

Needs and Problems of Children with Attention Deficit/ Hyperactivity Disorder (ADHD) and their Caregivers

Thesis

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List of Abbreviations

AAC AP	:	American Academy of Child and Adolescent Psychiatry
AAP	:	American Academy of Pediatrics
ADD (H)	:	Attention Deficit Disorder with or without Hyperactivity
APN	:	Advanced Practice Nurse
CCD	:	Community Care Division
CDC	:	Centers of Disease Control and Prevention
CDI	:	Child Developmental Institute
COMT	:	Catechol-O-Methyl Transferase
CS	:	Cesarian Section
CSF	:	Cerebro Spinal Fluid
DA	:	Dopamine
DAT	:	Dopamine Transporter Gene
DI	:	Dopamine Type 1
DRCs	:	Daily Report Cards
DRD4	:	D4 Dopamine Receptor Gene
DSM III	:	Diagnostic and Statistical Manual of Mental Disorders (3 rd edition)
ECG	:	Electro CardioGram
EEG	:	Electro EncephaloGram
EF	:	Executive Function

List of Abbreviations (Cont.)

EPI	:	Epinephrine
FAEs	:	Fetal Alcohol Effects
FAS	:	Fetal Alcohol Syndrome
HI	:	Serotonin
HRQOL	:	Health Related- Quality Of Life
ICU	:	Intensive Care Unit
IDEA	:	Individuals with Disabilities Education Act
IQ	:	Intelligence Quotient
MHPG	:	3 Methoxy-4-HydroxyPhenylGlycol
MRI	:	Magnetic Resonance Imaging
NE	:	Norepinephrine
NIMH	:	National Institute of Mental Health
ODD	:	Oppositional Defiant Disorder
PET	:	Positron Emission Tomography
RNA	:	Ribonucleic Acid
SDB	:	Sleep Disorder Breathing
SES	:	SocioEconomics State
TST	:	Total Sleep Times
LA	:	Long Acting

INTRODUCTION

Attention-deficit/hyperactivity disorder (ADHD) is one of the most common chronic conditions of childhood and the most common neurobehavioral disorder in child health (**National Institute of Health, 2008**). It is possible that these children will never outgrow this condition and their ADHD will continue into adulthood (**Tracy et al., 2008**). The prevalence for the rates of ADHD in school-age children differs from the 3% to 5% worldwide (**Marilyn, 2006**).

The ADHD is manifested in approximately 4-12% of children between the ages of 6 and 12 years and affects with boys 8 times more likely than girls to have it. The most prevalent co-morbid conditions in children were oppositional defiant disorder, conduct disorder, and anxiety. Each co-morbidity occurred in approximately 25-33% of patients diagnosed with ADHD. Approximately 20% of patients had depressive or learning disorder (**Jennifer et al., 2009**). In this context **The Ministry of Health and Population (2005)** reported that the prevalence of ADHD in Egypt is 5%, approximately 800.000 children out 16363598 aged from 4 up to 12 years.

Symptoms of ADHD include difficulty staying focused and paying attention, difficulty controlling behavior, and hyperactivity. The patient condition is easily distracted, has poor grades, poor social skills and low self esteem. They tend to blurt out things and interrupt others while they are talking

have trouble sitting still and they talk excessively, and often seem to be very fidgety (**National Institute of Health, 2008**).

Although the exact cause of ADHD is unknown, it is believed that genetics and heredity play a part. Constant exposure to low levels of lead, being born premature, difficulties in childbirth and exposure to cigarette smoke from the pregnant mother may cause children to be at greater risk for developing this condition. Ritalin long acting (LA) works by affecting certain chemicals in the brain that are linked to both hyperactivity control and impulse control (**National Institute of Health, 2008**).

There are many pediatricians, psychiatrist and parents who feel that ADHD behaviors could be caused by environmental factors (vaccines, pesticide and chemical exposure) poor nutrition (insufficient intake of vitamins, minerals and excessive food coloring) or even allergies (intolerance to dairy or wheat for example). Social, emotional, and educational influences could also play a part. If the causes of ADHD and ADD are environmental or social then using drugs to “treat” them would be merely masking the symptoms and not getting to the root of the problem (**Natural remedies for ADD and ADHD, 2009**).

There are three differentiated types of symptoms of (ADHD), the first includes problems of *inattention* which children may appear not to listen to others, may lose necessary school assignments, books or tools and may not pay enough attention to details. The second type of symptoms include

hyperactivity which includes fidgeting, having trouble sitting for any length of time. The third general symptom is **impulsivity** which includes blurting out answers before questions have been completed (**Rieff and Tippins, 2004**).

ADHD diagnosis is usually made by a pediatrician, neurologist, psychologist, psychiatrist or trained social worker. Teachers, who work closely with many children and are likely experienced at dealing with ADHD, are often useful in helping to spot possible cases. They can help monitor children and discuss potential issues with parents. Many schools also require teachers to fill in evaluation forms, which a professional considering a diagnosis of ADHD is needed (**Tracy et al., 2008**).

There's no cure for ADHD, pediatrician treat children by helping them to manage the symptoms most effectively. Because some children have more trouble with the attention side of the disorder and others have more problems with the activity side. Pediatrician usually follow a multimodal approach to ADHD treatment. This means that they use several different treatment methods for one children, such as medication, family an individual counseling, and changes at school to address particular learning styles. Certain medicines can help children with ADHD by improving their focus and attention and reducing the impulsiveness and hyperactivity associated with ADHD. Family counseling helps treat ADHD because it keeps parents informed and also shows them ways they can work with their kids to help. It also helps to improve communication, individual counseling helps teens with ADHD

to be better. Schools are also involved in helping students with ADHD (**Silver, 2008**).

The role of the nurse is commensurate according to educational preparation, use of nursing theoretical frameworks, clinical experience, personal interest and the clinical care setting. Nursing roles and responsibilities vary, from administering medications to developing and implementing holistic treatment plans. Responsibilities will be commensurate with educational preparation and legal parameters. Regardless of the level of practice, the nurse's role is to assess, diagnose, plan, implement, and evaluate the child's response to interventions. Interventions should be designed so as to minimize symptoms, improve relationships, and enhance child functioning, (**Cynthia, 2008**).

AIM OF THE STUDY

This study aimed to assess needs and problems of children with attention deficit / hyperactivity disorder (ADHD) and their caregivers.