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ملاحظات: لايوجد

SEXUAL ABUSE AND SELF-ESTEEM IN ATTENTION DEFICIT/HYPERACTIVE CHILDREN WITH INTERNALIZING AND EXTERNALIZING BEHAVIORS

Thesis

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Department of Medical Studies for Children

By

Hanan Abu El Nasr Zakaria Masoud
Master degree in childhood studies, Care for Special Needs Children- Ain Shams University

Under Supervision of

Dr. Mona Medhat Reda
Professor of Psychiatry
Faculty of Postgraduate Childhood Studies- Ain Shams University

Dr. Tarek Mohamed El Sehrawy
Lecturer of Psychiatry
Faculty of Medicine- Ain Shams University

Dr. Zeinab Mohamed Ahmed Ali
Lecturer of Psychiatry
Faculty of Medicine- Ain Shams University

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Hanan Abu El Nasr Zakaria

Contents

List of Abbreviations

ACEs	**:**	Adverse childhood experiences
ADHD	**:**	Attention Deficit/Hyperactivity Disorder
ADHD SC4	**:**	ADHD Symptom Checklist IV
ADHD-C	**:**	ADHD-combined presentation
ADHD-H	**:**	ADHD-predominantly hyperactive/impulsive
ADHD-I	**:**	ADHD-predominantly inattentive
ASD	**:**	Autism Spectrum Disorder
CBCL	**:**	Child Behavior Checklist
CBT	**:**	Cognitive Behavior Therapy
CD	**:**	Conduct Disorder
CSA	**:**	Child Sexual Abuse
CSAQ	**:**	Child Sexual Abuse Questionnaire
CSEI	**:**	Coopersmith Self-Esteem Inventory
CSV	**:**	Child Sexual Victimization
DSM-V	**:**	Diagnostic and Statistical Manual of Mental disorders, fifth edition
EXT	**:**	Externalizing / Externalization
GMV	**:**	Gray matter volume
INT	**:**	Internalizing / Internalization
INT&EXT	**:**	Internalization and Externalization
IQ	**:**	Intelligence Quotient
MW	**:**	Mind wandering

NCSV	**:**	Noncontact sexual victimization
NRBs	**:**	Normal Range Behavior
ODD	**:**	Oppositional Defiant Disorder
SE	**:**	Self-Esteem
SPSS	**:**	Statistical Package for Social Science
SV	**:**	Sexual Victimization / sexually victimized,
SVE	**:**	Sexual Victimization Exposure

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Abstract

Sexual Abuse and Self-Esteem in Attention Deficit/Hyperactive Children with Internalizing and Externalizing Behaviors

Introduction: ADHD and CSV are associated with long-lasting negative neuropsychiatric consequences and low SE. **Objective**: assessing SE level in relation to psychopathology, SVE, and ADHD characteristics and investigating the relationship between SVE and comorbid psychopathology in ADHD. **Subjects and Methods:** 186 ADHD children with internalizing and/or externalizing psychopathology of both sexes with age 8-14 years underwent physical health assessment, psychiatric assessment, psychometric assessment in the form IQ testing, ADHD rating, behavioral and emotional assessment, SE assessment and SVE screening and compared to 186 matching pure ADHD controls. **Results:** ADHD children with internalizing and/or externalizing psychopathology showed statistically significant lower total and domain specific CSEI scores and higher frequency of SVE than pure ADHD children. Internalization psychopathology was related to worse CSEI scores and more SVE. Some sociodemographic and ADHD characteristics were associated with lower CSEI scores. **Conclusion:** Low SE is associated with internalization and/or externalization psychopathology and SVE. The worst affection is related to SVE and comorbid Internalization.
Keywords: ADHD, Attention Deficit/Hyperactive, self-esteem, sexual victimization, abuse, children, internalization, externalization, psychopathology

Introduction, Hypothesis and Aim of Study

Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is a common debilitating neurodevelopmental disorder that affects children worldwide with variable prevalence estimates among countries, which range from 3.4% and 5% in some researches ***(Duda et al., 2019)*** to 8%–12% in other ones ***(Fontana et al., 2019).*** It is presented clinically by behavioral symptoms associated with inattention and/or hyperactivity and impulsivity ***(American Psychiatric Association, 2013).*** It also shows marked clinical heterogeneity; patients with the disorder differ in terms of core symptoms, level of impairment, comorbidities, coexisting problems and background from the individual, family and social standpoints ***(Thapar & Cooper, 2016).***

The etiology of ADHD is poorly understood, although multifactorial and highly genetic, both environmental and genetic factors contribute to the onset of the disorder ***(Tandon & Pergjika, 2017; Dark et al., 2018).*** Neuropsychiatric comorbidity in ADHD is frequent; occurring in over 2/3 of cases, impairing and poorly understood. Coexistent morbidities include sleep, conduct and childhood onset neurodevelopmental disorders; language disability, learning disability, autism spectrum disorder, tic disorders and psychiatric comorbidities; mood disorders, depressive disorders, anxiety disorders ***(Takeda et al., 2012; Thapar & Cooper, 2016).*** Moreover, various externalizing and internalizing disorders are present in children with ADHD ***(Kim & Kwack, 2018).*** It is estimated that over 50% of children with ADHD present with comorbid externalizing problems and 25–64% present with comorbid internalizing disorders ***(Mulraney et al., 2016).***

Internalizing disorders are mental disorders with primary symptoms that involve inner emotions ***(Thackery & Harris, 2003).*** They include social withdrawal, inhibition, shyness, anxiety, fear, rumination, distress and depression ***(Farmer et al., 2016).*** Meanwhile, externalizing disorders are mental disorders with primary symptoms that involve outward behavior ***(Thackery & Harris, 2003).*** They involve problems characterized by acting out including aggressive, destructive, impulsive, disruptive, oppositional and rule-breaking behaviors ***(Farmer et al., 2016).*** The effect of these disorders on the level of development and function in ADHD children vary depending on the pattern of the comorbid psychopathology ***(Kim & Kwack, 2018).***

Self-esteem refers to an individual's perception of personal self-worth and it is a mutable view of self whose roots of development begin early in childhood ***(Rosenberg, 1965).*** A child's self-esteem is influenced negatively or positively by maturational, social and environmental factors ***(Wright et al., 2012).*** Since children with ADHD exhibit deficits in working memory, processing speed, attention span and other executive functions, multiple secondary problems such as low academic achievement, difficulty with interpersonal relationships, negative emotional development, low self-esteem will eventually evolve ***(Dane & Welcome, 2018).***

Child Sexual Abuse (CSA) is operationalized as any act that exposes a child in, or involves a child in, sexual processes beyond his or her understanding or contrary to accepted standards ***(Palmer & Feldman, 2017).*** CSA has long-lasting negative consequences. It is associated with anxiety, aggressiveness, anger- management problems, interpersonal difficulties, post-traumatic stress disorders, depression, suicidal behavior, ADHD,

conduct disorder and the vulnerability for developing other psychiatric disorders ***(Arias & Johnson, 2013).***

It has been found that rate of sexual abuse was higher in children diagnosed with ADHD and especially comorbid ADHD and oppositional defiant disorder (ODD) ***(Goktena et al., 2016)*** and that self-esteem problems seem to be the common factor that interconnects many sequels of CSA experience, such as poor interpersonal skills in adulthood and increased vulnerability and exposure to psychological stress, sexual health risks and problems in intimate relationships ***(Lamoureux et al., 2012; Cortes et al., 2011).***

Hypothesis

Self-esteem level in children with ADHD is varied by disease characteristics, treatment modality and co-morbid conditions.

Aim of study

- To assess the level of self-esteem in children with ADHD in relation to internalizing and externalizing behaviors and sexual victimization experiences.
- To assess the relationship between sexual victimization exposure and internalizing & externalizing behaviors and relate it to self-esteem in ADHD children.
- To examine how self-esteem level varies by ADHD characteristics and treatment (psychological and pharmacological). Thus, helping in identifying factors affecting self-esteem.

Attention-deficit Hyperactivity Disorder

Attention-deficit hyperactivity disorder (ADHD) is one of the most common neuropsychiatric disorders with childhood onset, which has a chronic course and is associated with high dysfunction and morbidities throughout life ***(Kieling & Rohde, 2012).***

Aetiology

ADHD is a biopsychosocial disorder in which biological, psychological and environmental factors interplay to develop the symptoms ***(Scope, 2014)***. Differences in brain structure, genetic factors and environmental factors, influence prenatal neuroanatomical development ***(Miller, 2018)*** and interact to yield cognitive deficits and subsequent inappropriate or atypical behaviors displayed in ADHD ***(Scope, 2014),*** while other non-causative factors; socioeconomic, exposures, overall health influence expression, severity, course and comorbidity ***(Fischer & Herberholz, 2016).***

1. Biological Factors:

1.1. Genetic:

Genetics has a key role in ADHD etiology, with an estimated heritability of around 76% ***(Akutagava-Martins et al., 2016).*** ADHD is 2- to 8-fold higher in children of parents with ADHD ***(Faraone & Mick, 2010)*** and has 9-fold increased risk in siblings of ADHD ***(Faraone & Larsson, 2019)*** with higher concordance rate for monozygotic twins up to 92% than for dizygotic twins that is about 33% ***(Leung & Hon, 2010).***

The main inheritance mode is non-Mendelian ***(Thapar & Cooper, 2016)*** with association to either candidate genes or

genomic regions ***(Arcos-Burgos & Muenke, 2010)*** on different specific chromosomes ***(Faraone & Larsson, 2019)***.

1.2. Neuroanatomical and neurofunctional:

Co-occurring anatomical and functional alterations are present in ADHD: larger gray matter volume (GMV) in bilateral frontal regions, intracalcarine and temporal cortices and smaller GMV with larger functional connectivity in fronto-parietal networks along with altered white matter microstructure, in addition to widespread smaller GMV in different brain regions which was proved to be associated with higher symptom severity ***(Wu et al., 2019).*** Also, functional MRI studies demonstrate abnormal activation of the frontostriatal regions with greater frontal and lower striatal activation during response inhibition and lack of frontal lobe inhibitory processes ***(Mandelbaum, 2017).***

1.3. Neurotransmitters

Many neurotransmitters are implicated in ADHD ***(Mehta et al., 2019).*** Implicated neurotransmitters are dopamine, serotonin ***(Quinn & Lynch, 2016),*** noradrenaline ***(Mehta et al., 2019),*** glutamate and Gamma-aminobutyric acid ***(Naaijen et al., 2017).***

According to dopaminergic hypothesis, ADHD is associated with dopaminergic dysfunction in the meso-cortical, mesolimbic and nigrostriatal pathways. Reduction of dopamine is implicated in decreased attention, restlessness, cognitive deficits, motivational deficits and impaired learning ***(Mehta et al., 2019).***

In addition, central noradrenergic system regulation, specifically in noradrenergic transporters which play a key role modulating arousal and cognitive processes, is altered in ADHD patients ***(Ulke et al., 2019)*** beside the increase in serotonin and the significant decrease in serotonin transporter levels ***(Jawad et al., 2019).***