QUALITY OF LIFE IN ATTENTION-DEFICIT/ HYPERACTIVITY DISORDER IN DIFFERENT AGE GROUPS

Thesis submitted for fulfillment of PhD
In Medical Childhood Studies (Special Needs)

BY

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قسم الدراسات الطبية للأطفال

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عنوان الرسالة: جودة الحياة لدى الأطفال المصابون باضطراب فرط الحركة وتشتت الانتباه في الفئات العمرية المختلفة

اسم الطالب: إيمان علاء الدين إسماعيل

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صفحة الموافقة

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ABSTRACT

QUALITY OF LIFE IN ATTENTION-DEFICIT/ HYPERACTIVITY DISORDER IN DIFFERENT AGE GROUPS

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Aim of the study: To evaluate the quality of life (QoL) of children and adolescents with attention deficit hyperactive disorder (ADHD) in different age groups who attend the clinics of the Faculty of Postgraduate Childhood Studies, Ain Shams University.

S**tudy design**: Case-control study. **Methods**: 5 groups were included in this study from age (4 to 18) years old.

All subjects were subjected to full medical history and general clinical examination, psychiatric history and examination according to the psychiatric sheet of the clinic of the FPGCS, psychological assessments using Stanford Binet 5th edition and Attention Deficit Hyperactivity Disorder symptoms was rated according to The Conners Comprehensive Behavior Rating Scale for diagnosis and severity. Qol was measured with a questionnaire using the Pediatric Quality of Life Generic Core Inventory version 4 (PedsQL) and family socioeconomic status of the cases was measured using Al-Shakhs (2013) rating scale questionnaire .Scoring of Conners scale using the T-scores as follows, T-score of more than (60) can indicate that the child may have mild form of ADHD while between (60-70) indicate moderately severe issues and a T-score above (70) may be a sign that the behavioral, academic, or emotional problems are severe. The collected data were

analyzed using SPSS (Statistical Package for Social Sciences) software version (25), IBM Corp., Chicago, USA, (2009).

Results: There was group matching between ADHD and control research groups as regards demographic characteristics. Socioeconomic classes were closely matched. Most of the studied ADHD cases had moderate ADHD severity (40.4%) of the studied data. Sex differences shows male predominant in all severities. Regarding Socioeconomic classes, severe form of ADHD was found among lower socioeconomic class (64.5%), highly significant results ($p<0.001$). Physical functioning score statistically significantly decreased as ADHD severity increased. ($p<0.001$) Other scores and total score significantly increased as ADHD severity increased ($p <0.001$). Health and activities score decreased as ADHD severity increased. Other scores and total score increased as ADHD severity increased in a statistically significant manner ($p<0.001$). Physical functioning score were statistically significantly higher among males ($p<0.001$). Emotional functioning score was statistically non-significantly lower among males. School functioning score was statistically significantly lower among females.

Conclusion:

Quality of life is negatively affected in children having ADHD with male affection more than female in physical domains. Lower social class was negatively affected more than high social class patients.

Keywords:

ADHD, Attention deficit hyperactive disorder, Quality of life, QoL, PedsQL, Socioeconomic, Egypt.

CONTENTS

LIST OF ABBREVIATIONS

ADD	Attention-Deficit Disorder.
ADHD	Attention-Deficit Hyperactivity/Impulsivity Disorder.
ADHD-C	Combined ADHD
ADHD-PHI	Predominantly hyperactive-impulsive
ADHD-PI	Predominantly inattentive
ASD	Autism Spectrum Disorder
BMT	Behavior Management Therapy.
CD	Conduct Disorder.
CDD	Concentration Deficit Disorder
CHQ	Child Health Questionnaire.
DB	Disruptive Behavior.
DBD	Disruptive Behavior Disorder.
DSM-5	Diagnostic and Statistical Manual of Mental Disorders
EI	Emotional Impulsivity
FDA	Food and Drug Administration
FPGCS	Faculty of Postgraduate Childhood Studies
HRQoL	Health Related Quality Of Life.
ICD	International Classification of Diseases
LD	Learning Disability
MPH	Methylphenidate
MTA	Multisite Multimodal Treatment Study of ADHD.
NIMH	The National Institute of Mental Health
ODD	Oppositional Defiant Disorder.
PBT	Parenting behavior training

PedsQL	Pediatric Quality of Life Inventory.
PFOS	Perfluorooctane Sulfonate
PRO	Patient-reported outcome
PROMs	Patient-reported outcome measures
QoL	Quality of life.
SCT	sluggish cognitive tempo
SES	Socioeconomic status
WHO	The World Health Organization
β-HCH	β-hexachlorocyclohexane

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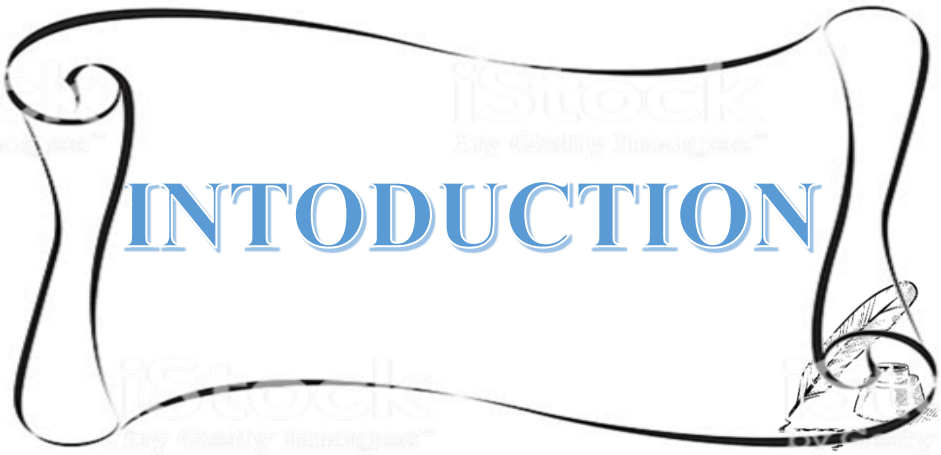
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INTRODUCTION

Attention - deficit / hyperactivity disorder (ADHD) represents one of the most prevalent childhood psychiatric disorder. However, due to public unawareness, it is one of the most neglected and misunderstood condition and usually considered a social stigma. The lack of diagnosis and proper treatment and support often results in a negative impact on the quality of life of the affected individual and their families. It affects the academic performance, social relationship, results in a negative self-esteem and can result in early school leaving ***(Young et al., 2013)***.

ADHD is a multifaceted disorder that varies in its types and severity of its symptoms. It includes some combination of neurobehavioral problems, such as difficulty sustaining attention, hyperactivity and impulsiveness. It often persists into adulthood and can profoundly affect the academic achievement, well-being, and social interaction ***(American Academy of Pediatrics, 2011)***.

The symptoms usually start before the age of (12) years, in some children, they appear as early as (3) years old. The disorder occurs more often in boys than girls with different predominant symptoms, as boys usually present with more hyperactivity symptoms, while girls present predominantly with inattentiveness. Younger children manifest the symptoms approximately twice as frequently as adolescents ***(Simon et al., 2009; Mayo Clinic, 2012).***

It is estimated that ADHD occurs in (3 to 5)% of preschool and school age children. This clarifies that in a class of (25 to 30) students, it is

expected to find at least one child suffering this disorder. The symptoms often decrease with age. The prevalence in adults is estimated to be (2.5%). Adolescents with ADHD are at risk of poor academic accomplishment, drug addiction, troubled social relationship ***(Simon et al., 2009; American Academy of Child Adolescent psychiatry, 2014).***

It is important to differentiate ADHD from other psychiatric disorders of children such as compulsive disorders, mood or anxiety disorders and learning disorders. Such disorders may associate ADHD as they share some of features but differ in other aspects, hence, need other management ***(Barkley & Peters, 2012)***.

Treatment of ADHD includes medications and non-medication interventions that are usually combined. The pharmacological interventions are often the use of psycho-stimulant medications. However, non-stimulants or antidepressants may be used in instead of or combined with stimulants in certain cases. The non-medication approaches include psychotherapy and behavior training for the child and his family members. ADHD affects the quality of life of children with ADHD together with their families ***(Lange et al., 2005; Morisse et al., 2013; Moen, 2014).***

The presented study aims at clarifying the nature of ADHD and its impact on the quality of life of the affected children. This is reached through a review of literature and an empirical study on Egyptian children.