



ADHD and substance use disorders: Subtype and gender differences

Results from the Bordeaux Addiction Cohort Study

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- No conflict of interest

Introduction (1)

- High prevalence of ADHD in adult substance use populations (Wilens 2004; Wilens 2011; van Emmerik van Oortmerssen 2012)
- Gender differences
 - Higher rates of psychiatric comorbidities in women with ADHD (Cumyn 2009)
 - Higher rates of substance use disorders (SUD) in men with ADHD (GroB-Lesh 2013; Cumyn 2009)
 - Role of ADHD subtype?
 - Hyperactivity Impulsivity (HI)
 - Inattention (I)
 - Combined (C)

Introduction (2)

- Subtype differences
 - More severe SUD in Combined subtype (ADHD-C) (Tamm 2012)
 - Adults with ADHD-C more likely to have Axis I and Axis II disorders (Cumyn 2009)
- Impact of gender and ADHD subtype on addiction severity and psychiatric comorbidity in comorbid ADHD and addictive disorder?

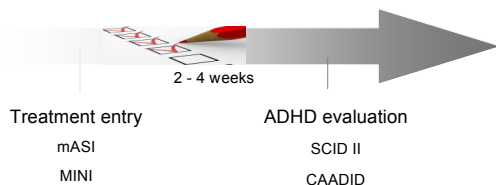
Objectives

- To describe
 - Sociodemographic, addiction and psychiatric characteristics
 - In a sample of ADHD individuals who seek treatment for addictive disorder
- To examine differences according to
 - Gender
 - ADHD subtype

Methods - Study sample

- Aquitaine Addiction Cohort
 - Participants who seek treatment for SUD or non-substance addictive disorder
 - In an outpatient setting
- Selection of participants who met criteria for ADHD
 - Childhood and/or adult form

Methods – Assessment



Results - Sample characteristics

- N = 58
- Mean Age: 31.1 y.o. (SD: 8.8)
- Males: 82.8% (n=48)
- ADHD diagnosis
 - Adult: 51.7% (n=30)
- ADHD subtypes
 - Hyperactivity/impulsivity predominant (HI) : 39.7% (n=23)
 - Inattention predominant (IN): 36.2% (n= 21)
 - Combined (C) : 24.1% (n=14)

Results - ADHD subtypes by gender

	HI % (N)	IN % (N)	C % (N)	Total
Male	35.4 (17)	37.5 (18)	27.1 (13)	48
Female	60.0 (6)	30.0 (3)	10.0 (1)	10

➔ Hyperactivity/impulsivity predominant subtype where more likely to be females

Results - Severity of addiction

- No difference in the severity of the addiction
 - Between males and females
- No significant clinical difference in the severity of addiction
 - Between ADHD subtypes

ASI ISR	Male N=48 m(SD)	Female N=10 m(SD)	p value	HI subtype N=23 m(SD)	IN subtype N=21 m(SD)	C subtype N=14 m(SD)	p value
Medical	1.7 (1.7)	2.0 (1.6)	0.6	2.2 (2.2)	1.2 (1.2)	1.8 (1.3)	0.16
Employment	3.3 (2.5)	2.8 (1.9)	0.5	3.0 (2.6)	3.1 (2.4)	3.9 (2.2)	0.48
Main addiction	6.0 (0.9)	7.0 (0)	0.09	6.5 (0.5)	6.2 (0.9)	5.6 (1.3)	0.36
Alcohol	3.6 (2.7)	3.1 (2.8)	0.6	3.3 (2.6)	3.5 (2.7)	3.9 (2.9)	0.81
Drugs	4.4 (2.6)	5.3 (2.8)	0.3	4.6 (2.5)	4.3 (2.6)	4.8 (3.0)	0.86
Legal	0.8 (1.3)	0.4 (1.3)	0.3	0.5 (1.3)	0.4 (1.1)	1.6 (1.3)*	0.013
Familial/Social	2.9 (1.8)	3.0 (1.8)	0.4	2.7 (1.9)	2.8 (1.7)	3.3 (1.8)	0.65
Psychological	4.8 (2.1)	5.0 (2.0)	0.7	4.6 (2.3)	4.3 (2.2)	5.7 (1.3)	0.15

Results – History of Addiction

- No difference in the history of addiction
 - Between males and females
 - Between ADHD subtypes

	Male N=48 m(SD)	Female N=10 m(SD)	p value	HI subtype N=23 m(SD)	IN subtype N=21 m(SD)	C subtype N=14 m(SD)	p value
Onset of main addiction (y.o.)	19.4 (6.1)	20.0 (2.8)	0.8	20.9 (6.2)	19.4 (4.2)	16.8 (7.0)	0.25
No. previous Tx for an addiction	2.3 (2.5)	1.0 (1.3)	0.11	2.3 (2.6)	1.7 (1.9)	2.4 (2.7)	0.58
Psychiatric comorbidities % (N)							
MDD	40.0 (19)	30.0 (3)	0.5	39.1 (9)	42.9 (9)	30.8 (4)	0.78
At least one anxiety disorder	45.7 (21)	44.4 (4)	0.9	40.9 (9)	45.0 (9)	53.9 (7)	0.76
BPD	21.3 (10)	62.5 (5)	0.02	23.8 (5)	23.8 (5)	38.5 (5)	0.58
ASPD	29.8 (14)	20.0 (2)	0.5	34.8 (8)	9.5 (2)*	46.2 (6)	0.04
Polyaddiction	59.6 (28)	30.0 (3)	0.09	39.1 (9) ^a	52.4 (11) ^{ab}	84.6 (11) ^b	0.03

Results – Psychiatric comorbidities

- Females ADHD met more often borderline personality disorder than males ADHD
- Inattention predominant ADHD subtype met more often antisocial personality disorder than other ADHD subtypes
- Individuals with poly-addiction where more often Inattention predominant or Combined ADHD subtype

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Discussion (1)

- ADHD males and females did not differ on
 - Severity of addiction
 - Axis I psychiatric comorbidities
 - ADHD females were more likely to meet borderline personality disorder than males
- Not consistent with previous studies
 - Small sample
 - High prevalence of psychiatric comorbidities
 - Severity of the addiction is high

Discussion (2)

- ADHD subtype
 - Females were more likely to be Hyperactivity/impulsivity predominant subtype
 - Not linked to severity of addiction, or psychiatric comorbidities
 - No difference in history and severity of addiction between subtypes
 - Unless considering poly-addiction as more severe addiction
 - Inattention predominant or Combined ADHD subtype = might be associated with more severe addictive disorders

Perspectives

- Larger sample is needed to confirm the findings
- Further studies are needed to compare with addictive disorders samples without ADHD

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