Abbreviations

- **ACTH:** Adrenocorticotrophic hormone.
- **ADHD:** Attention Deficit Hyperactivity Disorder.
- **BNST :** Bed nucleus of stria terminalis.
- **CBT :** Cognitive behavioral therapy.
- **CRF :** Corticotropin releasing factor.
- **DSM** : Diagnostic and Statistical manual of mental disorders.
- **FDA :** Food and drug administration.
- **GAD :** Generalized anxiety disorder.
- **HPA axis:** Hypothalamic pituitary adrenal axis.
- **ICD-10:** International Classification of Diseases, 10^{th}version.
- **MINI-KID:** Mini International Neuropsychiatric Interview for Children.
- **MMSE:** Mini-Mental State Examination.

- **NE :** Norepinephrine.
- **OCD:** Obsessive compulsive disorder.
- **PTSD:** Post traumatic stress disorder.
- **RCT** : Randomized control trial.
- **SSRIs**: Selective serotonin reuptake inhibitors.
- **STG** : superior temporal gyrus .
- **TCAs** : Tricyclic antidepressants.

PREVALENCE OF NEUROTIC DISORDERS IN AN EGYPTIAN SAMPLE OF PRIMARY SCHOOL CHILDREN

Thesis
Submitted for partial fulfillment for
Master degree

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DEDICATION

To my MOTHER,

FATHER,

SISTER and BROTHER,

for their love and care.

To everyone who helped me
throughout this work.

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Aim of the Work

1- To study the prevalence of neurotic disorders in primary school children (9-12 years)**.**

2- To estimate the gender difference in the prevalence of neurotic disorders in the study population.

3- To clarify the prevalence of anxiety disorders in relation to age.

Introduction

Anxiety disorders are the most common psychiatric conditions in the pediatric population, with prevalence estimates ranging from 5–18%. Children and adolescents with excessive anxiety often meet diagnostic criteria for a number of disorders within the DSM-IV **(*Labellarte MJ et al., 1999)***

Neurotic disorders are thought to be caused by an unconscious conflict that generates anxiety; symptoms develop when an individual's defenses can not cope adequately with this anxiety. ***(Toy and Klamen, 2007)***

Neurotic symptoms such as worry, tiredness, and sleepless nights are common in the general population affecting more than half of adults at some time, while as many as one person in seven experiences some form of diagnosable neurotic disorder. The World Health Organization's study of mental disorder in general health care screened over 25 000 people in 14 countries worldwide and assessed 5500 in detail. A quarter had well defined disorders, and a further 9% had sub-threshold conditions. The most common disorders were depression (10%) and generalized anxiety disorder (8%). ***(Craig and Boardman, 1997).***

Neurosis is a chronic or recurrent non psychotic disorder characterized mainly by anxiety which is experienced or expressed directly or is altered through defense mechanisms; it appears as a symptom such as an obsession, a compulsion, a phobia. In the 3rd edition of DSM a neurotic disorder was defined as follows: a mental disorder in which the predominant disturbance is a symptom or group of symptoms that is distressing to the individual and is recognized by him or her as

unacceptable and alien (ego dystonic); reality testing is grossly intact. Behavior does not actively violate gross social norms(though it may be quite disabling). The disturbance is relatively enduring or recurrent and is not limited to a transitory reaction to stressors. There is no demonstrable organic etiology or factor. ***(Sadock and Sadock, 2004).***

If children experience an excessive amount of anxiety during this stage, this could lead to development of anxiety disorders later in life.

Patients with neurotic illness become chronically unwell and high users of primary care services***. (Lloyd et al., 1996)***.

Neurotic disorders such as acute anxiety or panic disorder can cause chaotic or dangerous behavior, ***(Atakan and Davies,1997)*** , and even associated with raised mortality (the death rate among psychiatric outpatients with neurotic disorders is raised by a factor of 1.5 to 2). Increased deaths have been ascribed to suicide, accidental deaths, or even misdiagnosis of underlying physical conditions. ***(Sims and Prior, 1978)***

Such patients need appropriate physical, psychological and social effective intervention, particularly those with a more severe illness who do not recover within one year. ***(Lloyd K, Jenkins. 1995)***

Stress can trigger anxiety disorders, and children and adolescents with anxiety disorders seem to have an increased physical and psychological reaction to stress. Their reaction to danger, even if it is a small one, is quicker

and stronger**.** About 70% of grade school children report they worry "every now and then".***(Muris P et al,1998)***

The term neurosis encompasses a broad range of disorders of various signs and symptoms, as such; it has lost its precision. ***(Sadock and Sadock, 2004).***

However; it is still retained in the ICD10 in the rubric "neurotic, stress related and somatoform disorders". DSM IV has effectively carved up the neuroses into: anxiety disorders, somatoform disorders, dissociative disorders and adjustment disorders. ***(Semple et al.,2005)***

Children who suffer from an anxiety disorder are likely to suffer other disorders such as depression, eating disorders, attention deficit disorders both hyperactive and inattentive, and obsessive compulsive disorders.

A number of factors have been identified as contributing to the etiology of anxiety disorders in children. These factors include genetics/temperament, mother-child attachment pattern, presence of parental psychopathology, and parenting style. Behavioral inhibition in young children, characterized as persistent, fearful, avoidant behavior in response to new situations and novel stimuli, increases the likelihood of later developing anxiety disorders, especially social phobia in adolescence.***(Kagan J and Snidman N,1999)***

Insecure mother-child attachment pattern has been linked to subsequent onset of anxiety. ***(Warren SL et al., 1997) .***

In addition, offspring of parents with anxiety disorders and of parents who exhibit a controlling,

overprotective parenting style are more likely to manifest anxiety disorders themselves. ***(Siqueland L et al., 1996).***

According to the ICD 10 the neurotic disorders are classified as follows:

Neurotic, stress-related and somatoform disorders:

F40 Phobic anxiety disorders
F41 Other anxiety disorders
F42 Obsessive-compulsive disorder
F43 Reaction to severe stress, and adjustment disorders
F44 Dissociative [conversion] disorders
F45 Somatoform disorders
F48 Other neurotic disorders
(ICD 10, 2007)

Chapter (1)

Prevalence of anxiety disorders

Anxiety disorders are the most prevalent category of mental health problems in the general population, collectively affecting up to 18% of individuals in a given year and 25% of individuals over a lifetime. ***(Kessler and Walters, 2005; Kessler et al., 1994).***

Kessler et al., 2005, found that the onset of anxiety disorders occurs mainly during childhood**,** and is associated with considerable impairment in academic performance, peer relations, and family functioning. ***(Grills and Ollendick, 2002)***

In Egypt according to ***Okasha and Sayed ,1994***, the prevalence of anxiety disorders among children was found to be 7.9% while that of hyperkinetic disorder is 2.2%. Nocturnal enuresis was represented in 1.9% of children in Egyptian surveys.

Throughout their many studies on anxiety disorders ***Costello et al, 2003,*** reported that, the roots of many adolescent (and adult) psychiatric disorders begin in childhood, with psychiatric disorder in younger years

carrying a significant risk for adverse psychiatric outcomes throughout life. They examined three month prevalence of DSM-IV disorders in children aged 9-16 years, it was 13.3%, By 16 years, 36.7% of children had been diagnosed with at least one DSM-IV disorder.

Costello et al. found that the prevalence rates for having at least one childhood anxiety disorder vary from 6% to 20% over several large epidemiological studies ***(2004)*** and they reported a cumulative prevalence rate of 9.9% for anxiety disorders by the age of 16 years, which means that 1 out of 10 youths in this study had suffered from an anxiety disorder at some point during their childhood ***(2003)***.

They found the prevalence of any anxiety disorder among 9-13 years American Indian children 5.3% while among white children it was 5.6% and separation anxiety was found among 4.6% of American Indian children and 3.3% of white children. ***(Costello et al., 1997)***

Specific phobia, social phobia, generalized anxiety disorder, and separation anxiety disorder are most common,

with mean prevalence rates between 2.2 and 3.6%. Agoraphobia (1.5%) and post-traumatic stress disorder (1.5%) are less prevalent, whereas panic disorder and obsessive–compulsive disorder are relatively rare i.e., <1%; ***(Costello et al. 2004).***

Charlotte and Cody, 2002, reported the prevalence of any anxiety disorder in children and youth, was 6.5% while ***Robert et al, 2006,*** found the prevalence of any anxiety disorder was 5.8% among European American children, 7.9% among African American children; and 8.1% among Mexican American.

Surveys of children and adolescents in community populations, using self-report questionnaires, indicate that anxiety disorders are the most common childhood emotional disorders. Twelve month prevalence rates range from 17% to 21%; about 8% may require treatment ***(Bernstein, 1991).***

Subclinical anxiety symptoms are very common in the general pediatric population. About 70% of grade school children report they worry "every now and then".