower, 12% androgens and 15% estrogens, compared to adults. Youth with BPD had less estrogen use (4%) compared to their adult counterparts with other mental illness but similar proportions in androgen use (10%). Among adults, similar proportions of HT were seen across different comorbid illness except for adults with psychotic disorder using less androgen (13%) than their counterparts.

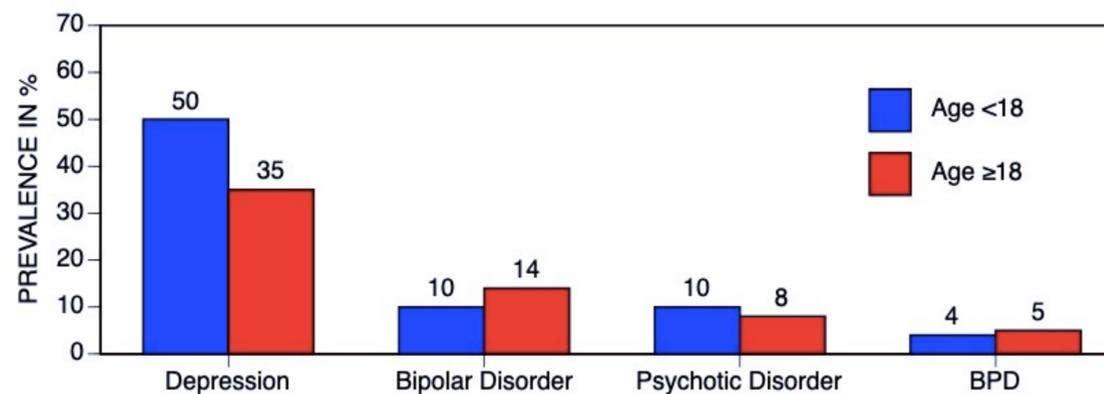


Figure 1. Prevalence of Mental Health Diagnoses among Patients with Gender Dysphoria by Age

RESULTS (cont.)

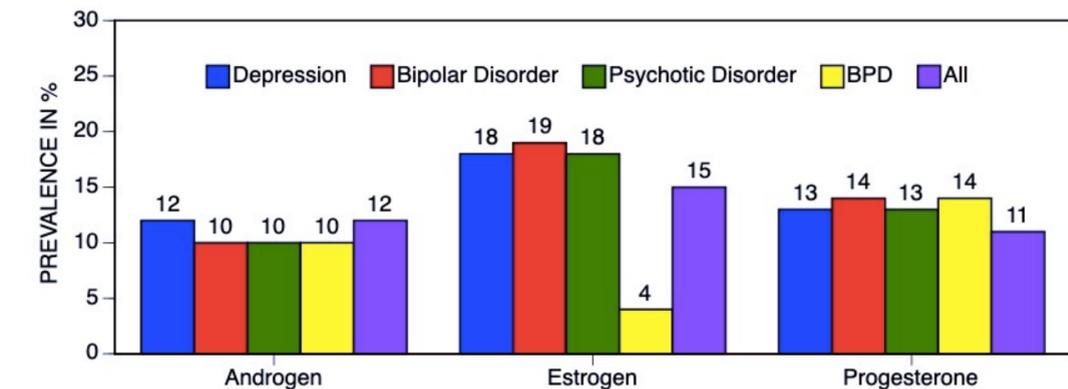


Figure 2. Hormone Therapy by Comorbid Conditions among Patients with Gender Dysphoria Age <18

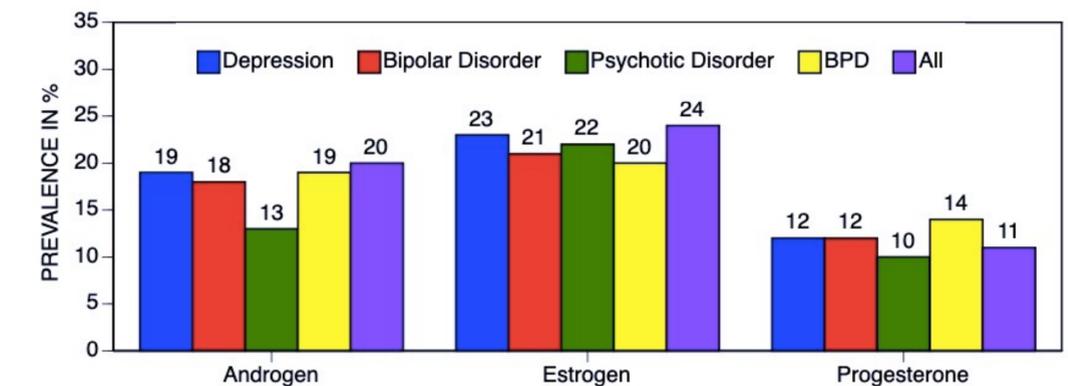


Figure 3. Hormone Therapy by Comorbid Conditions among Patients with Gender Dysphoria Age ≥18

CONCLUSIONS

These data indicate a minority of patients [10-20%] with GD receive HT. Overall, GD patients with most of the queried lifetime psychiatric co-morbidities show similar overall rates of HT, except for those aged<18 with BPD. The data suggest some psychiatric co-morbidities affect use or access to HT among younger GD patients, which needs to be further investigated.

References

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- Mueller SC, De Cuyper G, T'Sjoen G. Transgender research in the 21st century: a selective critical review from a neurocognitive perspective. Am J Psychiatry. 2017;174(12):1155–62