

Comorbid eating disorders in a Brazilian Attention-Deficit/Hyperactivity Disorder adult clinical sample

Transtornos alimentares comórbidos em uma amostra clínica de adultos com transtorno do déficit de atenção com hiperatividade

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Abstract

Although comorbidity between attention-deficit/hyperactivity disorder (ADHD) and eating disorders (ED) is relevant for clinical treatment, it is seldom investigated.

Methods: 86 DSM-IV attention deficit hyperactivity disorder patients out of 107 self-referred adults in a specialized center for attention deficit hyperactivity disorder were interviewed using SCID-R to evaluate the lifetime prevalence of ED and other comorbid conditions.

Results: Nine attention deficit hyperactivity disorder patients had comorbid eating disorders; binge eating disorder (BED) was the most common diagnosis. The group with eating disorders presented a higher prevalence of other comorbid disorders ($p=0.02$). No significant differences were found on gender, age at assessment, schooling level and type of attention deficit hyperactivity disorder between groups.

Conclusion: Attention deficit hyperactivity disorder clinical samples may have a high prevalence of BED comorbidity. Patients with attention deficit hyperactivity disorder and eating disorders may have a different comorbid profile.

Keywords: Attention deficit disorder with hyperactivity; Eating disorders; Bulimia; Comorbidity.

Resumo

A comorbidade de transtornos alimentares (TA) com o transtorno do déficit de atenção com hiperatividade (TDAH) é pouco investigada, apesar de relevante para o tratamento clínico.

Métodos: 86 adultos com transtorno do déficit de atenção com hiperatividade segundo o DSM-IV de uma amostra inicial de 107 indivíduos auto-referidos para um centro especializado em TDAH foram entrevistados com o SCID-P para avaliar a presença de transtornos alimentares e outros transtornos comórbidos.

Resultados: Nove pacientes apresentavam transtornos alimentares, sendo o transtorno da compulsão alimentar periódica (TCAP) o diagnóstico mais comum. O grupo com transtornos alimentares revelou maior número de comorbidades ($p=0,02$), não foram observadas, entretanto, diferenças quanto ao sexo, idade na avaliação atual, escolaridade e tipo de transtorno do déficit de atenção com hiperatividade entre os grupos.

Conclusão: Amostras clínicas de transtorno do déficit de atenção com hiperatividade podem apresentar elevada prevalência de comorbidade com transtorno da compulsão alimentar periódica. Pacientes com transtorno do déficit de atenção com hiperatividade e transtornos alimentares podem apresentar um perfil diferente de comorbidades.

Descritores: Transtorno da falta de atenção com hiperatividade; Transtornos da alimentação; Bulimia; Comorbilidade.

Introduction

Attention Deficit/Hyperactivity Disorder (ADHD) has a high comorbidity rate¹ with a number of conditions. Two studies addressing ADHD comorbidity in children and adolescents in Brazil²⁻³ revealed a high and similar prevalence of comorbidity.

There are some case reports of ADHD in Eating Disorders (ED) patients⁴⁻⁵ and the not yet published National Comorbidity Survey Replication⁶ recently revealed a high prevalence rate of Bulimia Nervosa (BN) in adult ADHD.

Some authors⁷⁻⁸ have suggested that binge eating is better understood as a general disregulation of impulse control. BN and Anorexia Nervosa (AN) have also been conceptualized in terms of impaired attention⁹ and impulsivity,¹⁰⁻¹¹ and disexecutive symptomatology is seen both in ADHD and BN.¹⁰⁻¹¹ Patients with a higher degree of impulsivity or inattention to inner sensations (like those with ADHD) possibly have more binge behavior.¹⁴

This comorbidity is of clinical interest since some case reports

point to a better efficacy when a stimulant is administrated⁵⁻⁷ but there is also a potential harm in prescribing stimulants in ED⁶ mainly because of their anorexic properties.

Objectives

To determine 1) the prevalence of ED in an adult DSM-IV ADHD clinical sample; 2) if the group of ADHD patients with comorbid ED is different from the one without this comorbidity regarding age at assessment, educational level, gender, ADHD type and number of other comorbidities.

Methods

107 consecutive adults (48 men, 59 women) aged 18 to 52 enlisted for treatment at the Institute of Psychiatry of the Federal University of Rio de Janeiro were initially screened at a baseline clinical interview and further interviewed with SCID-R by trained psychiatrists and psychologists; only 8 were not self-referred. Past

Table 1 - Eating Disorders diagnosis and other comorbidities among 9 adult ADHD patients

Sex	Age	Comorbid Eating Disorder	Other Comorbid Disorders
F	26	Present BED	PTSD, Agoraphobia, Dysmorphophobia, previous history of Cannabis Abuse
F	18	Present BN, previous history of AN	Dysthymia
M	42	Present BED	Social Phobia, previous history of Alcohol Abuse, Past Dep Episode
F	33	Present BED	Past and Present Dep Episode
F	29	Eating Disorder NOS	Dysthymia, Social Phobia, Anxiety Disorder NOS
M	28	Present BED	Past and Present Dep Episode, Social Phobia, GAD
F	26	Present BED	Past Dep Episode, Bipolar (II), previous history of Alcohol Abuse, previous history of Cannabis Dependency
M	33	Present BED	Previous history of Cocaine Dependency
F	22	Present BED	Past and Present Dep Episode, Social Phobia, Specific Phobia

PTSD: Post-Traumatic Stress Disorder; Dep: Depressive; NOS: Not Otherwise Specified; GAD: Generalized

ADHD symptoms were investigated either through the patients own recollections or parent's report, using the ADHD Childhood Symptoms Scale.¹⁵ Body Mass Index (BMI) was calculated and patients with DSM-IV ADHD diagnosis were enrolled for further treatment. All patients were pharmacological treatment-naïve for ADHD.

The group with ADHD and ED (ADHD-ED) was compared to the group with ADHD without ED (ADHD) using Student t test (age at assessment, educational level), and Fisher Exact Test (gender, ADHD type and number of other comorbidities).

Results

Only 86 (80.3%) of screened individuals fulfilled DSM-IV criteria for ADHD, Adult Type. Of this ADHD sample, nine patients (10.4%) had an ED diagnosis (Table 1) which was confirmed in

the follow-up treatment period, present BED being the most common one (7 cases). Although women were twice more common in the ADHD-ED group, this difference did not reach statistical significance ($p=0.3$).

Mood, Anxiety and Alcohol and Drug Abuse and Dependency Disorders were seen in comorbidity in the ADHD-ED group (Table 1), but also in the ADHD group. No patient in the ADHD-ED group had a BMI below 20; one patient in this group had BMI above 25 but below 30.

Although the ADHD-ED group had less years of education and was younger, these differences again did not reach statistical significance (respectively, $p=0.34$ and $p=0.24$). The only significant difference between the groups was on the comorbid profile as ADHD-ED has a significantly higher rate of cases with

Table 2 - Comparison between ADHD with and without Eating Disorders

	ADHD without ED	ADHD with ED	P Value
Mean age (standard deviation)	32.7 (9.4)	28.6 (7.0)	0.24
Mean number of years of education (standard deviation)	14.5 (2.7)	13.7 (1.9)	0.34
Male: female ratio	1:0.8	1:2	0.30
ADHD type			
(Combined type)	33.3%	50.7%	0.72
At least one comorbidity (other than ED)	58.4%	100%	0.02

ADHD: Attention-Deficit Hyperactivity Disorder; ED: Eating Disorder

at least one comorbid condition ($p=0.02$) than ADHD without ED (Table 2).

Discussion

The 8.13% prevalence of BED comorbidity found in this sample should be considered unexpected since the prevalence of ED in the general population is low: BED is the most prevalent ED and is estimated around 2.6%.¹⁶ The comorbidity was not suspected during the initial clinical interview and was only disclosed during the SCID-R, a feature commonly seen when ED is not the main diagnosis or reason for referral.

Since only two DSM-IV criteria for BED involve impulsivity or its correlates¹⁷ (a sense of lack of control over food ingestion (A2) and eating more quickly than normal (B1), ADHD impulsivity per se would not be enough for an ED diagnosis, suggesting a true comorbidity. A clinical aspect was however considered atypical in those BED cases: only two of them were overweight and none of them was obese. Although weight is not part of BED criteria, this is a very common feature.

As expected, women outnumbered men in the ADHD-ED group, since women are overrepresented in all ED. Our study may have not had enough power to detect a significant difference between groups due to the small sample of patients with ADHD-ED. Less education is not generally seen in ED samples, at least clinical ones.¹⁹ ED patients usually portray a large number of comorbidities and the same holds true for ADHD patients. However, in the ADHD-ED group, the number of comorbidities was higher than in the ADHD group, suggesting a possible additive effect.

Conclusion

The results prompt further analyses of larger series and possibly different socio-cultural contexts to confirm these preliminary findings. Comorbidity of ADHD with BED might require specific therapeutic approaches, since the use of psychostimulants (the first-line agents) may jeopardize the treatment of an ED because of the anorexic properties of those drugs. On the other side, BED patients with ADHD may need specific treatment for their impulsivity in order to properly gain control over binge episodes. Inattention to satiety cues might also be an important factor in the development and also treatment of bulimia. Also, a number of different pharmacologic treatments have already been proposed in BED¹⁸ and their use should be taken into account in ADHD patients with this comorbidity.

Conflict of interests: Dr Mattos is on the advisory board of, is a speaker for, or has received funding from Pfizer, Janssen-Cilag, Eli Lilly, Wyeth, Novartis, and GlaxoSmithKline.

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