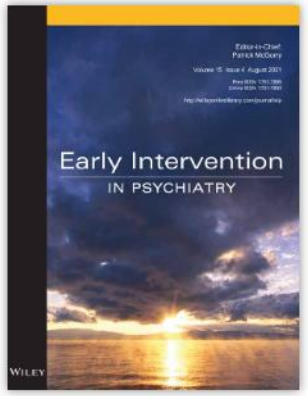
ADHD nell'adulto e dist. da uso di sostanze

Giovanni Migliarese ASST Pavia – SC Salute Mentale Lomellina

Early Intervention IN PSYCHIATRY



Volume 15, Issue 4
August 2021
Pages 957-965

ORIGINAL ARTICLE

Diagnostic delay in ADHD: Duration of untreated illness and its socio-demographic and clinical predictors in a sample of adult outpatients

Francesco Oliva, Francesca Malandrone, Santina Mirabella, Paolo Ferreri, Giulia di Girolamo, Giuseppe Maina

The Duration of Untreated Illness (DUI) of 150 adult outpatients with a confirmed diagnosis of DSM-IV ADHD was calculated. Non-parametric tests were used to evaluate differences in DUI among subgroups and to build a correlation matrix. Subsequently, a multiple linear regression model was performed.
Results
The median DUI was 17 years (interquartile range [IQR] = 14).
DUI was longer in employed patients, those with a family history of ADHD, those with a history of major depressive disorder and those who had predominantly inattentive ADHD in childhood. The current age, age at administration of the first proper treatment and education level were correlated with DUI.

ALCUNI ASPETTI

1. La rilevanza clinico-epidemiologica
2. Il legame tra le due condizioni
3. Le caratteristiche cliniche più significative
4. Come intervenire
5. Le criticità

RILEVANZA EPIDEMIOLOGICA

Electronic supplementary material:
The online version of this article contains supplementary material.

journal of global health

Cite as: Song P, Zha M, Yang Q, Zhang Y, Li X, Rudan I; Global Health Epidemiology Reference Group (GHERG). The prevalence of adult attention-deficit hyperactivity disorder: A global systematic review and meta-analysis. J Glob Health 2021;11:04009.

PAPRES

The prevalence of adult attention-deficit hyperactivity disorder: A global systematic review and meta-analysis

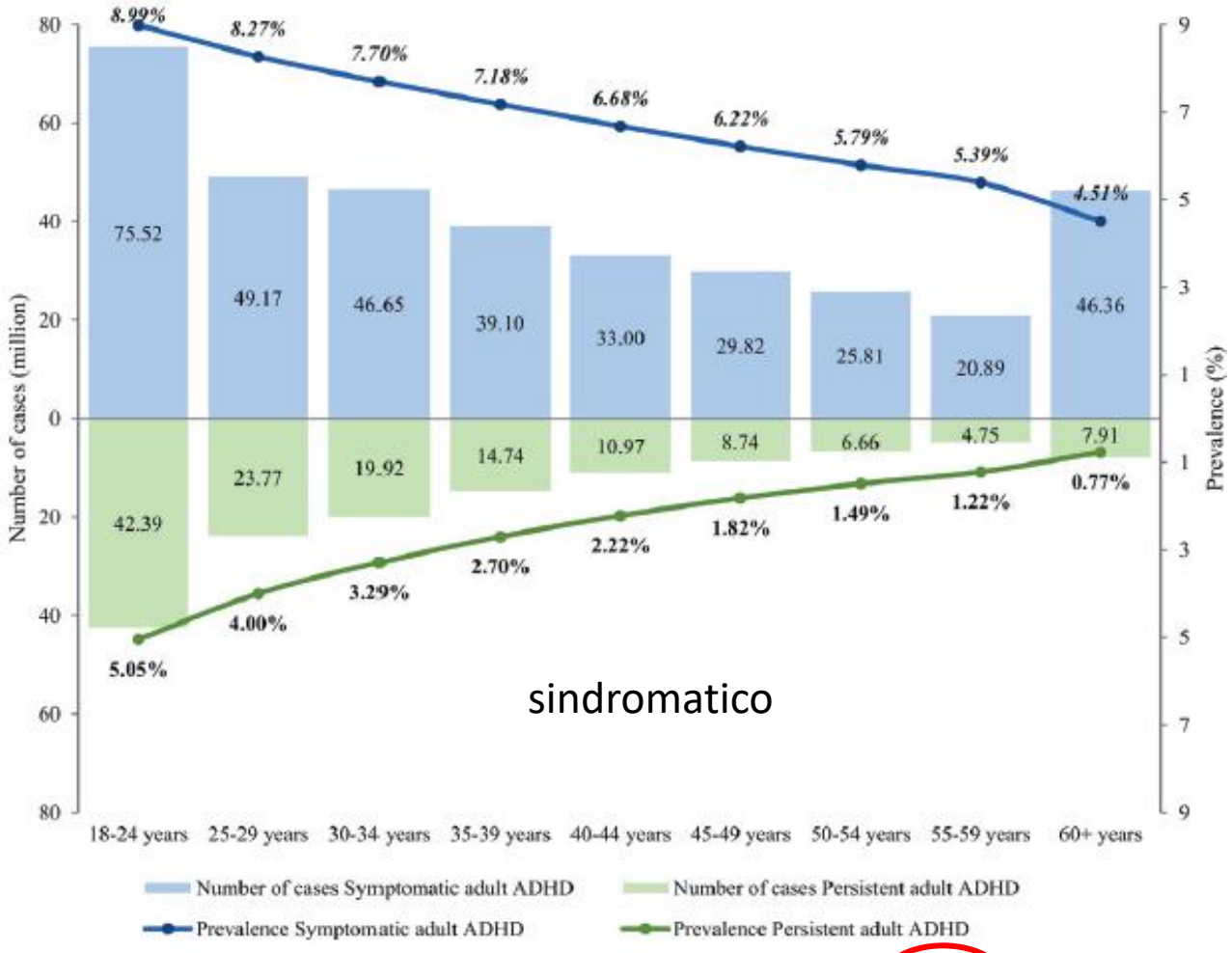
Background Adult attention-deficit hyperactivity disorder (ADHD) has recently attracted much attention, however, an up-to-date estimation on the prevalence of adult ADHD is lacking. In this study, we aimed to assess the global prevalence of adult ADHD in the general population through a systematic review and meta-analysis.

Methods PubMed, Medline, Embase and PsycINFO were searched to identify relevant articles published from January 2000 onwards. Population-based studies that were conducted in the general adult population and quantified the prevalence of adult ADHD were included.

Results The prevalence of persistent adult ADHD (with a childhood onset) and symptomatic adult ADHD (regardless of a childhood onset) both decreased with advancing age. By adjusting for the global demographic structure in 2020, the prevalence of persistent adult ADHD was 2.58% and that of symptomatic adult ADHD was 6.76%, translating to 139.84 million and 366.33 million affected adults in 2020 globally.

Conclusions This study provides an up-to-date estimation of the global prevalence of both persistent and symptomatic adult ADHD. A well-defined strategy for diagnosing adult ADHD and large-scale investigations on the epidemiology of adult ADHD are needed.

sintomatico



sindromatico

Figure 3. Estimated prevalence and cases of adult ADHD in 2020, by age group.

Deberdt *et al. BMC Psychiatry* (2015) 15:242
DOI 10.1186/s12888-015-0624-5

BMC Psychiatry

RESEARCH ARTICLE Open Access

Prevalence of ADHD in nonpsychotic adult psychiatric care (ADPSYC): A multinational cross-sectional study in Europe

Walter Deb
J. Antoni R

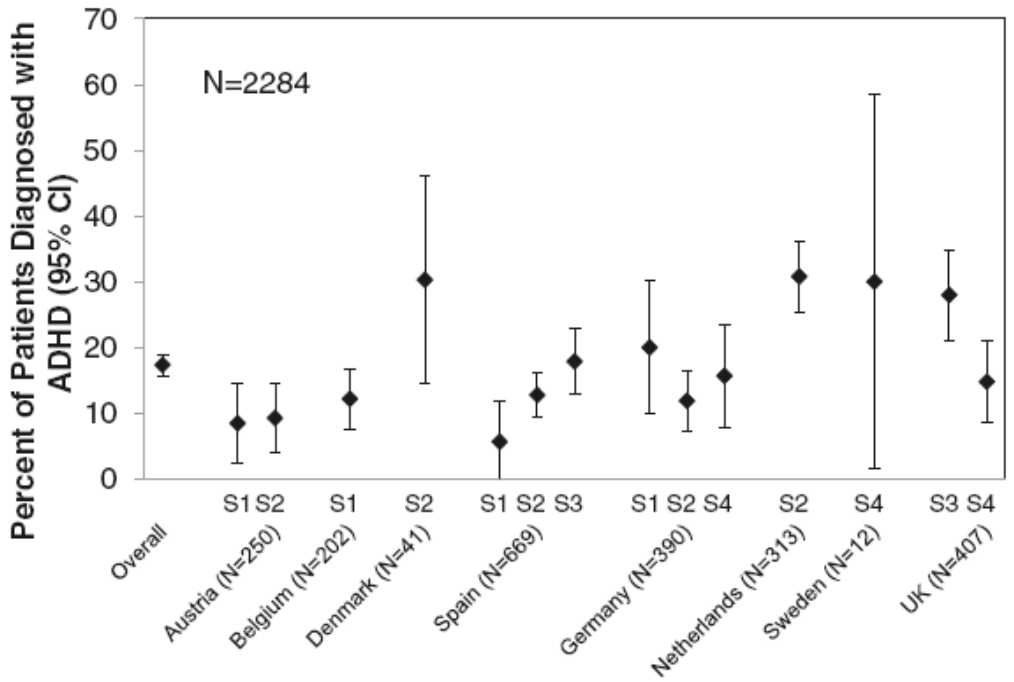


Fig. 2 ADHD prevalence in nonpsychotic psychiatric outpatients as determined by the DIVA according to criteria of the DSM-5, by country and setting. Abbreviations: ADHD = attention-deficit/hyperactivity disorder; CI = confidence interval; DIVA = Diagnostic Interview for ADHD in Adults; DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, 5th Edition; N = number of patients; S1 = general psychiatry outpatient clinics linked to general hospitals; S2 = private psychiatric practices; S3 = community mental health centers; S4 = outpatient clinics of psychiatric hospitals; UK = United Kingdom

Comorbidità / Casi complessi

Deberdt *et al. BMC Psychiatry* (2015) 15:242	ADHD Diagnosis Established by the DIVA	
	Prevalence of ADHD Among Patients with Other Disorders ($N = 349$), n (%)	Prevalence of Other Disorders Among Patients with ADHD ($N = 349$), n (%)
Psychiatric disorders[a]		
Depression ($n = 1215$)	150 (12.3)	150 (43.0)
Dysthymia ($n = 253$)	34 (13.4)	34 (9.7)
Bipolar disorder ($n = 268$)	29 (10.8)	29 (8.3)
Obsessive-compulsive disorder ($n = 126$)	17 (13.5)	17 (4.9)
Anxiety disorders ($n = 803$)	127 (15.8)	127 (36.4)
Eating disorders ($n = 113$)	24 (21.2)	24 (6.9)
Substance abuse ($n = 104$)	32 (30.8)	32 (9.2)
Substance dependence ($n = 86$)	21 (24.4)	21 (6.0)
Alcohol dependence ($n = 109$)	14 (12.8)	14 (4.0)
Alcohol abuse ($n = 133$)	36 (27.1)	36 (10.3)
Non-substance dependence ($n = 30$)	4 (13.3)	4 (1.1)
Antisocial personality disorders ($n = 24$)	4 (16.7)	4 (1.1)
Borderline personality disorders ($n = 172$)	32 (18.6)	32 (9.2)
Autistic spectrum disorder ($n = 36$)	9 (25.0)	9 (2.6)

Complex clinical pictures (comorbidity)

Acta Psychiatrica Scandinavica

Acta Psychiatr Scand 2018: 137: 176–186

DOI: 10.1111/acps.12845

ACTA PSYCHIATRICA SCANDINAVICA

Gender differences in psychiatric comorbidity: a population-based study of 40 000 adults with attention deficit hyperactivity disorder

B. S. Solberg[1,2,3], A. Halmøy[1,3,4], A. Engeland[2,5], J. Igland[2], J. Haavik[1,3,4], K. Klungsøyr[2,3,5]

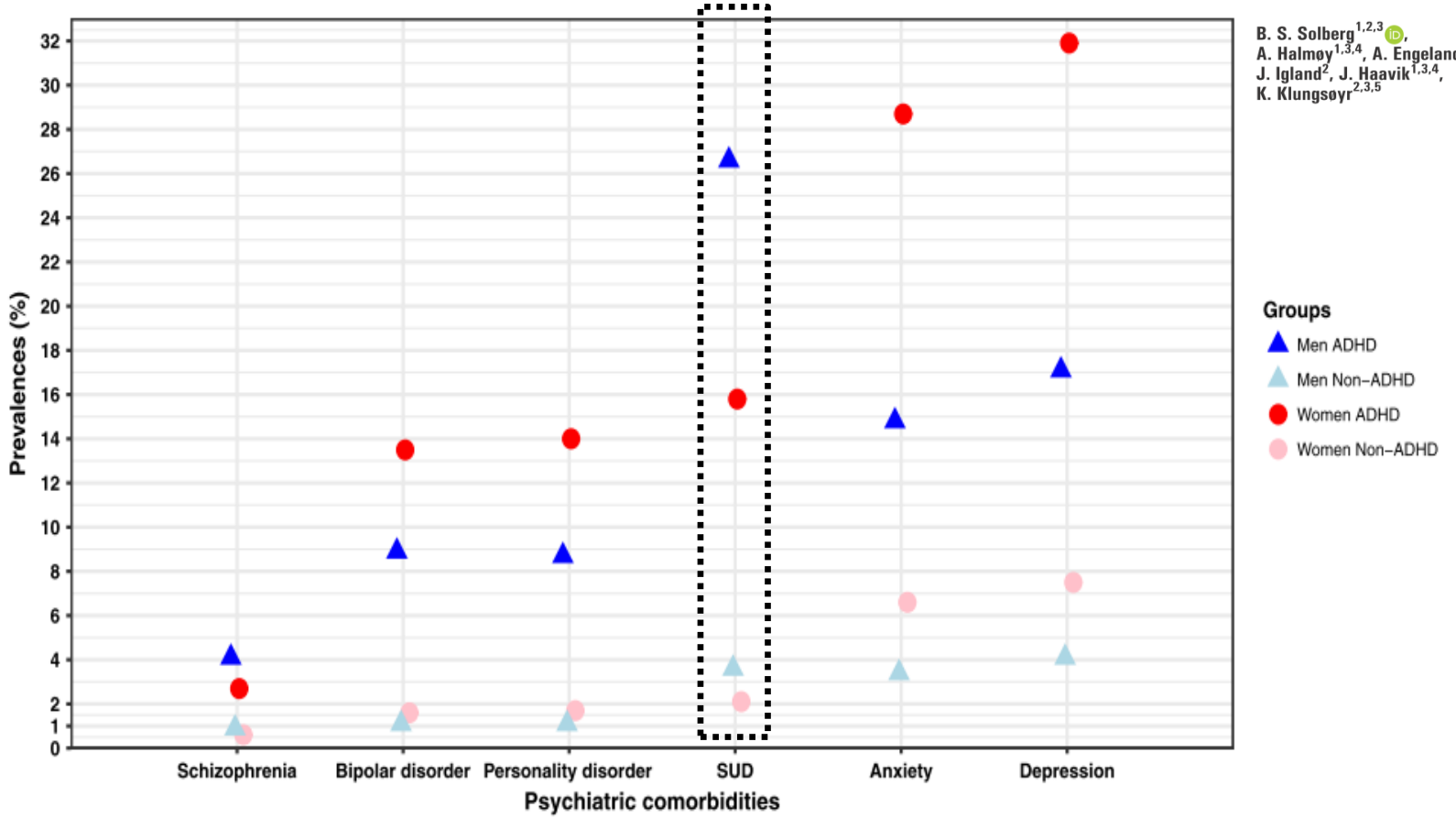
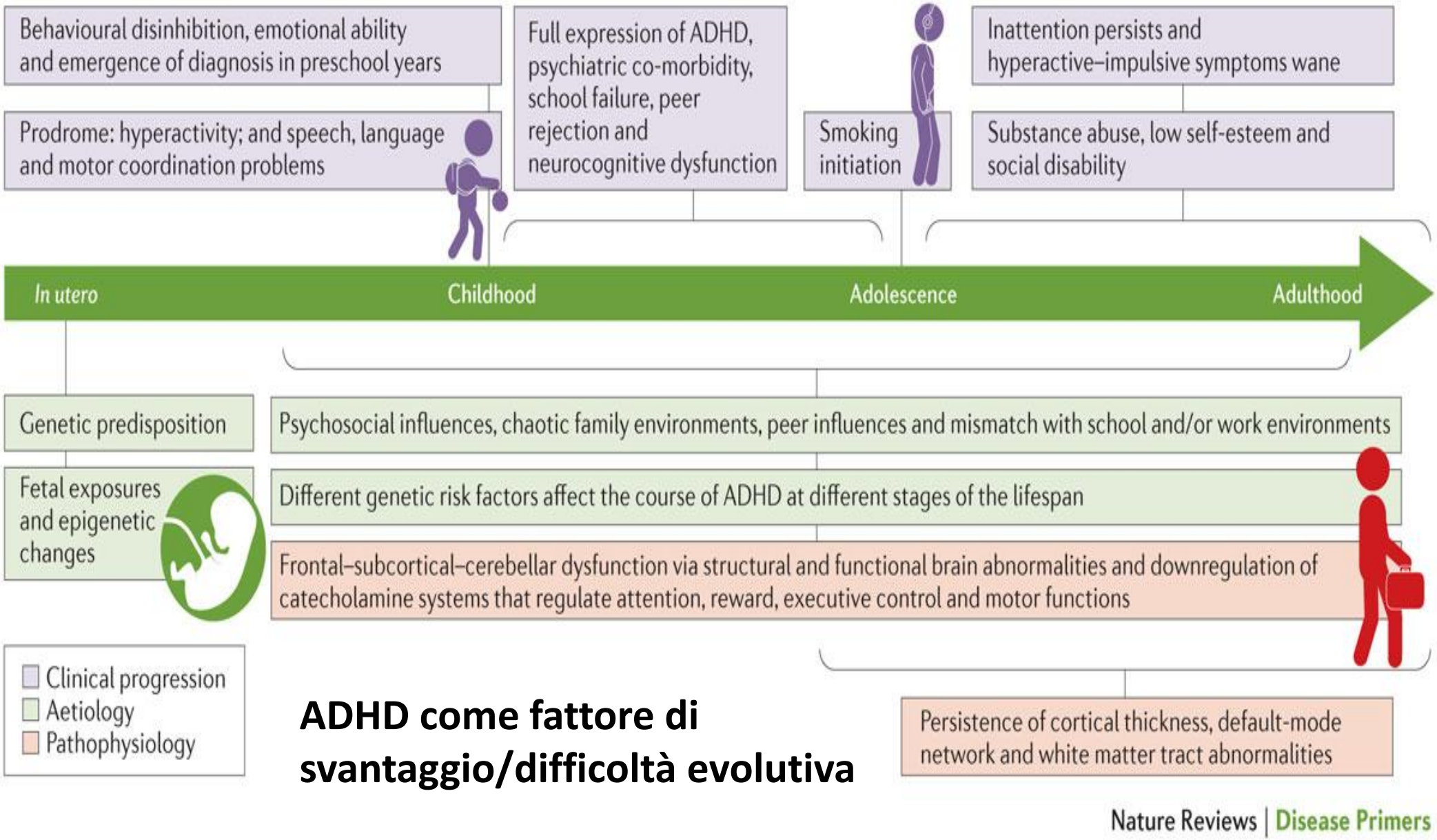


Fig. 1. Adjusted* prevalences of psychiatric disorders in men and women with and without ADHD. *Prevalences was adjusted for birth year, 5-year groups, from 1967 to 1997, with 1967–1973 as the reference. SUD, Substance use disorder.

QUALE LEGAME?

Figure 5 Developmental course of attention-deficit/hyperactivity disorder in persistent cases



ADHD come fattore di svantaggio/difficoltà evolutiva

Faraone, S. V. *et al.* (2015) Attention-deficit/hyperactivity disorder *Nat. Rev. Dis. Primers* doi:10.1038/nrdp.2015.20

Impatto longitudinale dell'ADHD

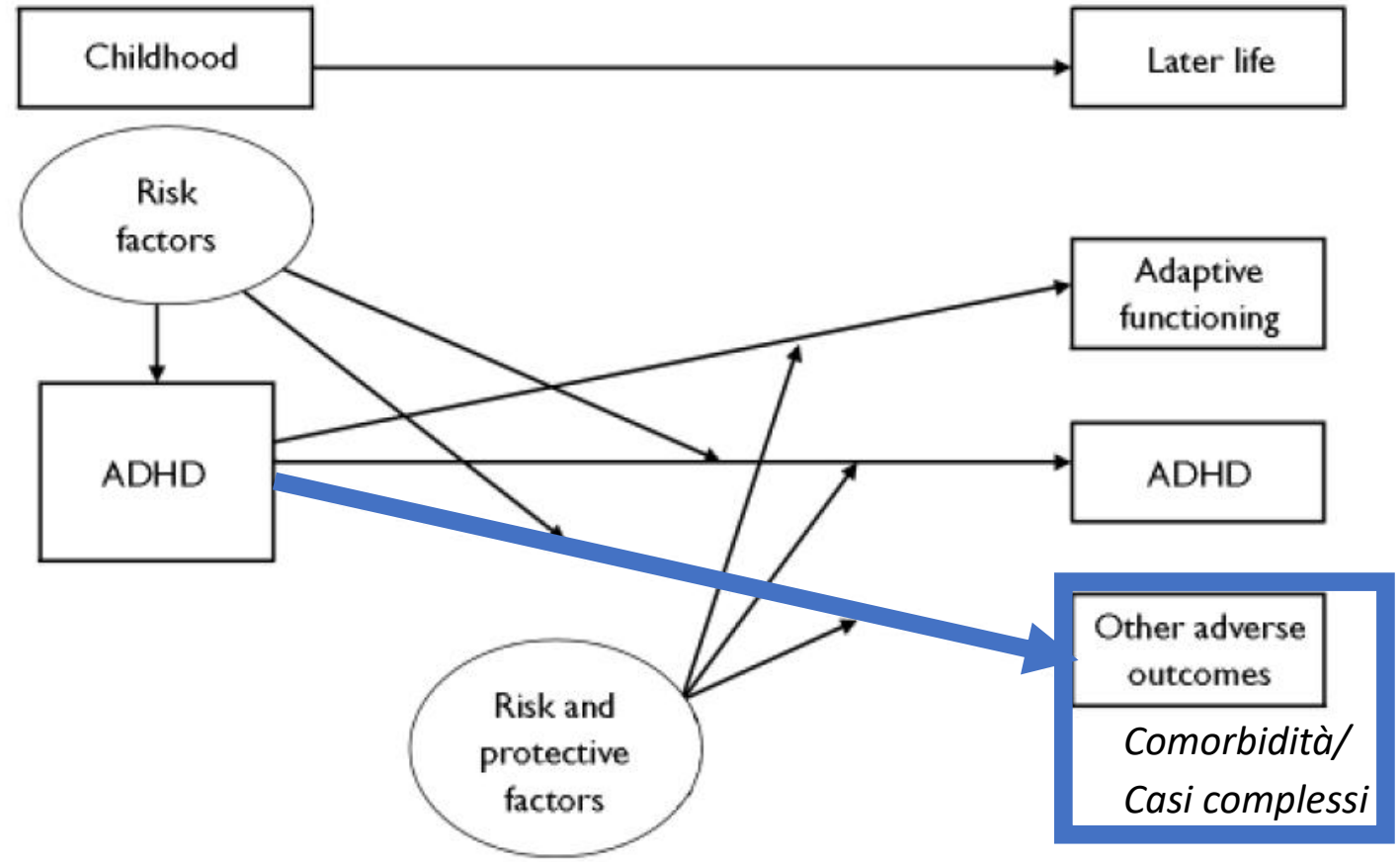
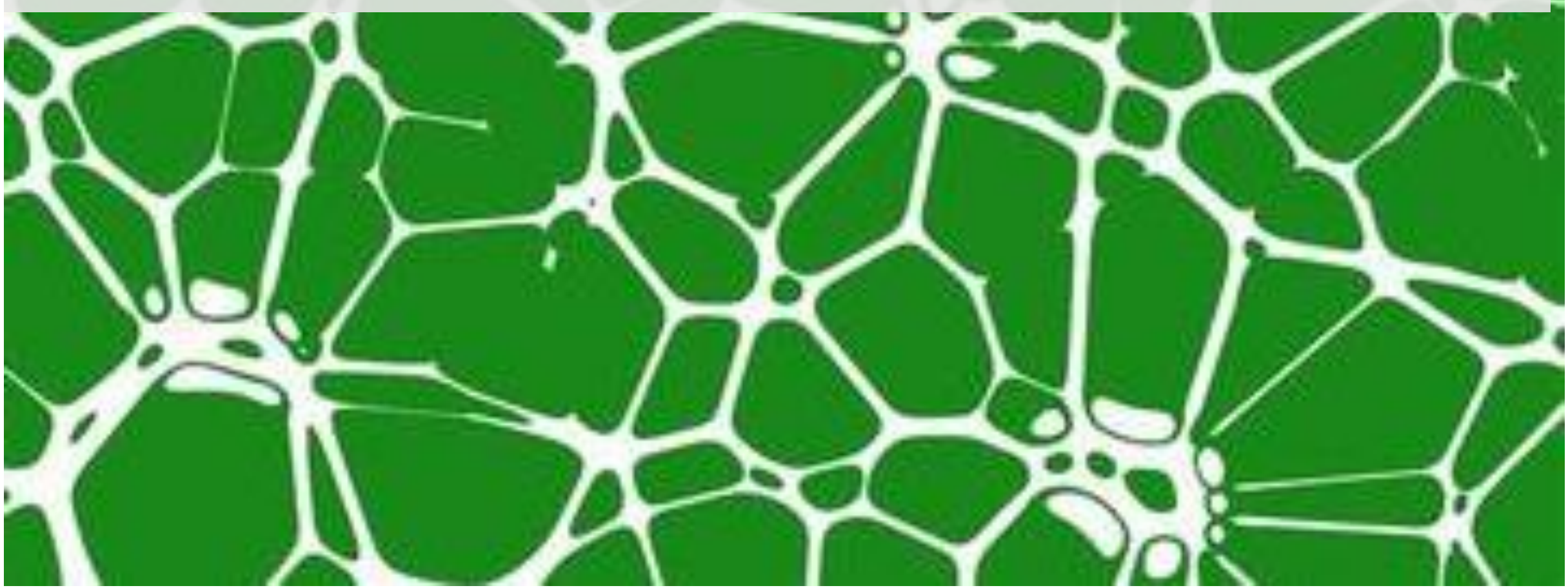


Fig. 1 The course of attention-deficit hyperactivity disorder (ADHD).

«Il decorso clinico e le manifestazione dell' ADHD nel soggetto adulto si definiscono in un rapporto dinamico con l'ambiente. Gli adattamenti messi in atto tendono a definire le specifiche modalità con cui il soggetto manifesta il proprio disfunzionamento.
Il rapporto dialettico tra (dis)funzionamento delle dimensioni core dell'ADHD e ambiente, nonché gli adattamenti appresi dal soggetto definiscono un quadro clinico ad alta eterogeneità, anche indipendentemente dalle comordilità»

ADHD come fattore di svantaggio evolutivo ed esperienziale come una modalità di funzionamento cognitivo, affettivo, esecutivo che influenza l'adattamento del soggetto all'ambiente



ADHD E USO DI SOSTANZE

Studi di popolazione (community-based)

- incremento di 3 volte del rischio di ADHD in soggetti con SUD (da 3,8 al 10,8%)

Per i soggetti in trattamento

- tra il 25 e il 50% degli adolescenti con SUD hanno un sottostante ADHD (Wilens 2004, Frodl 2010)
- tra il 20 e il 25% degli adulti con SUD hanno un ADHD associato (Levin & Evans 2001)
- un esordio più precoce e più grave sul piano clinico del SUD è stato associato alla presenza di ADHD (Levin & Evans 2001)
- vi è una sostanziale misdiagnosi di questa condizione nei centri di trattamento per le dipendenze. Una diagnosi strutturata permette di incrementare di 10 volte i tassi di riconoscimento (dal 3-4% fino al 30-40%)

Wilens and Morrison 2012

ADHD E USO DI SOSTANZE

Relazione biunivoca sul piano epidemiologico

- la presenza di ADHD è un fattore di rischio per lo sviluppo di un SUD come riscontrato in studi longitudinali (Charach et al. 2011)
- il rischio è maggiore in soggetti con dist. bipolare in comorbilità
- sembrano alcune caratteristiche dell'ADHD e non la familiarità per dipendenza predittori affidabili dello sviluppo di SUD (Wilens et al. 2011)
- il trattamento con MPH nei bambini/adolescenti sembra protettivo rispetto allo sviluppo successivo di SUD (Katusic et al. 2005)

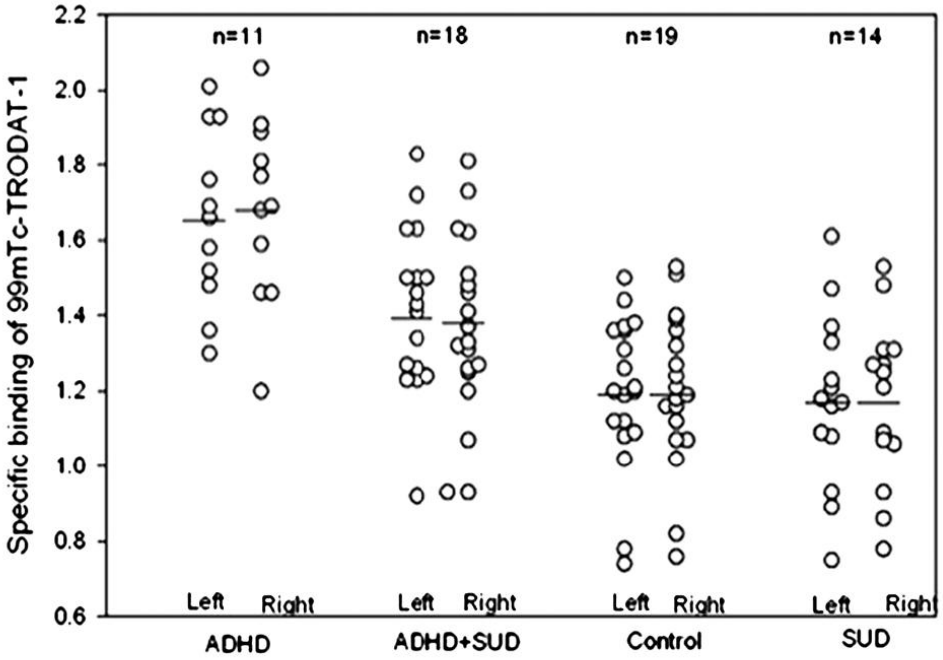
ORIGINAL ARTICLE

Searching for a Neurobiological Basis for Self-Medication Theory in ADHD Comorbid With Substance Use Disorders

An In Vivo Study of Dopamine Transporters Using ^{99m}Tc-TRODAT-1 SPECT

Neivo Silva, Jr, MD, PhD,† Claudia M. Szobot, MD, PhD,†§¶ Ming C. Shih, MD, PhD,‡ Marcelo Q. Hoexter, MD, PhD,‡ Carlos Eduardo Anselmi, MD,* Flavio Pechansky, MD, PhD,§ Rodrigo A. Bressan, MD, PhD,‡ and Luis Augusto Rohde, MD, PhD†//*

Clinical Nuclear Medicine • Volume 39, Number 2, February 2014 www.nuclearmed.com | e129



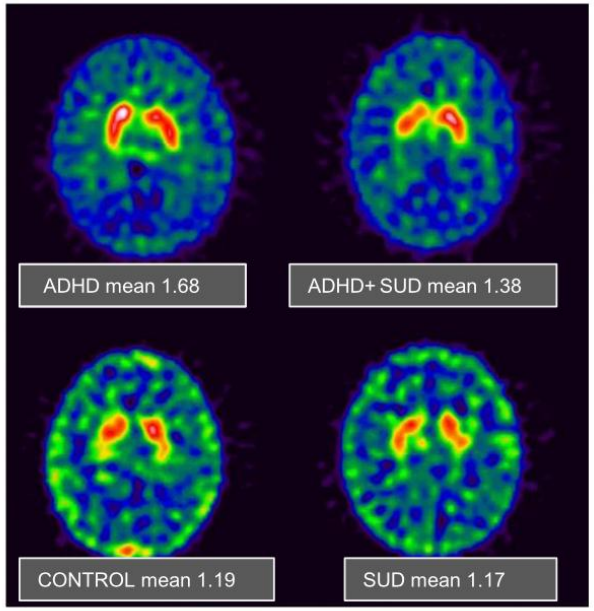


FIGURE 1. Dopamine transporter density in the striatum in each of the 4 groups (ADHD, ADHD + SUD, Control, and SUD).

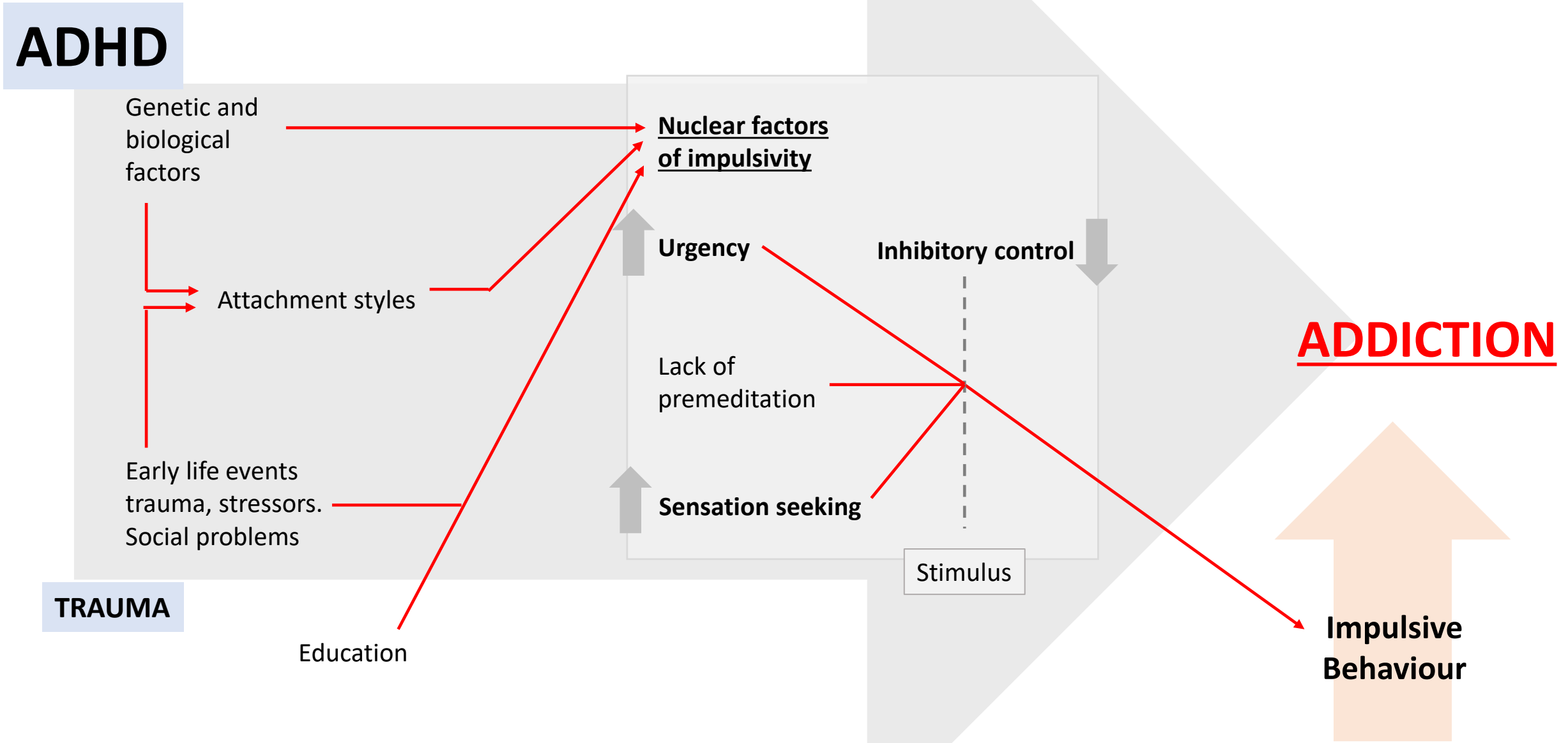
I pazienti con ADHD sarebbero spinti ad utilizzare le sostanze stimolanti per ridurre i sintomi di disattenzione dell'ADHD di alleviare la loro irrequietezza interna, le sostanze clamanti per gestire i fallimenti favoriti dall'ADHD.

Khantzian, 1997

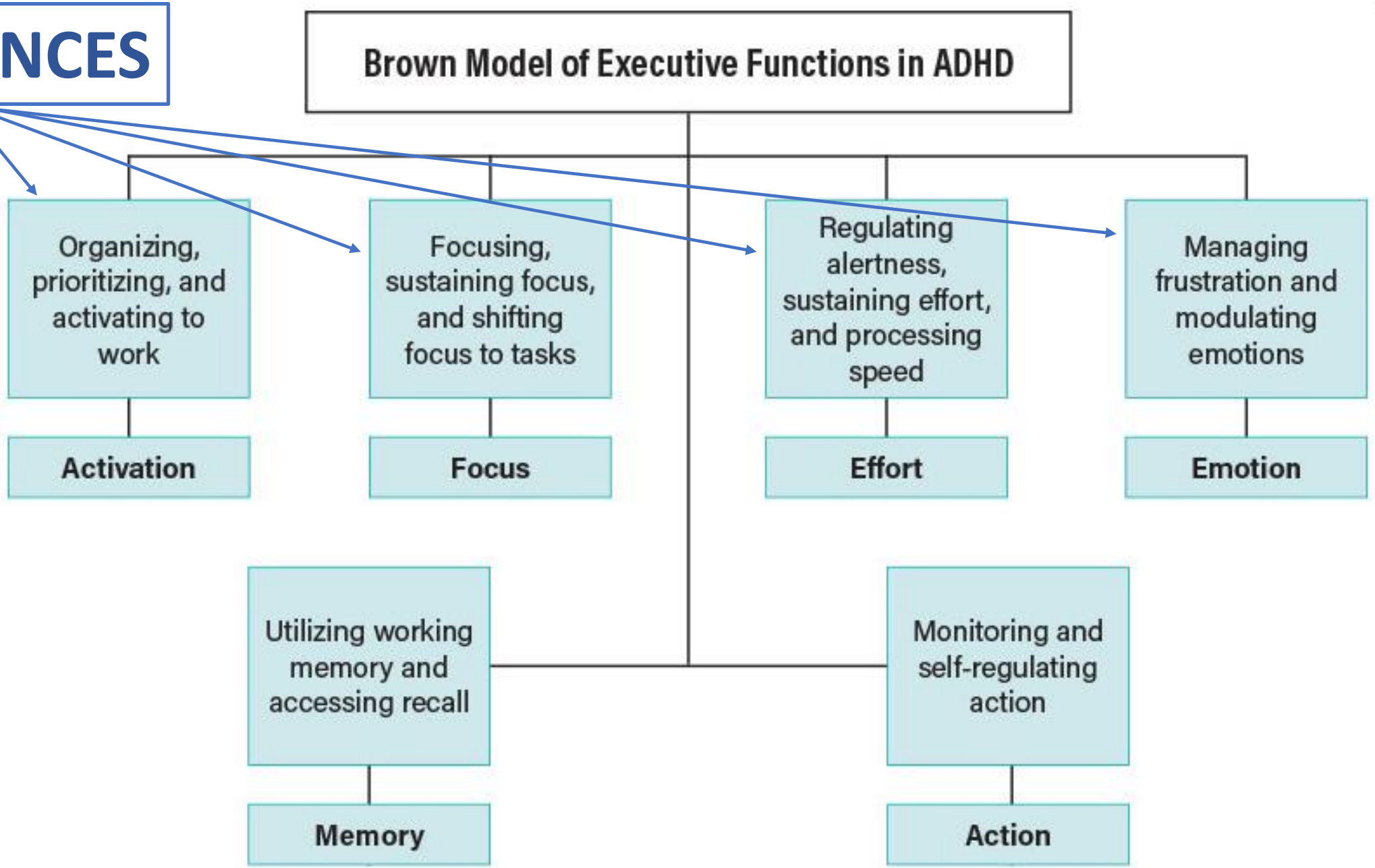
L'ADHD è associato a maggiore densità DAT striatale, suggerendo un deficit dopaminergico.
La comorbidità con SUD riduce la densità DAT → possibile meccanismo di automedicazione tramite aumento dopaminergico indotto da sostanze.

Campione **limitato**, in particolare per il gruppo ADHD puro (n=11).

INCREMENTO IMPULSIVITA' IN ADOLESCENZA E ADDICTION

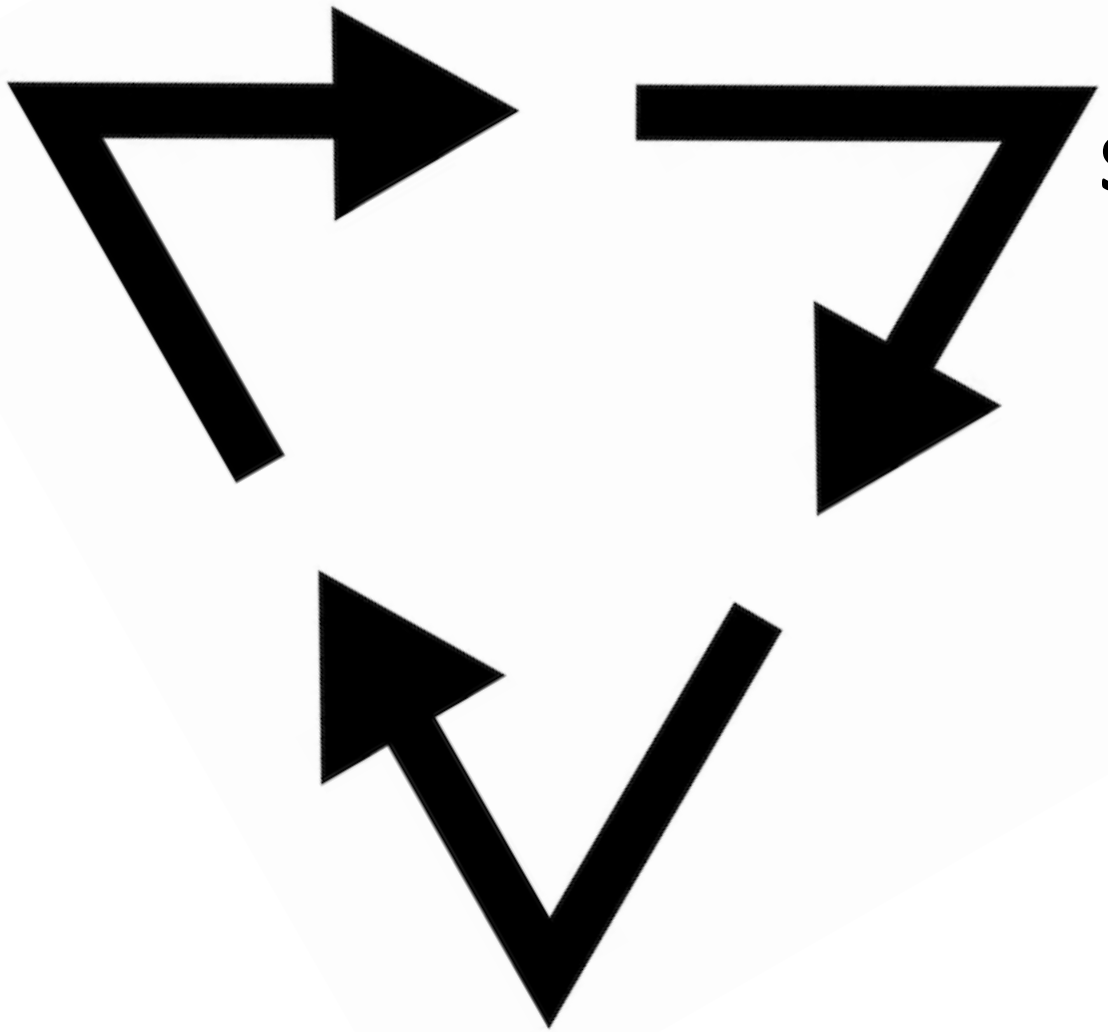


SUBSTANCES



Brown TE. *A New Understanding of ADHD in Children and Adults: Executive Function Impairments.* APA Publishing: 2013.

ADHD



SUBSTACE USE

SECONDARY PSYCHOPATHOLOGY

CARATTERISTICHE CLINICHE

LE MANIFESTAZIONI DELL'ADHD NELL'ADULTO

La dimensione *core*, "fondante", dell'ADHD attorno alla quale si strutturano le difficoltà di adattamento/funzionamento è data da una "difficoltà ad utilizzare in modo adeguato le risorse attentive".

Eccessivo *flow of consciousness (default mode network)* e difficoltà di filtro e difficoltà a focalizzare l'attenzione tra gli stimoli (alterato rapporto segnale/rumore)

Rigidità e difficoltà di adattamento attentivo (oscillazioni rapide tra dis-attenzione ed iper-attenzione)

Esauribilità dell'attenzione in assenza di continue sollecitazioni dello stimolo

METAMORFOSI SINDROMICA DELL'ADHD DALL'INFANZIA ALL'ETA' ADULTA

Il soggetto con funzionamento ADHD definisce le manifestazioni cliniche in relazione all'ambiente.
L'apprendimento di strategie più o meno adattive e compensatorie definisce l'emergenza della sintomatologia.
Vi è pertanto un cambiamento spontaneo di alcuni sintomi

Il rapporto dialettico tra (dis)funzionamento delle dimensioni core dell'ADHD e ambiente, nonché gli adattamenti appresi dal soggetto definiscono un quadro clinico ad alta eterogeneità, anche indipendentemente dalle comordilità

La disattenzione diviene il sintomo più disturbante

Riduzione dell'iperattività …. e persistenza dell'impulsività

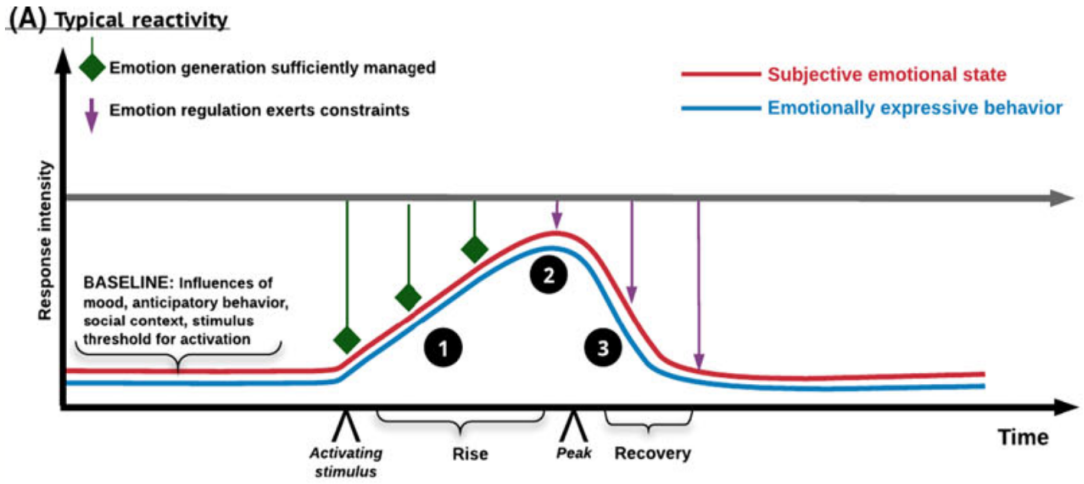
- Forgetfulness
- Distractibility
- Chaotic presentation
- Difficulty organizing & planning
- Difficulty listening
- Difficulty with punctuality (arriving either too late or too early)
- Temporary hyperfocus for highly salient tasks, but no control of attention when required or for many essential activities of daily life
- Getting lost in details
- Doubtfulness – unable to make decisions or solve problems
- Needing too much time to complete tasks
- Difficulty starting and finishing tasks
- Mind Wandering:
  - Mental restlessness
  - Unrelated spontaneous thoughts, constantly on the go, jumping and flitting, multiple thoughts at the same time
  - Associative thinking

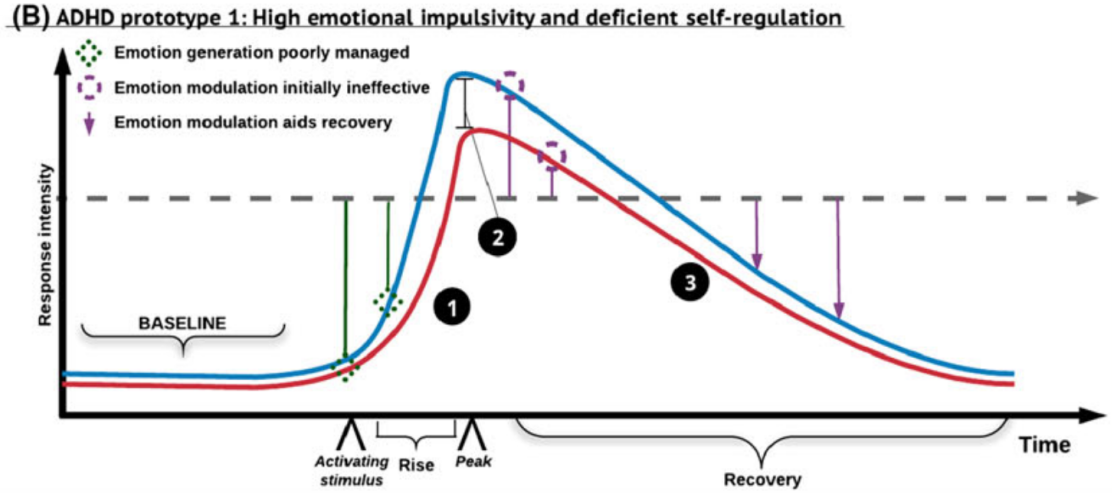
Kooij et al. 2019

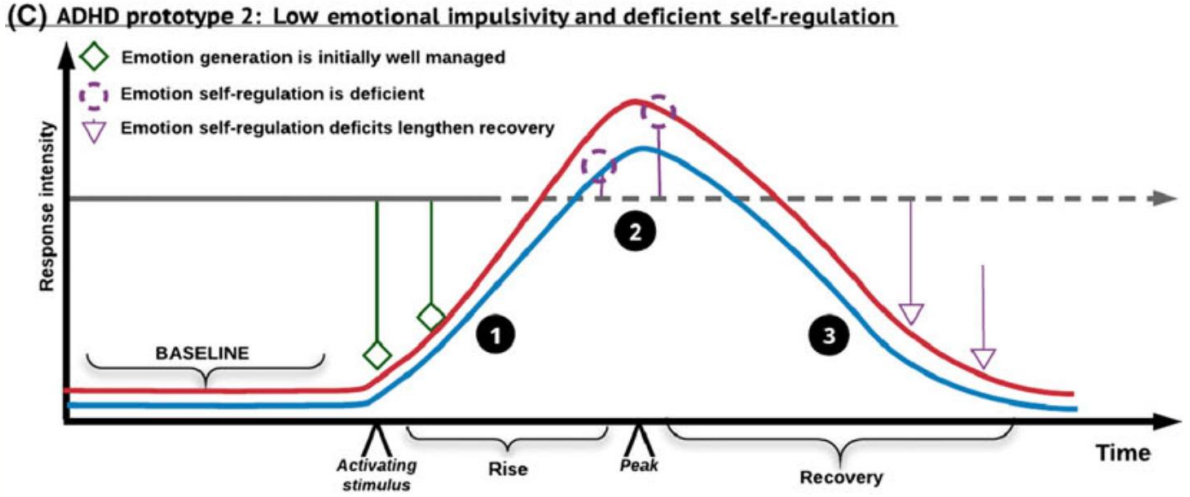
Impulsivity	• Acting without thinking • Difficulty waiting turn – linked to feelings of irritability • Blurting things out that cause distress to others • Interrupting others • Impatience and difficulty waiting turn • Spending too much • Walking out of jobs • Starting relationships quickly • Not being able to postpone gratification • Sensation seeking and risk taking behaviors • Binge eating
Emotional dysregulation	• Mood lability • Low frustration tolerance • Emotional impulsivity • Irritability • Anger outbursts • Premenstrual increase of symptoms

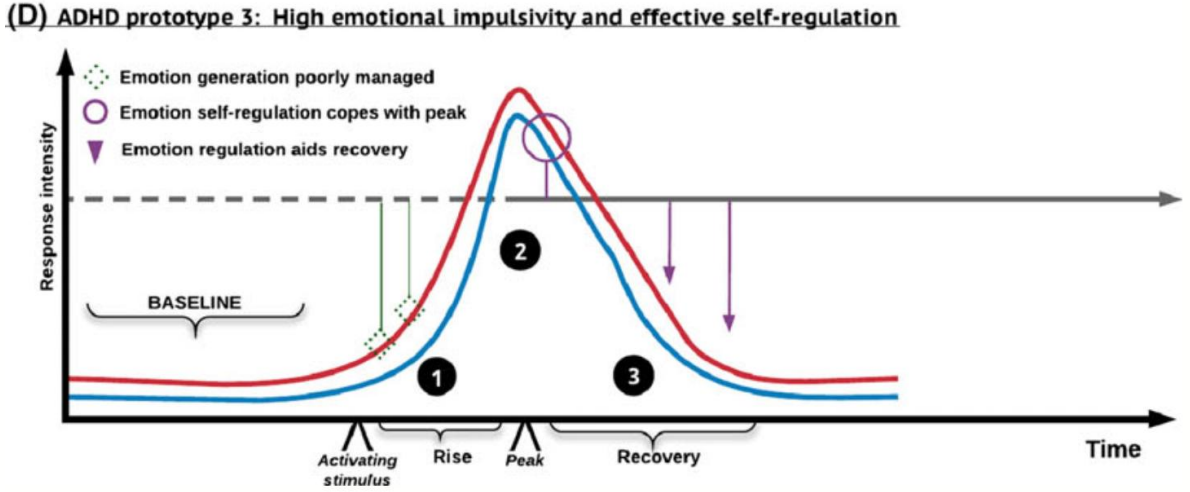
Kooij, J. et al., 2019.

La Disregolazione emotiva









Faraone et al. JCPP., 2019

PLOS ONE

RESEARCH ARTICLE

Common psychiatric and metabolic comorbidity of adult attention-deficit/hyperactivity disorder: A population-based cross-sectional study

Qi Chen[1]*, Catharina A. Hartman[2], Jan Haavik[3,4], Jaanus Harro[5], Kari Klungsøyr[6,7], Tor-Arne Hegvik[1,4], Rob Wanders[2], Cæcilie Ottosen[8,9], Søren Dalsgaard[8,9,10], Stephen V. Faraone[4,11], Henrik Larsson[1,12]

Table 2. Associations between adult ADHD and comorbidities in adults aged 18 to 64[a].

Comorbidity	With adult ADHD (N = 61,129)			Without adult ADHD (N = 5,490,678)			PR	95% CI
	N	Prevalence, %	95% CI, %	N	Prevalence, %	95% CI, %		
SUD	19,444	35.12	34.73–35.51	198,312	3.61	3.59–3.62	9.74	9.62–9.86
Depression	22,998	42.28	41.88–42.67	258,175	4.69	4.68–4.71	9.01	8.92–9.10
Bipolar Disorder	7123	14.29	13.98–14.60	39,403	0.72	0.71–0.72	19.96	19.48–20.43
Anxiety	25,376	44.65	44.25–45.05	269,015	4.89	4.88–4.91	9.12	9.04–9.21
T2DM	1044	3.90	3.68–4.13	89,565	1.62	1.61–1.63	2.41	2.27–2.55
Hypertension	2072	8.51	8.19–8.83	247,870	4.48	4.47–4.50	1.90	1.83–1.97

Contents lists available at ScienceDirect

Neuroscience and Biobehavioral Reviews

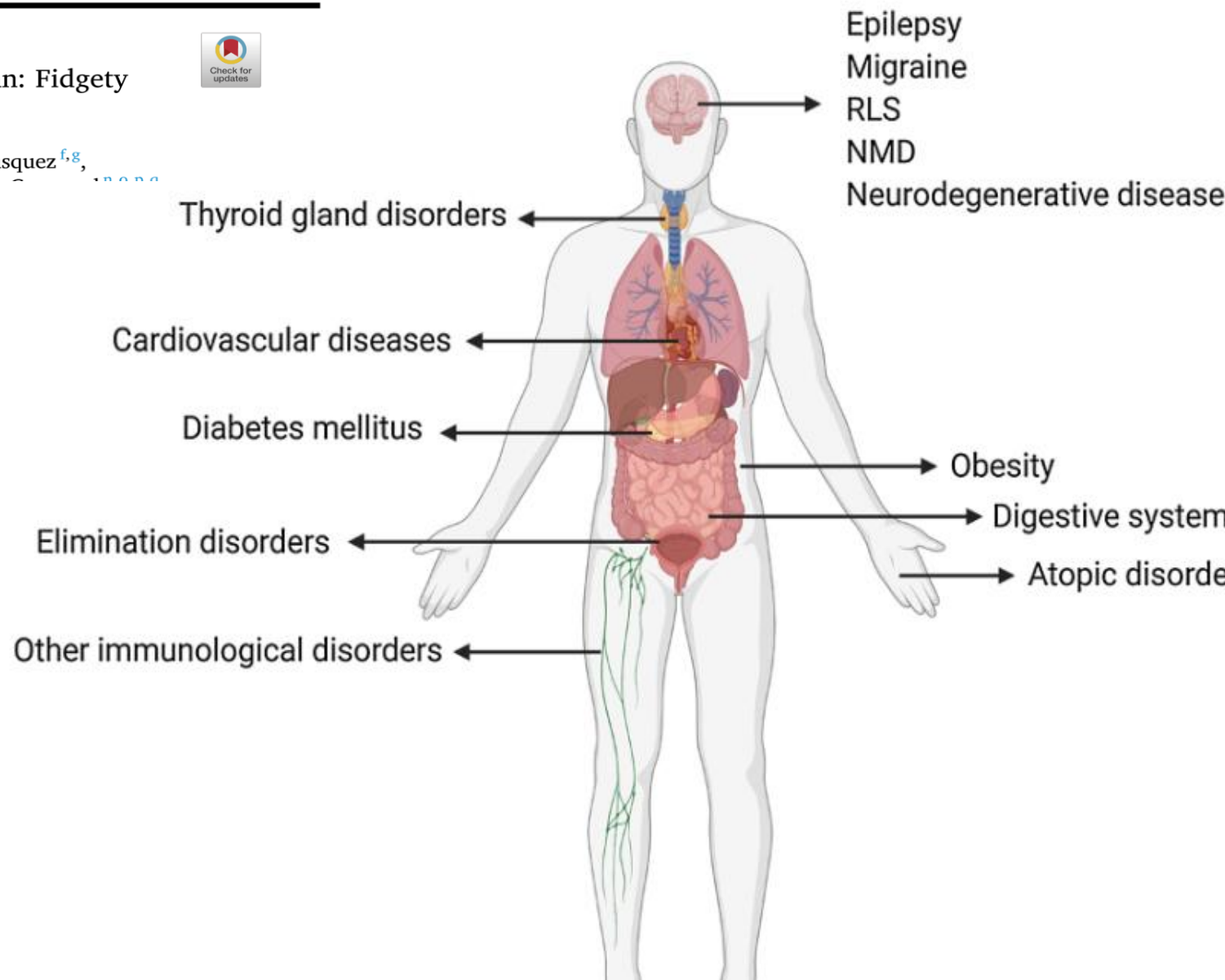
journal homepage: www.elsevier.com/locate/neubiorev

Review article

Non-mental diseases associated with ADHD across the lifespan: Fidgety Philipp and Pippi Longstocking at risk of multimorbidity?

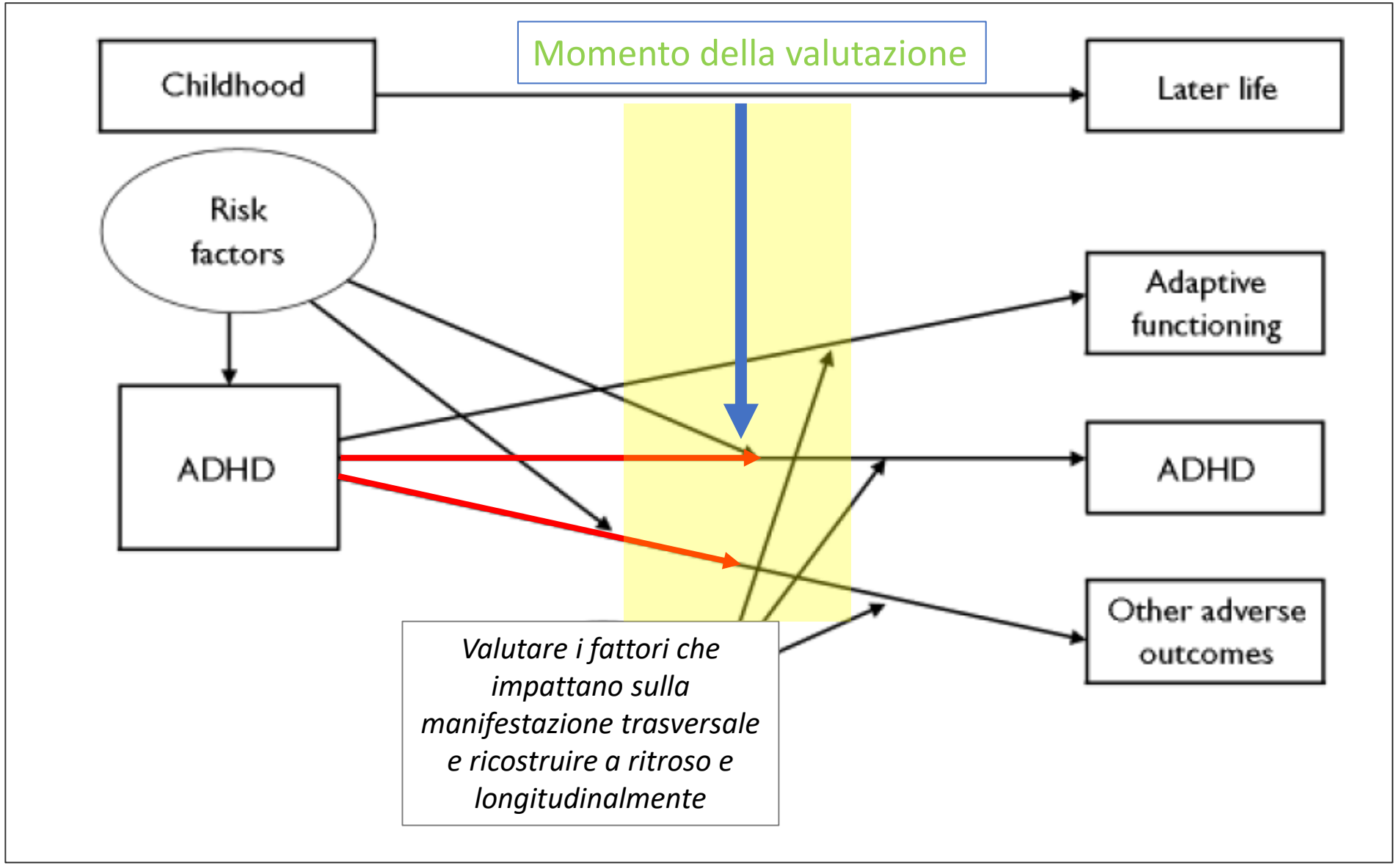
Sarah Kittel-Schneider [a,z,*], Gara Arteaga-Henriquez [b,c,d,e], Alejandro Arias Vasquez [f,g],

hightened risk of somatic disorders



CENNI RELATIVI ALLA DIAGNOSI

IL MOMENTO TRASVERSALE NELL'ADHD



SCENARIO DELLA VALUTAZIONE in età adulta

Paziente con ADHD noto e già diagnosticato in età precedente

- Rivalutazione del quadro attentivo/iperattivo/impusivo e suo impatto sul funzionamento e sulle autonomie
- Valutazione dei sintomi associati emersi successivamente (demoralizzazione secondaria, episodi depressivi, addiction)

Paziente che accede al percorso terapeutico lamentando sintomatologia depressiva, suicidalità/autolesionismo, addiction)

- Riconoscimento di ADHD precedentemente misdiagnosticato (diagnosi differenziale)
- Definizione della priorità di intervento e attribuzione corretta delle manifestazioni sintomatologiche

ALCUNE DIFFICOLTÀ DIAGNOSTICHE NELLA RIVALUTAZIONE: Peculiarità legate all'ADHD

Aspecificità delle manifestazioni cliniche

Sovrapposizione sintomatologica con altre entità cliniche

Egosintonia

Valutazione in ottica evolutiva

una attenta ricostruzione della sintomatologia precedente e durante i periodi di astinenza, può essere l'unico metodo disponibile per identificare una eventuale induzione di malattia da intossicazione di sostanze [35] riducendo frequente il rischio sovra-diagnostico

Peculiarità legate alle dipendenze

Alterazioni dell'attenzione e dell'irrequietezza in fase di utilizzo o astinenza dalle sostanze (utilità di valutazione in momento di sufficiente stabilizzazione clinica)

L'uso di diverse sostanze favorisce alterazioni della flessibilità cognitiva, della *working memory* e la gestione dell'impulsività, tutti aspetti centrali nel definire il funzionamento e l'adattamento all'ambiente. Nei periodi di utilizzo delle sostanze è frequente la difficoltà a riuscire a differenziare obiettivamente tra sintomi primari e sintomi derivati dall'uso di sostanze; per questo motivo sarebbe molto importante completare l'iter diagnostico in un periodo di astinenza o di forte riduzione dell'uso di sostanze, ma spesso questo è difficile da ottenere.

La valutazione andrebbe effettuata in una condizione di sufficiente stabilizzazione dell'uso di sostanze

Tabella 2 — Diagnosi

- Nei pazienti con SUD si deve sospettare la presenza di ADHD in relazione ad alcune caratteristiche anamnestiche, cliniche e del pattern di uso di sostanze.
- In caso di sospetto di ADHD la valutazione deve prevedere un'attenta anamnesi remota e del quadro evolutivo sul funzionamento precedente all'utilizzo di sostanze.
- Alcuni strumenti (*ASRS, Ultra-short Screening List for ADHD in Adults*) possono aiutare il clinico e fornire indicazioni per il successivo approfondimento.
- Un periodo di astinenza da sostanze, o una riduzione importante dell'uso, è spesso necessario al fine di stabilire una diagnosi valida.

Migliarese e Zita 2019

Molecular Psychiatry (2020) 25:1631–1639
https://doi.org/10.1038/s41380-020-0648-1

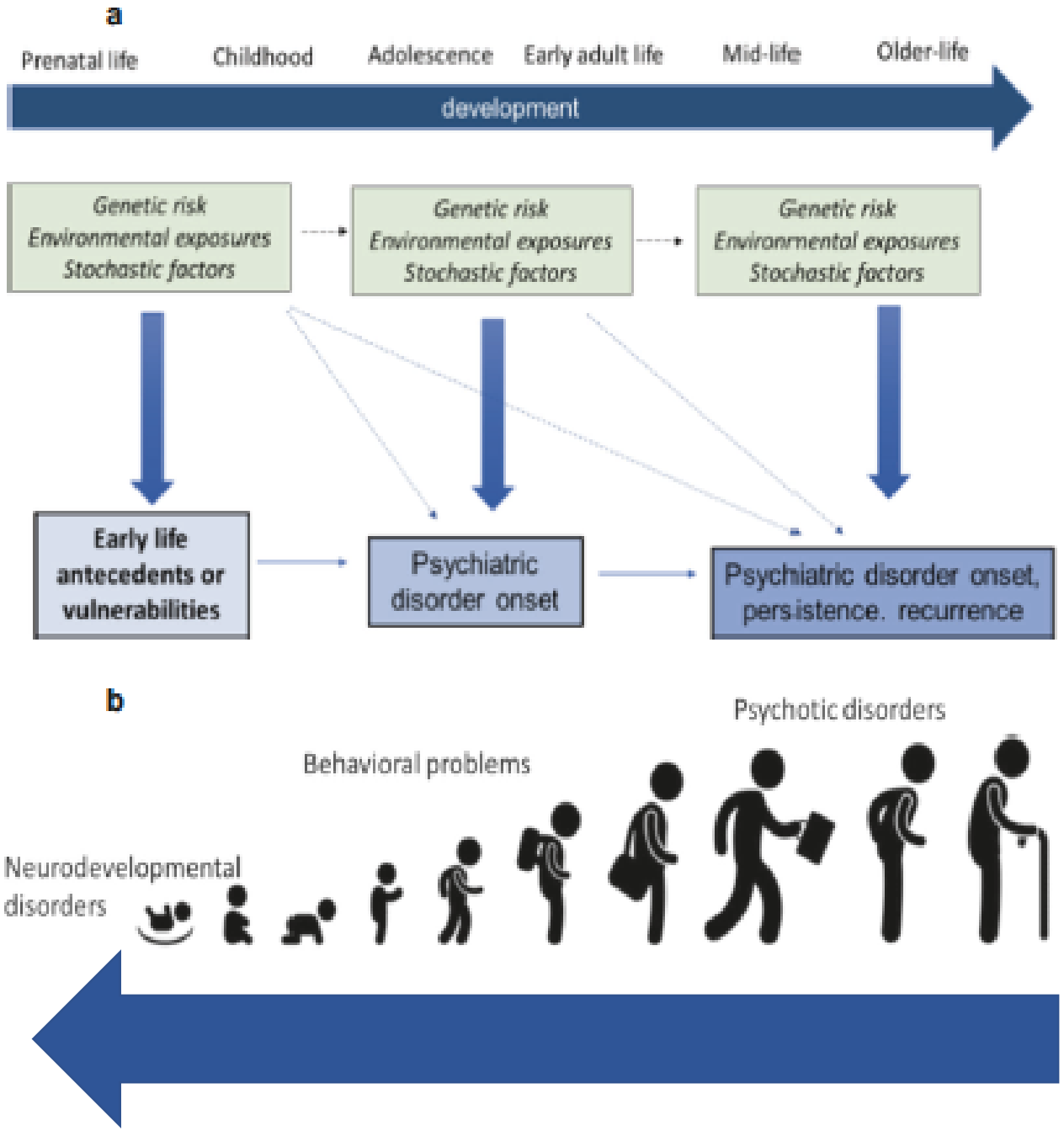
PERSPECTIVE

The importance of a developmental perspective in Psychiatry: what do recent genetic-epidemiological findings show?

Anita Thapar[1,2] · Lucy Riglin[1,2]

Conclusions

We emphasize in this article that a developmental perspective is important for all clinicians and researchers spanning from neuroscientists, geneticists, and epidemiologists to those conducting treatment trials and that this approach is currently timely. It does bring challenges for our measurement of psychopathology, classification and research framework, as well as research design and services but there are some solutions. We urge for a greater focus on developmentally orientated research, for clinicians to adopt a developmental perspective in clinical practice and for scientists to bring a developmental perspective to a broad range of science.



Lista di screening rapida per l'ADHD negli adulti

1. Di solito ti senti inquieto/a?
(per esempio: fatichi a rilassarti, hai difficoltà a restare seduto/a, ti agiti, devi fare molto sport o essere sempre attivo/a, hai la mente che non è mai libera ma piena di pensieri)

2. Di solito agisci prima di pensare?
(per esempio: dici d'impeto cose che non dovresti dire, sei impaziente, fai cose impulsivamente, fatichi ad attendere)

3. Di solito hai problemi di attenzione o concentrazione?
(per esempio: sei facilmente distratto/a, non finisci le cose, hai bisogno di tanti stimoli per prestare attenzione, sei smemorato/a o caotico/a)

Se la risposta alle domande 1 e / o 2 e / o 3 è sì rispondi alle domande successive:

4. Hai questi problemi da sempre?
(da quando puoi ricordare, oppure sei stato/a così per la maggior parte della tua vita, è un mio tratto "caratteriale")

5. Questi problemi hanno avuto un impatto rilevante sulla tua vita?
(per esempio: difficoltà nel rendimento scolastico, difficoltà coi gli altri - es i compagni, gli amici, i genitori ecc, insoddisfazione profonda su di sè)

Se la risposta alle domanda 4 e 5 è sì può essere utile un approfondimento clinico-diagnostico per l'ADHD.

AnnoXXVIII • n. 2 • luglio–dicembre

PSICHIATRIA OGGI
Fatti e opinioni dalla lombardia
Organo della Sezione Lombarda della società Italiana di Psichiatria

SEZIONE CLINICO/SCIENTIFICA

SIP-Lo
Sezione Regionale Lombarda della Società Italiana di Psichiatria

Tabella 3 - Iter diagnostico per l'ADHD in età adulta c/o Ambulatorio dell'A.O. Fatebenefratelli di Milano

1° livello di screening (scale auto-somministrate)	- WURS -ASRS V1.1	*Scale sintomi ADHD in infanzia/età adulta*
	- MDQ - SDS Zung - SCID-II questionario - STAI-Y 1 e 2	Scale per diagnosi differenziale o disturbi in comorbidità
2° livello (approfondimento psicodiagnostico)	- visite psicologiche - DIVA 2.O - SCID II intervista - ADD Brown Scales - WHOQOL - DERS	Intervista diagnostica ADHD, approfondimento comorbidità, qualità di vita, regolazione delle emozioni
3° livello (approfondimento clinico)	- visita psichiatrica - CGI - VGF - AA-QoL	Fwunzionamento globale, gravità clinica e impatto dei sintomi ADHD su qualità di vita

CENNI DI TRATTAMENTO

Intervento trasversale e impatto longitudinale

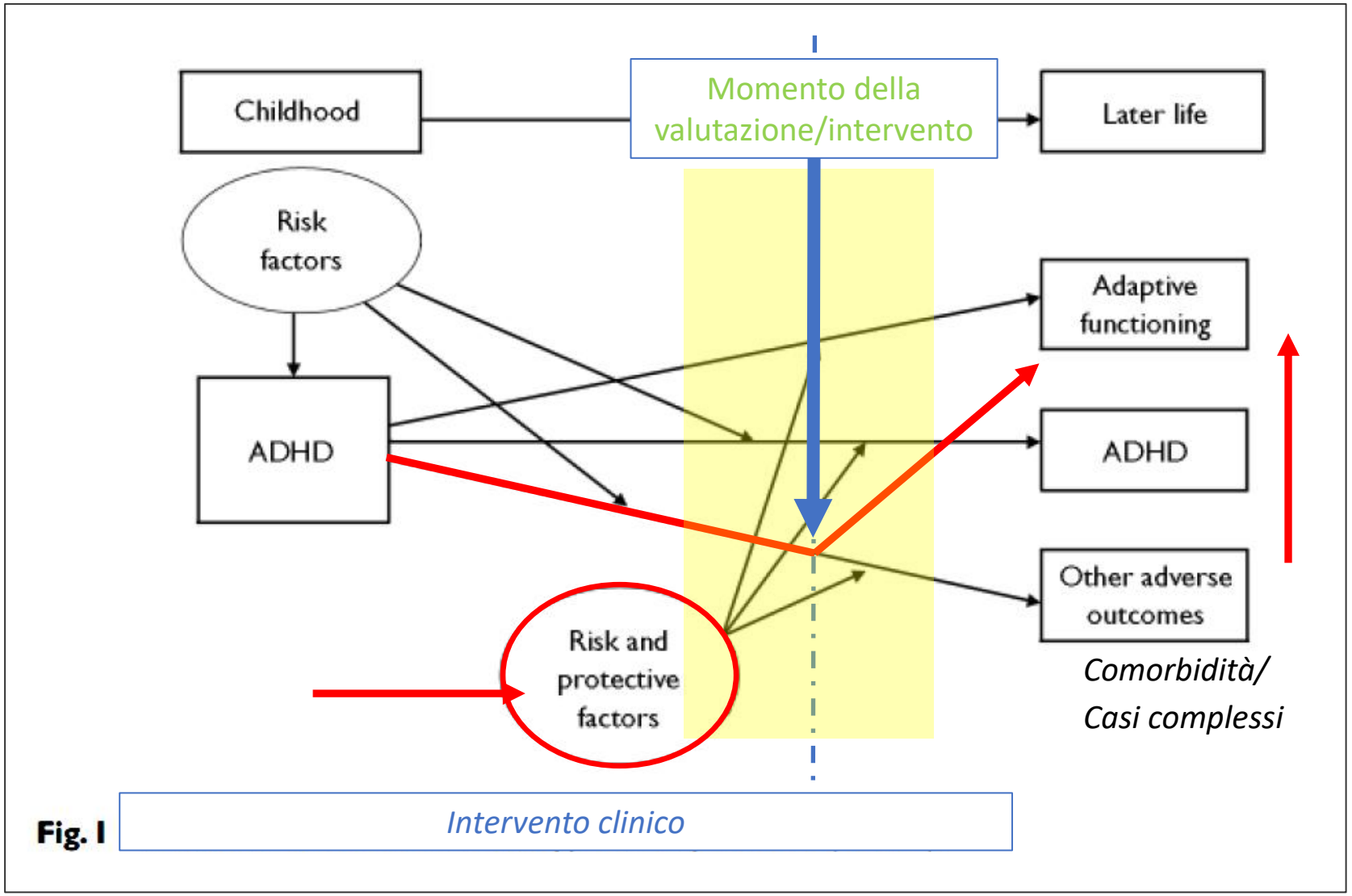
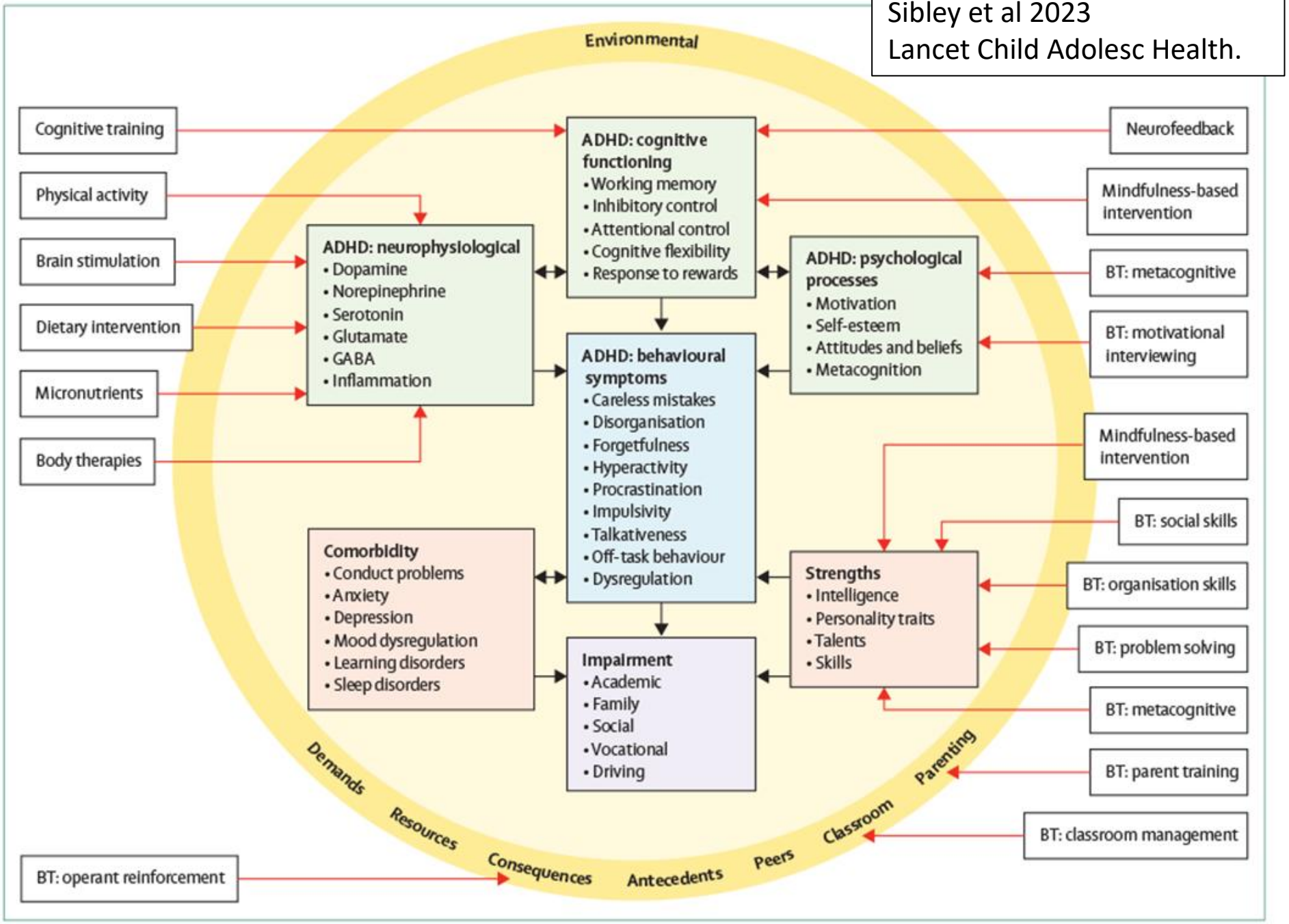


Fig. I

"L'intervento clinico sul soggetto con ADHD interviene in un momento definito della storia clinica e – concettualmente – dovrebbe porsi l'obiettivo di ridurre in primis la complessità determinata dalla presenza delle manifestazioni comorbidi e contemporaneamente di favorire un funzionamento maggiormente adattivo"

The heterogeneous contributors of ADHD are a function of biological and environmental factors, so treatments must be individualised and target both mechanisms. For example, ADHD is highly heritable, polygenic, and linked to neurotransmitter deficiencies (with emerging research supporting additional biological mechanisms such as inflammation, nutrient deficiencies, infections, and gut dysbiosis). However, environmental (eg, parenting style, classroom characteristics, toxins, and nutrition) and psychological (eg, self-management strategies, beliefs, and thinking styles) factors also influence ADHD severity, and are reasonable intervention targ

Sibley et al 2023
Lancet Child Adolesc Health.

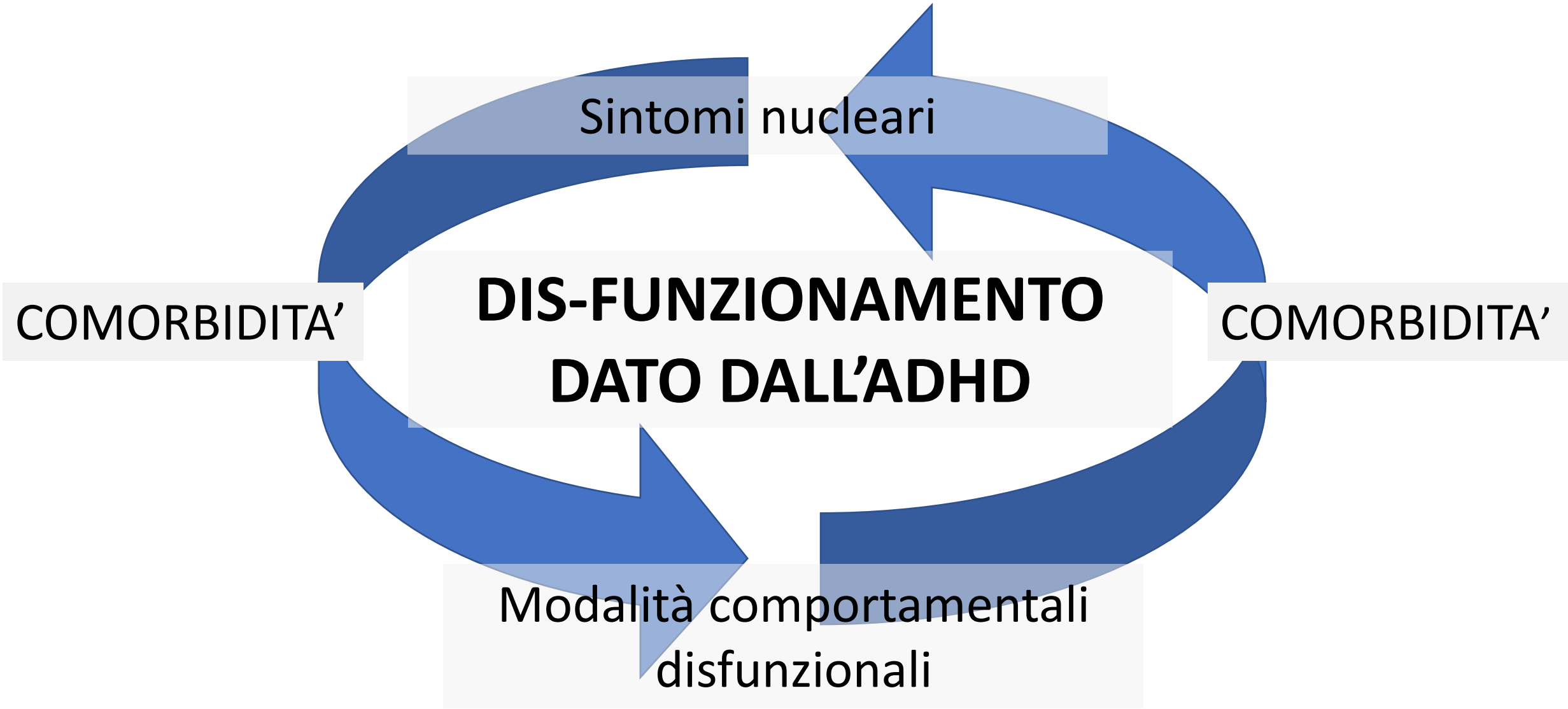


Il trattamento dell'ADHD in età adulta

- contenere la sintomatologia maggiormente invalidante (azione sui sintomi nucleari)
- favorire una buona conoscenza del disturbo e delle modalità di funzionamento,
- massimizzare le competenze e minimizzare le disfunzionalità
- favorire un buon adattamento all'ambiente
- migliorare la qualità di vita

- ridurre il rischio di psicopatologia secondaria
- trattare le comorbidità

FAVORIRE UN NUOVO ADATTAMENTO



Il trattamento farmacologico determina una «finestra di opportunità» per i trattamenti psicoeducativi e non farmacologici

GENERALITA' SUL TRATTAMENTO FARMACOLOGICO…

Il trattamento farmacologico è indicato quando il disturbo interferisce significativamente con la vita della persona (quadri clinici moderati e gravi)

Il trattamento farmacologico è il presidio terapeutico più efficace nel trattamento degli adulti con ADHD, almeno nel breve periodo

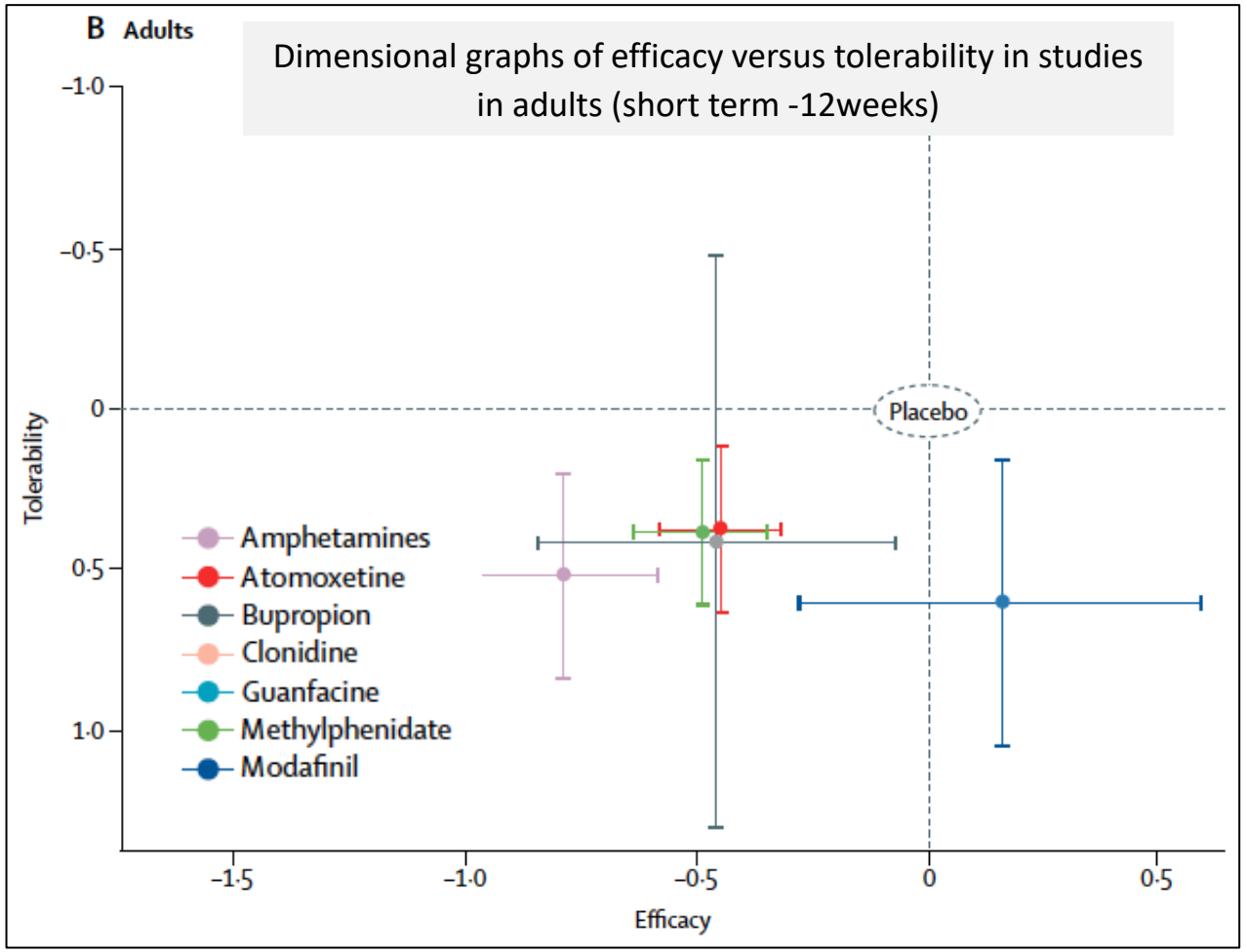
A differenza del trattamento di bambini e adolescenti, il beneficio dimostrato dal trattamento farmacologico negli adulti appare superiore a quello dei soli trattamenti psicosociali

Il trattamento farmacologico determina una «finestra di opportunità»

Cortese et al. Lancet Psychiatry 2018; 5: 727-38

Comparative efficacy and tolerability of medications for attention-deficit hyperactivity disorder in children, adolescents, and adults: a systematic review and network meta-analysis

Samuele Cortese, Nicoletta Adamo, Cinzia Del Giovane, Christina Mohr-Jensen, Adrian J Hayes, Sara Carucci, Lauren Z Atkinson, Luca Tessari, Tobias Banaschewski, David Coghill, Chris Hollis, Emily Simonoff, Alessandro Zuddas, Corrado Barbui, Marianna Purgato, Hans-Christoph Steinhausen, Farhad Shokraneh, Jun Xia, Andrea Cipriani



Comparative efficacy and acceptability of pharmacological, psychological, and neurostimulatory interventions for ADHD in adults: a systematic review and component network meta-analysis

Edoardo G Ostinelli, Marcel Schulze, Caroline Zangani, Luis C Farhat, Anneka Tomlinson, Cinzia Del Giovane, Samuel R Chamberlain, Alexandra Philipsen, Susan Young, Phil J Cowen, Andrea Bilbow, Andrea Cipriani, Samuele Cortese**

*Stimulants and atomoxetine were **the only interventions with evidence of effectively reducing core ADHD symptoms in the short term,** based on both self-reported and clinician-reported ratings, although atomoxetine was less well tolerated than placebo.*

Some non-pharmacological therapeutic components (ie, CBT, neurofeedback, and relaxation therapy) achieved beneficial effects on ADHD core symptoms over longer timeframes, yet with discordant results across types

Il trattamento farmacologico dell'ADHD nell'adulto

Farmaci di prima linea

~~*Atomoxetina (dosaggi 40-100 mg/die)*~~

Metilfenidato (dosaggi 20-80 mg/die)

Farmaci di seconda linea

Bupropione (dosaggi 150-450 mg/die) *off-label per ADHD*

Altri farmaci *(dati sostanzialmente inesistenti di efficacia)*

Antidepressivi triciclici (desipramina), guanfacina, clonidina, SNRI (venlafaxina, desvenlafaxina), NARI (reboxetina) SSRI (sertralina), aripiprazolo, modafinil *off-label per ADHD*

NICE guidelines, CADDRA guidelines

Gli articoli di questa sezione sono sottoposti a referaggio doppiamente cieco (double blind peer review process) e seguono gli standard in uso per le pubblicazioni scientifiche a livello internazionale ed accettati dalle principali banche dati citazionali

La doppia diagnosi ADHD e SUD

Gianmaria Zita, Giovanni Migliarese***

Summary

■ ***Psychiatric comorbidities are frequently found in patients with Substance Use Disorder (SUD). Although in the literature Attention Deficit Hyperactivity Disorder (ADHD) is one of the most frequent comorbidities with SUD, it appears poorly diagnosed in the clinical settings. Various researches show that about a third of patients with ADHD also suffer from an Addiction Disorder.***
In addressing subjects affected by this comorbidity, it is important to underline the relevance of the clinical assessment in order to identify symptoms that frequently appear similar and which make treatment more complex. An accurate assessment must consider the influence of the substance use on cognitive functions. This effect influences the course of ADHD worsening the retention rate and the outcome.
The treatment of this comorbidity requires multiple therapeutic strategies, including pharmacological, psychological and socio-educational interventions. Pharmacological therapies and the risks of their misuse has to be particularly considered. Thus, to provide an effective treatment it is necessary to build a highly integrated setting in which specific interventions are delivered simultaneously. ■

Keywords: *ADHD, Substance Use Disorder, Dual Disorder.*
Parole chiave: *ADHD, Disturbo da Uso di Sostanze, Doppia Diagnosi.*

Clinical practice guideline on pharmacological and psychological management of adult patients with attention deficit and hyperactivity disorder and comorbid substance use

Ruth Cunill[1]*, Xavier Castells[1]**, Ana González-Pinto[1]***, Manuel Arrojo****, Miquel Bernardo*****
Tirado-Muñoz*
Manuel Goikol
Luis San*.

Substantial evidence has confirmed the high comorbidity between Attention-Deficit/Hyperactivity Disorder (ADHD) and a substance use disorder (SUD). This review synthesizes the pharmacological and psychosocial interventions conducted in ADHD and SUDs, and provides clinical recommendations using the GRADE approach. Our results suggest: 1) In patients with ADHD and alcohol use, atomoxetine is recommended to reduce ADHD symptoms (weak recommendation) and alcohol craving (weak recommendation). 2) In patients with ADHD and cannabis use disorder, atomoxetine is recommended to improve ADHD symptoms (weak recommendation), not to reduce cannabis use (weak recommendation). 3) In patients with ADHD and cocaine use disorder, methylphenidate is not recommended to improve ADHD symptoms or to reduce cocaine use (weak recommendation). 4) In patients with ADHD and comorbid nicotine use disorder, methylphenidate is recommended to improve ADHD symptoms (weak recommendation). Psychoestimulants, such as methylphenidate or lisdexamfetamine dimesylate, are not recommended to reduce nicotine use (weak recommendation). 5) Regarding patients with ADHD and any SUD, the use of psychostimulants is recommended to improve ADHD symptoms (weak recommendation), not to reduce substance use (weak recommendation) or to improve retention to treatment (strong recommendation). In these patients, the use of atomoxetine is recommended to improve ADHD symptoms (weak recommendation), not to decrease substance use (weak recommendation) or to improve retention to treatment (strong recommendation). Atomoxetine and psychostimulants appear to be safe in patients with any SUD (strong recommendation). Our review suggests the need for more research in this area and for larger, multisite, randomized studies to provide more definite and conclusive evidence.

Journal of
Clinical Medicine

MDPI

Review

Treatment of Adolescents with Concurrent Substance Use Disorder and Attention-Deficit/Hyperactivity Disorder: A Systematic Review

Heval Özgen [1,2,*], Renske Spijkerman [1], Moritz Noack [3], Martin Holtmann [3], Arnt Schellekens [4,5,6], Søren Dalsgaard [7], Wim van den Brink [6,8] and Vincent Hendriks [1,2]

A systematic review of controlled studies on the effectiveness of pharmacological, psychosocial, and complementary treatments of ADHD in adolescents with and without comorbid SUD.

«High-dose stimulant treatment could be an effective treatment for adolescents with ADHD and SUD comorbidity,
Cognitive behavior therapy (CBT) might have a small beneficial effect in these patients, and that alternative treatments are probably not effective.»

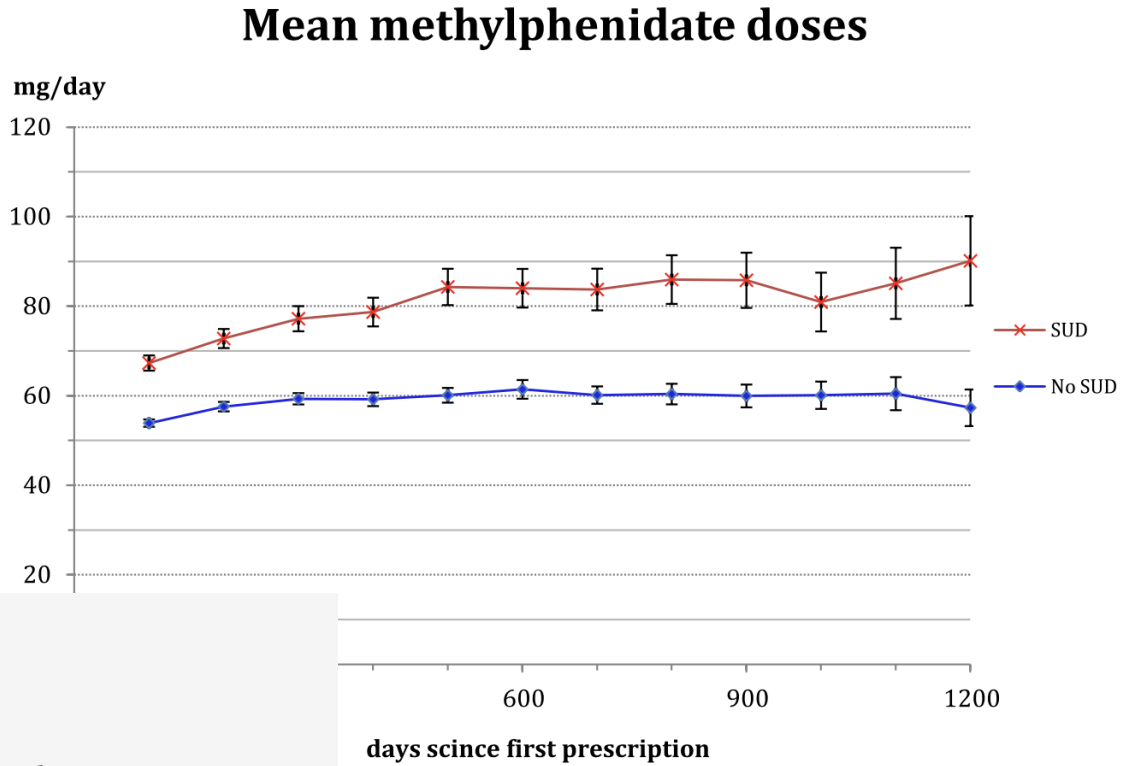
European Neuropsychopharmacology
Volume 27, Issue 11, November 2017, Pages 1144-1152

Methylphenidate doses in Attention Deficit/Hyperactivity Disorder and comorbid substance use disorders

Charlotte Skoglund [a], Lena Brandt [b], Brian D'Onofrio [d], Henrik Larsson [c], Johan Franck [a]

Highlights

- Patients with SUD use 40% higher methylphenidate doses than those with ADHD only
- Patients with SUD show high long-term adherence to methylphenidate treatment
- Patients with SUD are treated with methylphenidate without signs of tolerance



European Addiction Research

Research Article

Eur Addict Res 2020;26:223–232
DOI: 10.1159/000508385

Received: April 8, 2020
Accepted: May 4, 2020
Published online: July 7, 2020

International Consensus Statement for the Screening, Diagnosis, and Treatment of Adolescents with Concurrent Attention-Deficit/Hyperactivity Disorder and Substance Use Disorder

Heval Özgen[a, ξ] Renske Spijkerman[a] Moritz Noack[b] Martin Holtmann[b] Arnt S.A. Schellekens[c, d]

- Screening routinario bidirezionale ADHD-SUD
- Trattamento con formulazioni a rilascio prolungato
- Trattamento combinato
- *Non pieno consenso su necessità di raggiungere l'astinenza dalle sostanze prima dell'inizio della terapia*
- *Non pieno consenso su uso di bupropione o stimolanti*

7). Routine screening is recommended for ADHD in adolescent patients in substance abuse treatment and for SUD in adolescent patients with ADHD in mental healthcare settings. Long-acting stimulants are recommended as the first-line treatment of ADHD in adolescents with concurrent ADHD and SUD, and pharmacotherapy should preferably be embedded in psychosocial treatment. The only remaining no-consensus statement concerned the requirement of abstinence before starting pharmacological treatment in adolescents with ADHD and concurrent SUD. In contrast to the majority, some experts required full abstinence before starting any pharmacological treatment, some were against the use of stimulants in the treatment of these patients (independent of abstinence), while some were against the alternative use of bupropion. ***Conclusion:*** This international consensus statement can be used by clinicians and patients together in a shared decision-making process to select the best interventions and to reach optimal outcomes in adolescent patients with concurrent ADHD and SUD.

ADHD e disturbo da uso di sostanze

Peculiarità diagnostiche, cliniche e di trattamento

Giovanni Migliarese, Gianmaria Zita***

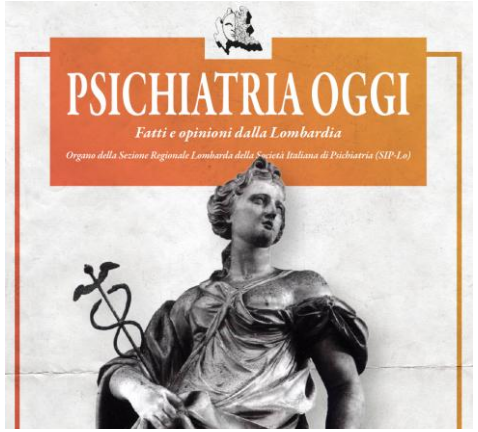


Tabella 3a — Generalità sul trattamento per soggetto con SUD e comorbidità ADHD

- È necessario definire un gradiente di priorità per affrontare prima la condizione più problematica, funzionalmente invalidante o destabilizzante.
- Il paziente deve essere preso in carico contemporaneamente dagli specialisti che si occupano dei due disturbi al fine di gestire in maniera ottimale l'evoluzione della patologia.
- L'importante definizione del *setting* e dell'intervento strutturato deve essere condivisa con il paziente.
- Restituire la diagnosi di ADHD al paziente per favorire la comprensione delle modalità di funzionamento ed identificare il focus del trattamento.

Tabella 3b — Specificità sul trattamento per soggetto con SUD e comorbidità ADHD

- Prevedere un primo intervento motivazionale per aumentare l'adesione alla cura e favorire una stabilizzazione delle condotte.
- Nel momento di maggior adesione alla cura è necessario inserire il paziente in un trattamento psicoterapeutico ad orientamento CBT o motivazionale.
- Pensare di impostare un trattamento farmacologico con farmaci specifici, meglio se farmaci a basso rischio di indurre dipendenza (atomoxetina, bupropione). In caso di utilizzo di metilfenidato sono da preferire formulazioni a rilascio modificato.
- Sono necessari *setting* strutturati per la corretta somministrazione farmacologica e il monitoraggio.

Comparative efficacy and acceptability of pharmacological, psychological, and neurostimulatory interventions for ADHD in adults: a systematic review and component network meta-analysis

Edoardo G Ostinelli, Marcel Schulze, Caroline Zangani, Luis C Farhat, Anneka Tomlinson, Cinzia Del Giovane, Sam

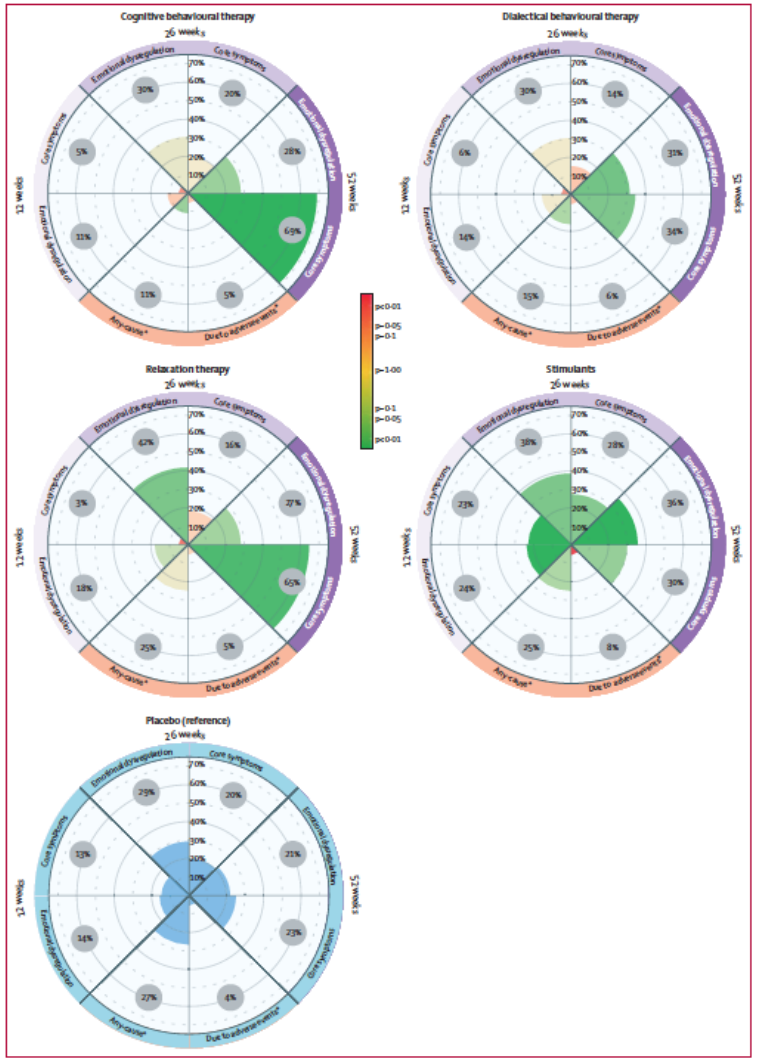


Figure 3: Vitruvian plots of competing active therapeutic components with data for all prioritised outcomes
The four competing active therapeutic components with available data for all the eight outcomes prioritised by the representative of people with lived experience of ADHD are summarised here. For each plot: the left quadrant includes changes of self-reported ADHD core symptoms and emotional dysregulation at about 12 weeks; the top quadrant includes changes of self-reported ADHD core symptoms and emotional dysregulation at about 26 weeks; the right quadrant includes changes of self-reported ADHD core symptoms and emotional dysregulation at about 52 weeks; and the bottom quadrant includes acceptability (any-cause discontinuation) and tolerability (discontinuation due to adverse event). Colour indicates the relative performance of the active therapeutic component of interest and the precision of the estimate in comparison with pill placebo (blue), from green (component better than placebo), to yellow (unclear whether the component performs better or worse than placebo), and then red (component worse than placebo). The more precise the estimate (narrow confidence interval), the brighter the colour. Experimental and control event rates are expressed as the estimated probability of an outcome, calculated from the component network meta-analysis. Further details are available in the appendix (S38; pp 1200-01). For the originally submitted figure see appendix (S41; p 1205). *Discontinuation from trials.

Research in context

Evidence before this study

Pharmacological interventions for ADHD in adults have a prominent role in clinical guidelines to date. However, in the past decade, an increasing number of randomised controlled trials (RCTs) of non-pharmacological options for adults with ADHD have been published. Given the concerns around the safety of ADHD medications, there is a pressing need to better understand the comparative efficacy and tolerability or safety of medications and non-pharmacological interventions for the management of ADHD in adults. Before conducting our systematic review and network meta-analysis, we searched in May, 2022, and again on March 17, 2024, PubMed, PsycINFO, and Embase for network meta-analyses (NMAs) on interventions for ADHD in adults using the search terms "network", "adult", "ADHD", "meta-analysis",

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Added va

To our kn

in adults that jointly synthesises comparative effects for pharmacological, psychological, and neurostimulatory interventions within a single network. Our study is also, to our knowledge, the first study to provide comparative meta-analytic evidence showing that stimulants and atomoxetine, among all available pharmacological and non-pharmacological interventions for ADHD, are the only ones to be rated as efficacious in terms of ADHD core symptoms according to both self-reported and clinician-reported scales. However, ADHD medications are not well tolerated by everyone, there is no evidence that they significantly improve outcomes that are important to individuals with ADHD such as quality of life, and their long-term effects are under investigation. We also provide, for the first time, comparative meta-analytic evidence that the efficacy in the short term and

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to better inform the care of ADHD in adults.

Some non-pharmacological therapeutic components (ie, CBT, neurofeedback, and relaxation therapy) achieved beneficial effects on ADHD core symptoms over longer timeframes, yet with discordant results across types

Psychology and Psychotherapy
Theory, Research and Practice
the british psychological society

RESEARCH ARTICLE

Effectiveness of cognitive behavioural-based interventions for adults with attention-deficit/hyperactivity disorder extends beyond core symptoms: A meta-analysis of randomized controlled trials

Chun-I Liu, Mao-Hsiu Hua, Mong-Liang Lu, Kah Kheng Goh

Ristrutturazione cognitiva su alcune credenze disfunzionali associate al disturbo (es. procrastinanzione) o alle comorbidità (ansia, autostima…)

Twenty-eight studies met the inclusion criteria. This meta-analysis indicates that CBT for adults with ADHD was effective in **reducing both core and emotional symptoms**. Decreases in **depression** and **anxiety** were predicted by the reduction of core ADHD symptoms. An increase in **self-esteem and quality of life** were also observed for adults with ADHD who were received CBT. Adults who received either individual or group therapy significantly exhibited a greater reduction of symptoms than those who received active control intervention, received treatment as usual, or were on the treatment waitlist. Traditional CBT was equally effective in reducing core ADHD symptoms but outperformed other CBT approaches in reducing emotional symptoms among adults with ADHD.

This meta-analysis offers cautiously optimistic support for the efficacy of CBT in treating adults with ADHD. The additional reduction of emotional symptoms demonstrates the potential of CBT in adults with ADHD who are at higher risk for depression and anxiety comorbidities.

AREE DI INTERVENTO

ORGANIZZAZIONE

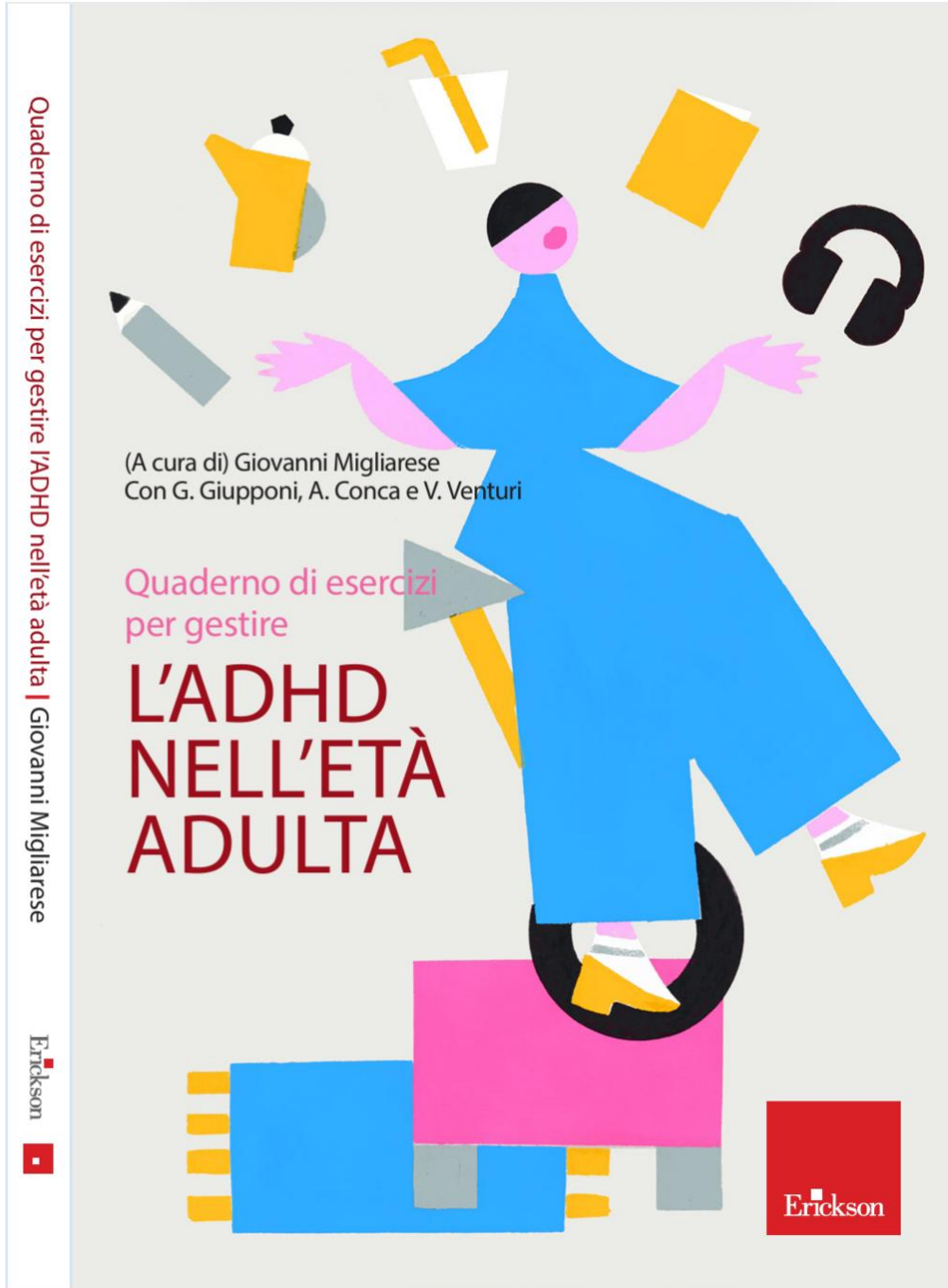
CURA DI SE'

RELAZIONI INTERPERSONALI

AUTOSTIMA

DISREGOLAZIONE EMOTIVA

Sviluppare strategie specifiche mirate a rinforzare gli aspetti deficitari e a valorizzare i punti di forza



Indice

CRITICITA’

Eur Addict Res. 2023;29(5):305-312. doi: 10.1159/000531008. Epub 2023 Jul 28.

Concomitant Drug Use among Opioid-Dependent Patients with and without Attention Deficit Hyperactivity Disorder: Does Methylphenidate Merit a Trial?

Letizia Tschudi [1] Sebastian Karl Maximilian Fischer [2] [3] Eugeniy Perlov [2]
Markus R Baun
Jochen Mutsch

Abstract

Introduction: Concomitant drug use is common among opioid-dependent patients in maintenance therapy. Attention deficit hyperactivity disorder (ADHD), a common comorbidity among opioid users, is associated with a higher risk of concomitant drug use. Earlier studies showed that methylphenidate (MPH) can reduce cocaine consumption among patients with ADHD. The use of MPH as an agonist-replacement or maintenance therapy in cocaine-dependent patients without ADHD is also common in Switzerland, despite a lack of supporting evidence. The aim of this study

Results: We did not find significant differences in the number of patients using cocaine, amphetamine, MDMA, or heroin between groups with or without ADHD. With respect to cocaine use, 85.2 percent of patients in the ADHD group and 73.1 percent in the non-ADHD group were users. The non-ADHD group showed a significant positive correlation between the concentration of MPH and cocaine in hair samples (p < 0.05), and a positive correlation between cocaine craving and the concentration of MPH in hair samples (p = 0.065). These two trends were not evident in the ADHD group.

Conclusion: Among patients without ADHD, use of MPH correlates with higher cocaine consumption and craving. Conversely, no significant correlation was found between MPH and cocaine use in patients with ADHD. Our study adds to the evidence that MPH confers negative effects in cocaine users without ADHD and should thus have no place in the treatment of these patients.

consumption and craving. Conversely, no significant correlation was found between MPH and cocaine use in patients with ADHD. Our study adds to the evidence that MPH confers negative effects in cocaine users without ADHD and should thus have no place in the treatment of these patients.

brain sciences

MDPI

Opinion

Malingering and Stimulant Medications Abuse, Misuse and Diversion

Joseph Sadek

Abstract: Attention deficit hyperactivity disorder (ADHD) is a neurodevelopmental disorder that interferes with multiple aspects of daily functioning. Malingering or feigning of symptoms can be a major challenge during ADHD assessment. Stimulant medication abuse, misuse and diversion may constitute another challenge during management. A literature search of the past 15 years on the topic continued to suggest that there are several reasons for malingering and faking ADHD symptoms. Some of the reasons include the intent to obtain prescriptions for stimulant medications for performance enhancement, to gain access to additional school services and accommodations, to use recreationally and to sell as a street drug. In some countries, patients may receive additional tax or student loan benefits. Several researchers suggested that self-report rating measures are easily simulated by patients without ADHD. They concluded that no questionnaire has proved sufficiently robust against false positives. Some clinical factors that may suggest malingering during the ADHD assessment are highlighted and some available tests to detect malingering are discussed.

«obtain prescriptions for stimulant medications for performance enhancement, to gain access to additional school services and accommodations, to use recreationally and to sell as a street drug. In some countries, patients may receive additional tax or student loan benefits.»

«Tools used in ADHD assessment can be easily manipulated»

Patient Preference and Adherence

Dovepress
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Open Access Full Text Article

ORIGINAL RESEARCH

Adult Patient Preferences for Long-Acting ADHD Treatments: A Discrete Choice Experiment

M Janelle Cambron-Mellott[1]
Jaromir Mikl[2]
Joana E Matos[1]
Jennifer G Erensen[2]
Kathleen Beusterien[1]
Marc J Cataldo[2]
Bernadette Hallissey[1]
Gregory W Mattingly[3–5]

[1]Kantar Health, New York, NY, USA; [2]Purdue Pharma L.P./Adlon Therapeutics, L.P., Stamford, CT, USA; [3]Department of Psychiatry, Washington University School of Medicine, St. Louis, MO, USA; [4]Midwest Research Group, St. Charles, MO, USA; [5]St. Charles Psychiatric Associates, St. Charles, MO, USA

Background and Objective: Treatment for attention deficit hyperactivity disorder (ADHD) requires a multifaceted approach including psychosocial interventions and pharmacological treatment. This study evaluates preferences for specific attributes associated with different long-acting stimulant treatment among US adults with ADHD.

Methods: Patients completed an online, cross-sectional survey, incorporating a discrete choice experiment to assess preferences for attributes.

Results: Analyses included 200 adults with ADHD (mean age 33.0 years; 60% self-reporting moderate severity); the mean (SD) Adult ADHD Self-Report Scale-v1.1 score was 45.9 (12.4). Overall, patients valued speed of onset most and risk of rebound least. Three population groups with distinct preferences were identified: side effect-driven (n=69, 35%), quick onset-driven (n=47, 24%) and quick onset and long duration-driven (n=84, 42%).

Conclusion: This study shows differences in how adults with ADHD value and assess benefit-risk trade-offs when considering the desired attributes of stimulant treatments, highlighting the importance of patient-physician shared decision-making to optimize the desired benefits of individualized treatment.

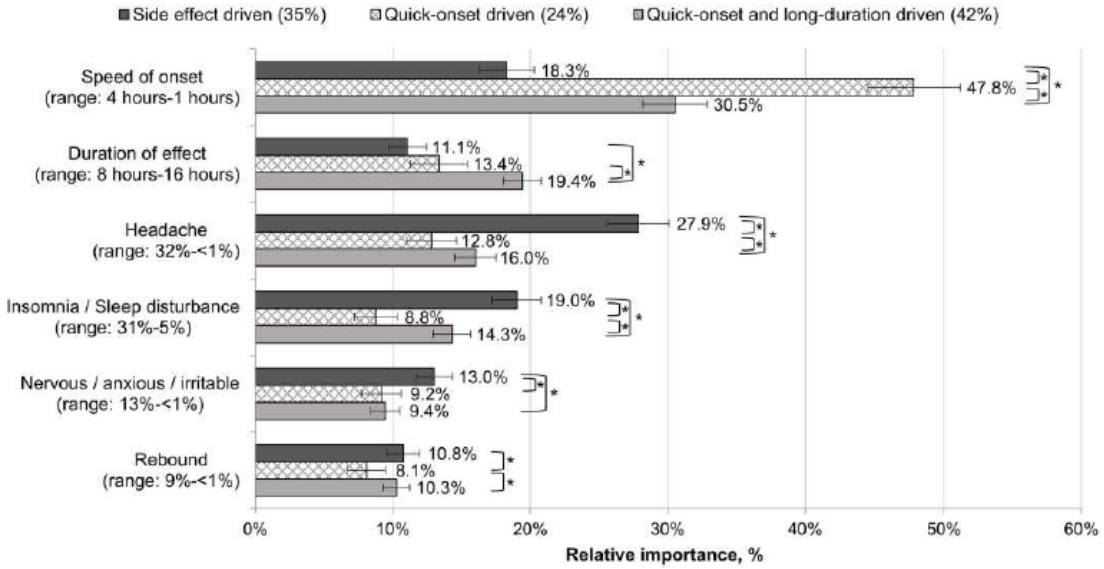
patients valued speed of onset most and risk of rebound least.

Three population groups with distinct preferences were identified: side effect-driven (n=69, 35%), quick onset-driven (n=47, 24%) and quick onset and long duration-driven (n=84, 42%).

Table 3 Attribute-Level Preference Weights: Total and by Latent Class Group

		Total (n=200)	Side Effects (n=69)	Quick Onset (n=47)	Quick Onset and Long Duration (n=84)
Attribute	**Level**	**M (95% CI)**	**M (95% CI)**	**M (95% CI)**	**M (95% CI)**
Speed of onset - "Medication takes effect in __"	4 hours	−3.32 (−3.55–3.09)	−1.86 (−2.11–1.60)	−4.65 (−5.05–4.26)	−3.78 (−4.04–3.52)
	2 hours	0.17 (0.10–0.23)	−0.03 (−0.13–0.06)	0.16 (−0.01–0.33)	0.34 (0.25–0.43)
	1.5 hours	1.25 (1.18–1.32)	0.91 (0.80–1.02)	1.51 (1.37–1.64)	1.38 (1.29–1.47)
	1 hour	1.90 (1.73–2.08)	0.98 (0.75–1.21)	2.99 (2.65–3.32)	2.06 (1.85–2.26)
Duration of effect - "Medication lasts for __ after it is taken"	8 hours	−1.28 (−1.48–1.07)	−0.62 (−0.88–0.35)	−0.15 (−0.52–0.22)	−2.45 (−2.66–2.24)
	12 hours	0.21 (0.15–0.27)	0.34 (0.24–0.45)	0.04 (−0.09–0.17)	0.20 (0.11–0.28)
	14 hours	0.64 (0.56–0.72)	0.33 (0.21–0.44)	0.50 (0.33–0.66)	0.98 (0.88–1.08)
	16 hours	0.42 (0.27–0.58)	−0.05 (−0.26–0.16)	−0.39 (−0.68–0.10)	1.27 (1.10–1.44)
Insomnia/sleep disturbance - "__ risk of insomnia or disruptions to sleep"	31%	−1.27 (−1.37–1.16)	−1.64 (−1.80–1.47)	−0.54 (−0.70–0.38)	−1.37 (−1.52–1.23)
	18%	−0.07 (−0.13–0.02)	−0.16 (−0.27–0.06)	0.06 (−0.07–0.18)	−0.07 (−0.15–0.00)
	5%	1.34 (1.23–1.46)	1.80 (1.63–1.97)	0.48 (0.31–0.66)	1.45 (1.30–1.60)
Headache - "__ risk of headache"	32%	−1.89 (−2.02–1.75)	−2.66 (−2.86–2.46)	−1.01 (−1.20–0.83)	−1.74 (−1.90–1.58)
	15%	0.32 (0.26–0.38)	0.29 (0.19–0.38)	0.16 (0.04–0.27)	0.44 (0.35–0.52)
	<1%	1.57 (1.42–1.71)	2.37 (2.17–2.57)	0.86 (0.66–1.06)	1.30 (1.12–1.48)
Nervousness/anxiety/irritability - "__ risk of feeling nervous, anxious, or irritable"	13%	−0.91 (−1.01–0.80)	−1.24 (−1.39–1.09)	−0.37 (−0.60–0.14)	−0.93 (−1.07–0.79)
	7%	0.14 (0.09–0.20)	0.21 (0.10–0.32)	0.15 (0.03–0.27)	0.08 (0.01–0.16)
	<1%	0.77 (0.66–0.87)	1.04 (0.86–1.21)	0.22 (0.01–0.43)	0.85 (0.71–0.99)
Rebound - "__ risk of rebound/crash effect when medication effect wears off (making you feel eg, moody, tired, drained, or sluggish)"	9%	−0.62 (−0.74–0.50)	−0.50 (−0.69–0.30)	0.01 (−0.20–0.22)	−1.08 (−1.23–0.93)
	3%	−0.04 (−0.12–0.05)	−0.46 (−0.56–0.35)	0.05 (−0.13–0.24)	0.26 (0.14–0.38)
	<1%	0.66 (0.56–0.76)	0.96 (0.79–1.12)	−0.06 (−0.24–0.12)	0.82 (0.70–0.94)

Note: Text appearing in quotations shows the text seen by respondents for each attribute.
Abbreviations: CI, confidence interval; M, mean.



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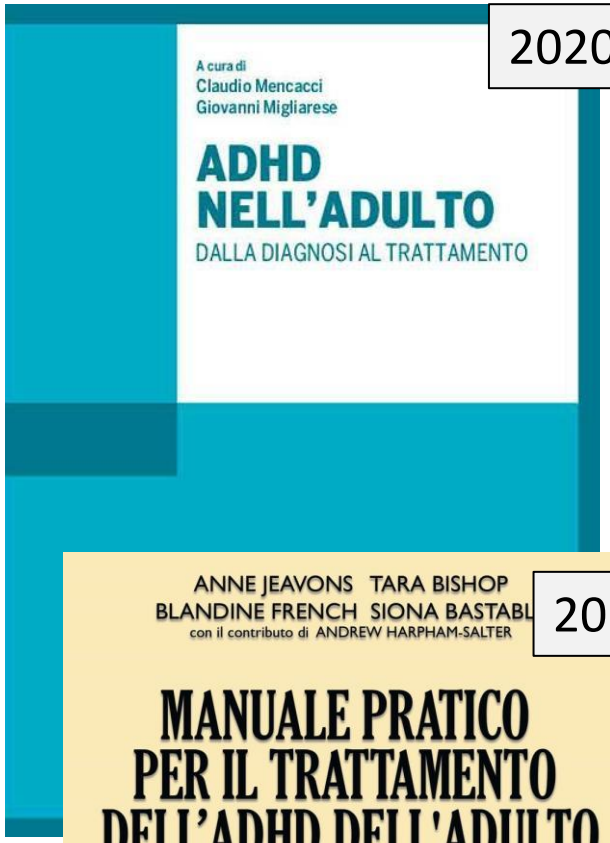

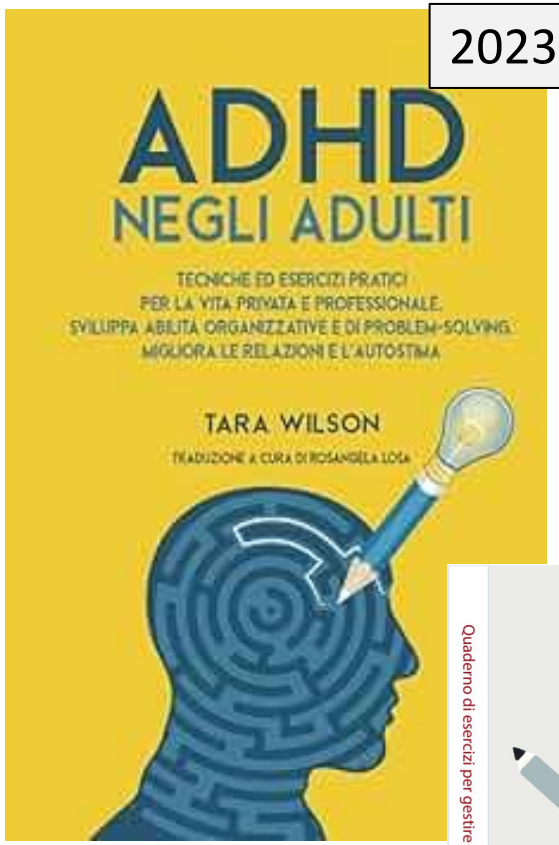

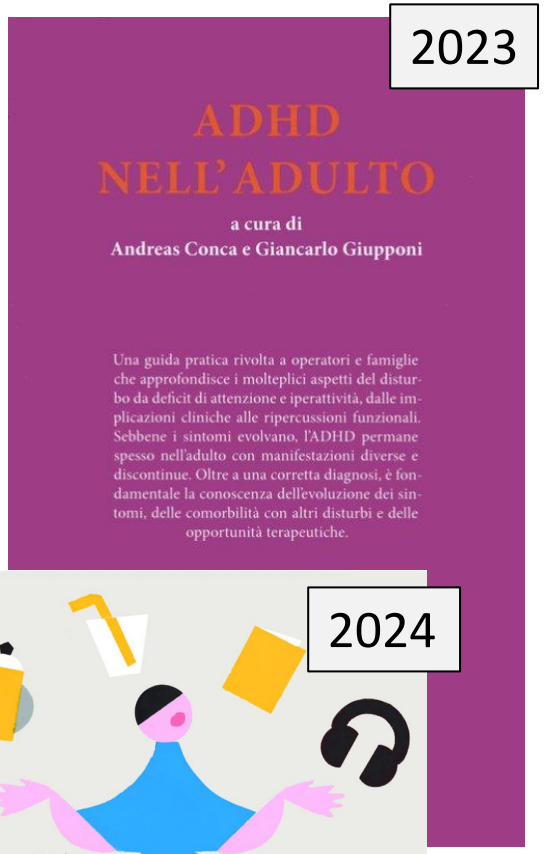

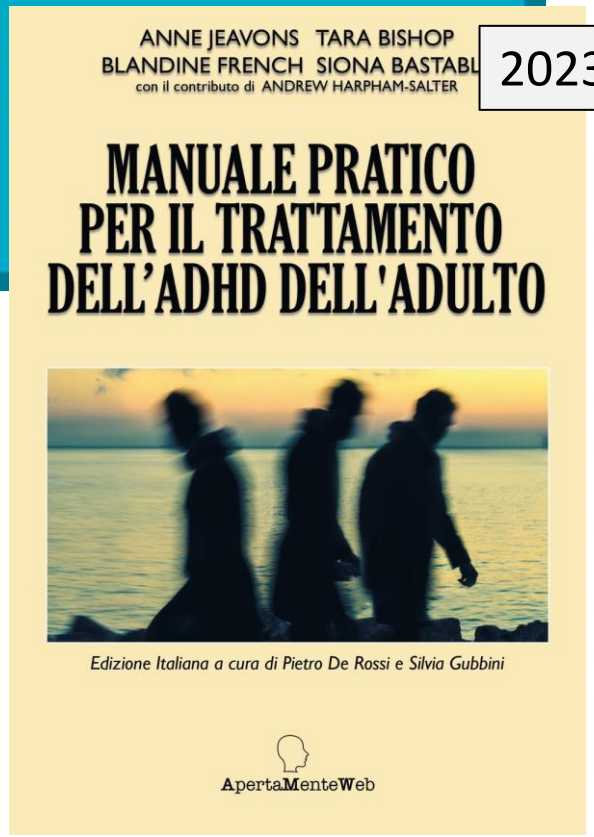

Amo i gesti imprecisi,
uno che inciampa, l'altro
che fa urtare il bicchiere,
quello che non ricorda,
chi è distratto, la sentinella
che non sa arrestare il battito
breve delle palpebre.
Mi stanno a cuore,
perché vedo in loro il tremore,
il tintinnio familiare
del meccanismo rotto.
L'oggetto intatto tace, non ha voce
ma solo movimento. Qui invece
ha ceduto il congegno,
il gioco delle parti,
un pezzo si separa,
si annuncia.
Dentro qualcosa balla.

(V. Magrelli)

GRAZIE

per L'AtTeNZiOnE

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Risk of Cardiovascular Diseases Associated With Medications Used in Attention-Deficit/Hyperactivity Disorder

A Systematic Review and Meta-analysis

Le Zhang, MPH; Honghui Yao, MSc; Lin Li, PhD; Ebba Du Rietz, PhD; Pontus Andell, MD, PhD; Miguel Garcia-Argibay, PhD; Brian M. D'Onofrio, PhD; Samuele Cortese, MD, PhD; Henrik Larsson, PhD; Zheng Chang, PhD

Key Points

Question Are attention-deficit/hyperactivity disorder (ADHD) medications associated with the risk of cardiovascular disease (CVD)?

Findings This systematic review and meta-analysis based on 19 observational studies with more than 3.9 million participants suggested that there was no statistically significant association between ADHD medications and the risk of cardiovascular events among children and adolescents, young and middle-aged adults, or older adults.

Figure 2. Risk of Any Cardiovascular Event by Age Group Among Individuals Receiving Attention-Deficit/Hyperactivity Disorder Medication

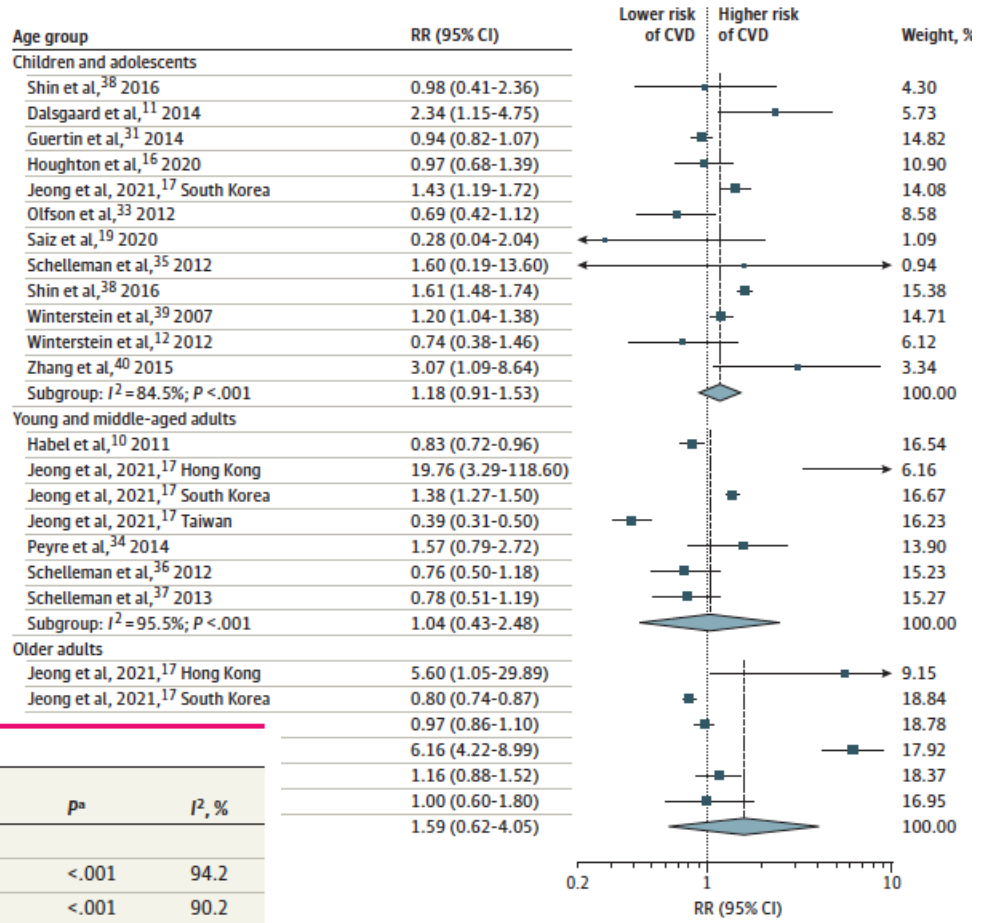

Table 2. Summary of Subgroup Analysis Results

Subgroup	Studies, No. (data sets, No.)	Pooled RRs	P[a]	I^2, %
Type of ADHD medication				
Stimulants	15 (17)	1.24 (0.84-1.83)	<.001	94.2
Nonstimulants	3 (3)	1.22 (0.25-5.97)	<.001	90.2
Specific CVD outcome				
Cardiac arrest or tachyarrhythmias	9 (9)	1.60 (0.94-2.72)	<.001	77.9
Cerebrovascular diseases	10 (10)	0.91 (0.72-1.15)	.14	34.0
Myocardial infarction	8 (10)	1.06 (0.68-1.65)	<.001	86.2
Sex groups				
Male	3 (5)	1.08 (0.32-3.67)	<.001	96.1
Female	3 (5)	1.88 (0.43-8.24)	<.001	85.6
Prior CVD history				
Without CVD history	10 (11)	0.99 (0.73-1.33)	<.001	98.7
With CVD history	7 (8)	1.31 (0.80-2.16)	<.001	99.0

The Risk of Treatment-Emergent Mania With Methylphenidate in Bipolar Disorder

Am J Psychiatry 174:4, April 2017

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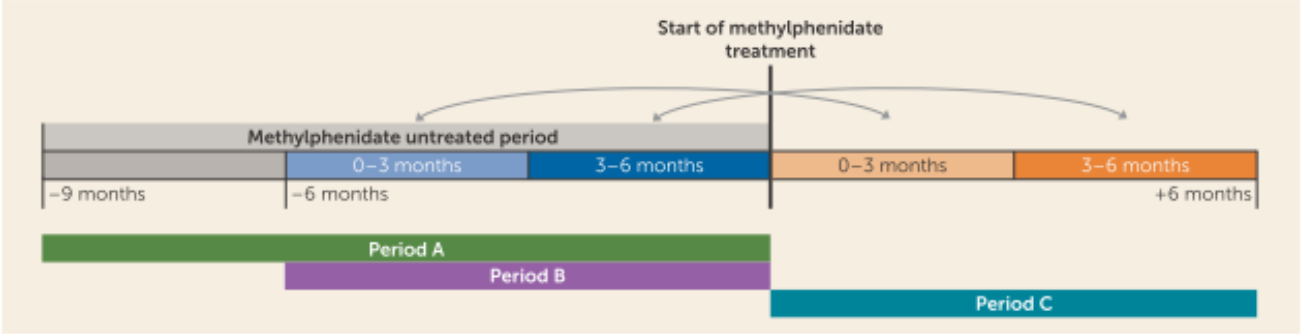
FIGURE 1. Design of a Registry Study of Treatment-Emergent Mania Associated With Methylphenidate in Patients With Comorbid Bipolar Disorder and ADHD[a]



[a] The design permits within-individual comparisons of mania after initiation of methylphenidate treatment with a preceding nontreatment period. The follow-up time is divided into 0–3 months and 3–6 months to assess both acute (switch) and longer-term effects.

On the basis of this finding, we recommend careful assessment to rule out bipolar disorder before initiating methylphenidate as a monotherapy.

"This study suggests that methylphenidate may increase the risk of treatment-emergent mania in patients suffering from bipolar disorder when it is used without a concomitant mood-stabilizing treatment."

TABLE 2. Risk of Mania in Patients With Comorbid Bipolar Disorder and ADHD Following Methylphenidate Treatment, Based on Mania Diagnoses and New Prescriptions for Antipsychotics and Mood Stabilizers[a]

				Mania Events (12-Month Follow-Up)	
Group	Hazard Ratio	p	95% CI	N	Rate[b]
No mood-stabilizing medication[c] (N=718)				61	0.08
0–3 months	6.67	0.002	1.98–22.4		
3–6 months	9.67	<0.001	2.94–31.7		
Mood-stabilizing medication[d] (N=1,103)				195	0.18
0–3 months	0.56	0.010	0.36–0.87		
3–6 months	0.91	0.758	0.50–1.67		

Chang et al. Biol Psychiatry. 2019 Dec 13

Medication for Attention-Deficit/Hyperactivity Disorder and Risk for Suicide Attempts.

BACKGROUND:

Attention-deficit/hyperactivity disorder (ADHD) is a risk factor for suicidal behavior, but the effect of ADHD medication on suicidal behavior remains unclear. This study aimed to examine the associations between medication treatment for ADHD and risk of suicide attempts.

METHODS:

We identified a large cohort of patients with ADHD (N = 3,874,728, 47.8% female patients) using data from commercial health care claims from 2005 to 2014 in the United States. We used population-level and within-individual analyses to compare risk of suicide attempts during months when individuals received prescribed stimulant or nonstimulant medication relative to months when they did not receive medication.

RESULTS:

In both population-level and within-individual analyses, ADHD medication was associated with lower odds of suicide attempts (odds ratio [OR], 0.69; 95% confidence interval [CI], 0.66-0.73; and OR, 0.61; 95% CI, 0.57-0.66, respectively). Similar reductions were found in children to middle-aged adults and in clinically relevant subgroups, including patients with ADHD with preexisting depression or substance use disorder. The reduction was mainly seen for stimulant medication (OR, 0.72; 95% CI, 0.66-0.77); nonstimulant medication was not associated with statistically significant changes in risk of suicide attempts (OR, 0.94; 95% CI, 0.74-1.19). Sensitivity analyses assessing the influence of different exposure definitions, different outcome definitions, subsets of the cohort, and different analytic approaches provided comparable results.

CONCLUSIONS:

Stimulant medication was associated with a reduced risk of suicide attempts in patients with ADHD, and nonstimulant medication is unlikely to increase the risk of suicide attempts.

Nei soggetti con ADHD in età adulta (A-ADHD), il consumo di cocaina può inizialmente ridurre i sintomi di disattenzione, attuando una forma di relief craving che sostiene l'uso continuativo della sostanza.

Con il tempo, tuttavia, la cocaina — caratterizzata da un'azione rapida e intensa — determina effetti disforici e meccanismi di dipendenza, che si sommano ai sintomi di base dell'ADHD. In questo modo le due condizioni finiscono per amplificare reciprocamente i loro effetti negativi: l'euforia iniziale lascia rapidamente spazio alla disforia legata all'intossicazione e all'astinenza.

L'impiego di stimolanti terapeutici, al contrario, non comporta effetti disforici. Essi riducono i sintomi di disattenzione e, di conseguenza, attenuano il "bisogno" di cocaina. La riduzione del craving è quindi proporzionale al miglioramento dei sintomi attentivi indotti dall'ADHD e al contenimento degli stati disforici indotti dalla dipendenza da cocaina.