PATTERN AND PRECIPITATING FACTORS OF PSYCHOLOGICAL DISORDERS IN CHILDREN & ADOLESCENTS IN KHARTOUM STATE

A Thesis Submitted In The Partial Fulfillment
Of The Degree Of Clinical MD In Pediatrics And Child Health

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Dedication

To my mother, sisters and brothers

For their care and encouragement

To the soul of my father
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ABSTRACT

A cross-sectional hospital based study in the Military hospital, Khartoum Teaching Hospital, Eltigani Elmahi Hospital and Bahri Hospital. The duration of the study was from 1st of March to the end of August 2005.

The objectives were to study patterns of psychiatric disorders among children and adolescent, the association of psychiatric illnesses with chronic illness and social factors, the possible precipitating factors of psychiatric illnesses and the attitude of parent toward their affected children.

The study included 72 children; male to female ratio was 2:1. 50% of children were below 10 years of age and 50% above 10 years. The study tools included interview and questionnaire as well as psychological assessment.

The majority of children have behavioral disorders (79.2%). ADHA disorder was the dominating pattern affecting 30.6%. It occurred mainly in the age groups of less than 5 and 5-10 years. About 13.9% of children suffered from enuresis, which was commoner in males.

Learning difficulties was shown by 9.7% of children. There was significant correlation between learning and family size and the age of acquisition of language.
Depression occurred in 10 children 60% of them were males and 40% females. There was association between depression and chronic illnesses. About 50% of depressed children have more than 7 siblings. Autism constituted 4.2% of the total psychiatric disorders. Conduct disorders predominates in adolescent males.

Precipitating factors of psychiatric illnesses included, hospital admission, separation from parent, accident, violence and physical and sexual abuse.

Fathers responses toward affected children were variable, 30.6% were sympathetic, 6.9% showed a feeling of guilt and 8.3% rejected the diagnosis. Anxiety was shown by 23% of mothers; as expected mothers were more sympathetic than fathers. 4.2% of mothers were depressed due to their children illness, 6.9% were unresponsive while 12.5% of fathers showed unresponsiveness.
مستخلص الأطروحة

أجريت هذه الدراسة العينية في الفترة من مارس إلى أغسطس عام 2005 في مستشفي السلاح الطبي، مستشفى الخرطوم التعليمي، مستشفى التيجاني الماهي و مستشفى بحري.

أهداف الدراسة:

دراسة أنماط الأمراض النفسية بين الأطفال والمراهقين ومدى مصاحبة هذه الأنماط للأمراض العضوية المزمنة والظروف الاجتماعية المحيطة. العوامل التي قد تساهم في حدوث الأمراض النفسية ودراسة توجهات الأباء والأمّات نحو أبنائهم المصابين بالأمراض النفسية.

تضمنت هذه الدراسة اثنان وسبعون طفلاً، كانت نسبة الذكور للإناث 1:2.5.

شملت وسائل البحث المقابلة الشخصية وتبني استبان مع تقييم سايكلوجي للأطفال. وجد أن حوالي 50% من الأطفال أعمارهم أكثر من عشر سنوات وكذلك من هم دون العاشرة بلغوا 50%.

معظم الأطفال كانوا يعانون من اضطرابات سلوكية، وقد كانت متلازمة النشاط الزائد هي الأكثر انتشاراً بين الأطفال حيث عاني منها 10% ، تراوحت أعمارهم بين 10 - 5 سنوات وأقل من خمسة سنوات.

بلغت نسبة النوب الملازدي بين الأطفال 13.9% وهو أكثر انتشاراً بين الذكور. علاني 9.7% من الأطفال من صعوبات في التعلم وهذه الصعوبات لديها علاقة وثيقة بتأخر النمو اللغوي وعدد أفراد الأسرة.

وقد أن هناك 10 أطفال مصابين بالاكتئاب 10% منهم ذكور بينما بلغت نسبة الإناث 40%.

حدث الاكتئاب كان مصاحباً للأمراض العضوية المزمنة.

وجدنا علاقة قوية بين الاكتئاب وعدد أفراد الأسرة حيث أن نصف الأطفال الذين يعانون من الاكتئاب لديهم أكثر من سبعة إخوة.

نسبة الأطفال المصابين بالتحت بلغت 2,40% من جملة الأمراض النفسية.

اضطرابات المسكوك كانت أكثر شيوعاً لدى الذكور المراهقين. العوامل المساهمة في حدوث الأمراض النفسية تضمنت، السوء بالمستشفى، البعد عن الأبوين، الحوادث، العنف، التعرض للأذى الجسدي والجنسي، الإدمان.
فيما يختص بتوجهات الآباء نحو أطفالهم المصابين بالأمراض النفسية، معظم الآباء كانوا متعاطفين مع أبنائهم لكن بعض الآباء لديهم شعور بالذنب تجاه أطفالهم و شكوا هولاء 10.9%، لجا بعض الآباء للمعالجين التقليديين (الشيوخ)، 89.8% أنكروا وجود أي مرض نفسي لدى أطفالهم.

نسبة قلق الأمهات تجاه الأطفال المصابين كانت حوالي 23.6%، وكما هو متوقع أبدت الأمهات تعاطفاً مع الأطفال المصابين بنسبة أكبر من الآباء. كما أصيبت 4.2% من الأمهات بالإكتئاب كرد فعل لإصابة أطفالهن.

بعض الأمهات و الآباء ابدوا عدم الاكتئاب نحو أطفالهم المصابين بالأمراض النفسية.
List of abbreviations

**ADHA** : Attention deficit hyperactivity.

**DSM III** : Diagnostic statistical manual of American psychiatric association 3rd ed

**DSM IV** : Diagnostic statistical manual of American psychiatric association 4th ed

**OCD** : Obsessive compulsive disorders

**PTSD** : Post-traumatic stress disorders
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INTRODUCTION

Childhood was considered a happy, Idyllic period of life. Children were not thought to suffer mental or emotional problems because they were spared the stresses adult must face.

Researches conducted since 1960s, however, shows that children do suffer from depression and manic-depressive and anxiety disorders, illnesses once thought to be reserved for adult. From three to six millions children suffer clinical depression and are at high risk for suicide, the third leading cause of death among young people.\(^{(1)}\)

Parent's whose children's suffer from these illnesses often ask themselves What did I do wrong? Self blaming is not appropriate since, the cases are complex and never due to single factor.

Researches indicate that many mental illnesses have a biological component which makes a child susceptible to the disorder. Feelings of guilt about a child's mental illness are often as inappropriate as feeling of guilt about other childhood illnesses or about inherited health problems.\(^{(2)}\)
Definitions:

Psychosis are manifested by pathology in all areas of mental function including behavior, cognition and affect they are relatively rare 4-10 case per 10,000 But pose significant problems for medical care. \(^{(3)}\)

**Psychosis include four major categories autism, childhood pervasive developmental disorder, disintegrative disorder and schizophrenia.**

Disturbances of conduct and emotions, specific development disorders, the special symptoms of enuresis, soiling, sleep and eating difficulties are the commonest psychiatric disorders in children. \(^{(3)}\)

**Classification of childhood psychiatric disorders:**

A major step forward in the classification of child psychiatric disorder has been the multi-axial frame work 1\(^{st}\) sponsored by the WHO (Rutter et al 1976) And also adopted in a modified form In DSM III (Diagnostic and statistical manual of the American psychiatric association 1980). This has the merit of including all the important and often independently varying diagnostic aspects of a case without forcing the diagnostician into arbitrary choices. \(^{(4)}\)
Five axes were defined:

I. The clinical psychiatric syndromes (eg: conduct, emotional disorders)
II. Specific delays in development (eg: language or educational delays)
III. Intellectual level;
IV. Associated medical condition (eg: cerebral palsy, epilepsy)
V. Associated abnormal psychosocial situations (eg: parent divorce institution upbringing).

Rutter and Gould (1958) remind us that useful classification should be comprehensive based on observable phenomena, reliable but with adequate differentiation between clinically different condition and valid in the sense that separately categorized disorders. It should differ also on the criteria such as symptomatology, etiology or outcome. However no classification is ever perfect.\(^{(4)}\)

1.1 Behavioral and emotional disorders with onset specific to childhood and adolescence:

1.1.1 Conduct disorders:

studies indicate that conduct disorders are the largest single group of psychiatric illness in adolescent. Often beginning before the teen age, conduct disorders affect approximately 9% of boys and 2% of girls under the age of 18 years.\(^{(5)}\)
Because the symptoms are closely tied to socially unaccepted violent or criminal behavior, many people confuse the illness in this category with either juvenile delinquency or the turmoil of the teen years. Conduct disorders tend to evoke counter aggression from parent, teachers and wider society and the prognosis is much less favorable than that of emotional disorders (Robin 1966). (6)

a- Conduct disorders confined to the family context:

This acknowledge that stealing from step mother or cutting up mothers clothes at night may be a specific reaction to disturbed mother child relationship. But the child did not show other behavior outdoors.

b- Socialized conduct disorder:

Children with this group of difficulties are well integrated with their delinquent peers and most antisocial conduct such as stealing or truancy, takes place outside the home.

c- Unsocialized conduct disorder:

This disorder is characterized by persistent antisocial behavior with lack of friendship with other children and hostile or non intimate relationship with parent and teachers. Children who have demonstrated at least three of the following behaviors over six month should be evaluated for possible conduct disorder:
- steal without confrontation or by using force as in mugging or armed robbery.
- consistently lies other than to avoid physical or sexual abuse.
- deliberately sets fires.
- often truant from school.
- has broken into some ones house, office or car.
- deliberately destroys the properties of others.
- has been physically cruel to animals or human.
- has forced someone into sexual activity.
- has use the weapon in more than one fight.
- often starts fights. \(^{(6)}\)

**Treatment of conduct disorders:**

Treatment of children with aggressive or conduct disorder, like the treatment of children with other behavior disorders is determined by the symptoms then by the child personality characteristics, his life experiences and his family and school environment.

When the child symptoms are due to recent stress, eg physical or psychiatric illness of a parent, unemployment or bereavement or mounting debts threatening the disruption of a previously well functioning family treatment aimed to help the family during this crisis will also help the child especially if the school staff can offer understanding and support.

Family therapy (will\&wrate1985) and behavioral techniques are helpful, especially with young children when the parents have some personality strength and not handicapped by psychiatric illness or addiction. \(^{(7)}\)
1.1.2 Enuresis:

Nocturnal enuresis is the involuntary voiding of urine during sleep after the age of four to five years. It is common condition affecting boys more than girls. While children who are enuretic since birth improve with age some children who were dry become enuretic in middle childhood.\(^{(8)}\)

In the Isle of Wight survey it was found that at seven years 6.7% of boys and 3.3% of girls were wet at least once per week. The prevalence rate at 9-10 years and at 14 years were 2.9% and 2.2% for boys and 1.1 and 0.5% for girls. Diurnal enuresis also occurs in a small proportion of children. There is a strong familial tendency to enuresis and the symptom persists longer in socioeconomic deprived families. Emotional and conduct disorders are often associated.

Urinary tract infection which is very rare in boys, is much common in enuretic than non enuretic girls. Among children with urinary tract infection 30% are also enuretic (Kovlin et al 1973) the only symptom associated with urinary tract infection in enuretics is abdominal pain.\(^{(8)}\)

In some children failure to acquire continence is excessively disappointing to their parent with anxiety and tension between parent and the child over toilet training then secondary psychiatric disorder occur.

Precipitating factors for enuresis:

Anxiety provoking life events in the first four years of life was found to be significantly associated with later enuresis. The life events studied were family break up through death, divorce or separation, temporary separation from the mother, birth of a sibling, admission to hospital and surgical operation.
The number of disturbing events was correlated with the percentage of children who were subsequently enuretic. At each age the highest prevalence of enuresis was among children not cared for by their mothers. Children who were temporarily separated the highest prevalence was in those looked after by unfamiliar caregiver in unfamiliar surroundings. (9)

**Treatment of enuresis:**

-the most successful treatment is behavior modification with a bell and pad apparatus. Shaffer(1985)
-increasing self-esteem and enabling parent and teacher to become less critical is helpful.
-if these measures were difficult to apply then imipramine in a dose of 25-50mg at night is indicated.

1.1.3 Encopresis:

Encopresis is the repeated evacuation of faeces into clothes or receptacles not made for the purpose after the age at which bowel control is usually achieved.

An epidemiological study of Stockholm school children age 7 years found that soiling more than once a month occurred in 2-3% of boys and 0.7% of girls. Half the soilers had toilet control early in life but relapsed later in response to identifiable stresses such as starting school or separation from their parent. (10)
Treatment of Encopresis:

Treatment is often not immediately successful apart from measure to counteract constipation when it is present, a combination of behavioral methods and psychotherapy talking account of the individual circumstances of each child and family is indicated. \(^{(11)}\) Hospitalization may be needed to provide a relief when Encopresis has seriously impaired an already strained parent-child relationship. \(^{(12)}\)

1.1.4 Eating disorder:

1.1.4.1: Anorexia Nervosa:

It is a disorder characterized by a disturbed sense of body image, a morbid fear of obesity, refusal to maintain a minimally normal body weight. About 95% of persons with this disorder are females. Onset usually during adolescence occasionally earlier many patient belong to middle or upper socioeconomic classes. \(^{(13)}\)

Clinical manifestation of anorexia nervosa:

The first indications for this disorder are concerns about body weight and restriction of food intake. Denial of the disorder is a prominent feature patient do not complain of anorexia or weight loss they usually resist treatment and brought to physicians by intercurrent illness or
by other symptoms eg bloating, abdominal distress and constipation. Other findings include bradycardia hypotension, hypothermia, hirsutism and edema.

**Treatment of anorexia nervosa:**

Treatment has two phases:
1- Short term treatment to restore body weight and save life. The nutritional status and fluid and electrolyte balance are the main targets.
2- Long term therapy to improve psychological functions and prevent relapse, it starts by individual psychotherapy and family therapy.

**1.2 Attention deficit disorders:**

This is hyperkinetic syndrome that affects a child’s ability to concentrate, learn and to maintain a normal level of activity. (14) Attention deficit disorder affects 3-10% of children in America. It affects boys ten times more than girls. This disorder often develops before the age of 7 years but most often diagnosed when the child is between 8-10 years. (15)

**Clinical manifestation of Attention deficit disorders:**

The child with this disorder presents with:
- difficulty finishing any activity that requires concentration at home, school or play; shift from one activity to another.
- acting before thinking, excessively active and run or climbs nearly all the time.
- dose not seem to be listening to anything said to him or her.
- requires close supervision, frequently call in class has difficulty waiting his or her turn in games or groups.

In addition these children may have specific learning disability that lead to emotional problems as a result of falling behind in school or receiving constant reprimand from adults. (16)

**Causes of attention deficit hyperactivity disorders:**

No single cause of ADHA is known but a combination of hereditary, environment, and biological problems contribute to the development of the disorder.

Children may develop inappropriate behavior because they can't hear or see well enough to know what is going on around them. Physical illness also contribute to this problem. (17)(18)

**Treatment of attention deficit disorders:**
Treatment includes the use of medication, special educational programs that help the child keep up academically and psychotherapy.

Between 70%-60% of children with ADD respond to medication (methylphenidate or haloperidol). Medication improves the child's attention span and controls his impulsive behavior.

Psychotherapy is used in combination with medications by working with therapists, a child can learn to cope with his or her disorder and reaction of others to it. (19-23)

1.3. specific developmental disorders:

Onset of these disorders invariably in infancy or very early childhood, a family history of similar condition is common suggesting a genetic basis.

It is suggested that disorders is diagnosed only when the child IQ is more than 70, because mentally handicapped children have uneven development of their capacities. (24)

1.3.1 specific developmental disorders of speech and language:

A simple delay in the acquisition of speech compared with a child’s general, social and motor development is very common. In later life there may be difficulties in reading or writing.

Usually there is undue persistence of infantile articulation. Clinically significant language delays are only rarely environmentally determined e.g. when a child is reared by deaf
parents or exposed to socioemotional neglect in the first year of life.\(^{(25)}\)

1.3.2 specific developmental disorder of scholastic skills:

Specific reading retardation is a serious handicap in childhood. It is diagnosed when the child’s attainments in reading are seriously below what is expected for his age and overall ability. It is commoner in boys than girls and children from large sibship. Specific developmental arithmetical delay are rare unless associated with general educational retardation.\(^{(26)}\)

1.3.3 specific developmental disorder of motor function:

These include clumsiness affecting a child’s level of self care, his skill at ball games, writing and drawing skills. The clinical presentation is often of a child unhappy at school, in doubt about his own abilities, sometimes labeled lazy by teachers and even parent. the child motivation for learning are at risk. In the history relative delay in the acquisition of spoken language or motor skills can often be identified.\(^{(27)}\)

Treatment of specific developmental disorders:
The diagnosis is therapeutic in itself in restoring the child self-esteem and helping parents to be less demanding in the area of difficulty and encouraging competence in other spheres. Remedial education should be provided to help the child catch up in school.\(^{(28-30)}\)

1.4. neurotic disorders in children:

neurotic illnesses begin to occur from 3-5 years on ward.

1.4.1 obsessive compulsive disorders in children and adolescent:

community surveys of adolescent have suggest that at any given time 1-3% are experiencing symptoms of obsessive compulsive disorder. children as young as 5-6 years can show full blown picture of OCD.\(^{(31)}\)

Clinical features of obsessive compulsive disorder:

DSM-4 defines obsession as:

1- recurrent and persistent thoughts impulses or images that experienced at some time during the disturbance, as intrusive and inappropriate and that cause marked anxiety or distress.

2 - the thoughts impulses, or images are not simply excessive worries about real life problems.

3- the person attempts to ignore or suppress such thoughts, impulses or image to neutralize them with some other thought or action.

4- the person recognize that obsessional thoughts, impulses or image are a product of his own mind.\(^{(32)}\)
DSM-4 defines compulsion as:

1) Repetitive behaviors (eg hand washing, ordering, kicking) or mental acts (eg praying, counting) that the person feels driven to perform in response to obsession.

2) The behavior or mental acts are aimed at preventing or reducing distress however these behavior or mental act are clearly excessive. \(^{(32)}\)

Usually the obsession or compulsion cause marked distress and are time consuming (takes more than one hour per day) or significantly interfere with the person normal functions.

Causes of obsessive compulsive disorders:

Most recent research studies points toward a biological basis for OCD. PET scan have shown abnormality in the sub-orbital cortex and basal ganglia (the scan shows the level of brain activity). A striking abnormality was increased activity in the sub-orbital cortex. When patient were successfully treated whether treated with psychotherapy or medication, the brain scan studies resemble those individual without OCD. \(^{(32,33)}\)

Treatment of obsessive compulsive disorders:
Once a child has been diagnosed with OCD we need to decide which treatment to use first. Many clinician prefer to start with cognitive and behavioral therapy if there is no response, medication may then be added. There are circumstances in which it is appropriate to start with medication eg clomipramine and psychotherapy simultaneously. \(^{(33)}\)

1.4.2 Dissociative and somatisation disorders:

Conversion hysteria such as hysterical disorders of gait or vision are quite rare in childhood but may occur in adolescent.

1.4.3 Anxiety disorders:

These are common in childhood. Nearly all children develop fears of dark, witches or other fantasy images. over time these normal fears fades. But when they persist or begin to interfere with a child’s normal daily routine he or she may need attention of a mental health professional. \(^{(34)}\)

Symptoms of anxiety disorder includes:

- sleep disturbance
- specific fears
- restlessness
- inability to concentrate
loss of appetite
-social withdrawal
-abdominal pain
-vomiting and headache.\(^{(35-37)}\)

1.4.3.1 Separation anxiety:

Separation anxiety disorder is diagnosed when children develop intense anxiety even to the point of panic, as a result of being separated from a parent or other loved one. It often appears suddenly in a child who has shown no previous sign of a problem. Separation anxiety may cause school phobia.

**Symptoms of separation anxiety:**
- Sever persistent anxiety about being separated from home or parents.
- Distress when separated from parents.
- Nausea headache and abdominal pain before or during separation.\(^{(38)}\)

**Treatment of anxiety:**

- Behavioral, parent and child may benefit from counseling, parent education and family therapy are often helpful.
The child may also benefit from individual play therapy when the therapist helps the child work out the anxiety expressing it through play. In behavioral therapy the child learns to relax and overcome fear through gradual exposure to separation from parent or caregiver.\(^{(28)}\) - medication, this is needed for minority of children who have persistent symptoms resistant to behavior modification and psychotherapy. Prozac, Zoloft, paxil are new class antidepressant which has made treatment of childhood depression and anxiety disorder safer and more effective.\(^{(39)}\)

1.4.3.2 Post-traumatic stress disorders in children and adolescent:

Post traumatic stress disorder is an anxiety disorder resulting from the long and short term effects of trauma that causes behavioral and physiologic sequels in toddlers, children and adolescent. Epidemiologic studies have placed the life time prevalence of PSTD by age 18 years at 6% in community sample.\(^{(40)}\)

Events that cause PTSD in children:

A diagnosis of PSTD mean that an individual experienced an event that involved a threat to ones own or another life or
physical integrity and this person responded with intense fear, helplessness or horror.

There are number of traumatic event that have been shown to cause PTSD in children and adolescents.

These includes natural and man made disasters such as floods, violence crimes such as kidnapping, rape or murder of a parent and school shooting, motor vehicle accident such as plane crashes, sever burn, exposure to community violence, war peer suicide and sexual and physical abuse. \(^{(41,42)}\).

**Risk factors for post traumatic stress disorder:**

There are three factors that have been shown to increase the likelihood that children will develop post traumatic stress disorder. These factors include:

- The severity of the traumatic event
- The parental reaction to the traumatic event.
- The proximity to the traumatic event.

Researches suggest that interpersonal trauma such as rape and assault are more likely to result in post traumatic stress disorder than other types of trauma.

Additionally if individual has experienced a number of traumatic events in the past, those experience increase the risk of developing post traumatic stress disorder.

In terms of gender several studies suggest that girls are more likely than boys to develop post traumatic stress disorder.

**Clinical manifestations of post traumatic stress disorder:**
Three clusters of symptoms are essential for diagnosis of post traumatic stress disorder.

- Persistent re-experiencing of the stressor through intrusive recollection, nightmares and re-enactment in play are typical responses in children.
- Persistent avoidance of reminders and numbing of emotional responsiveness such as isolation, amnesia constitute the second cluster of behavior.
- Finally symptoms of hyper arousal such as hyper vigilance, poor concentration, and extreme startle responses, agitation and sleep problems. \(^{(42,43)}\)

**Treatment of post traumatic stress disorder in children and adolescent:**

Although some children show a natural remission in post traumatic stress disorder symptoms over a period of few months a significant number of children continue to exhibit symptoms for years if not treated.

Cognitive behavior therapy for children generally includes directly discussing the traumatic event with the child "exposure"

Anxiety management techniques such as relaxation and assertiveness training and correction of inaccurate distorted trauma related thoughts.

Although there is some controversy regarding exposing children to the event that scare them, exposure based treatment
seem to be the most relevant when memories or reminders of the trauma distress the child.\(^{(44)}\)

Children can be exposed gradually and taught relaxation so that they can learn to relax while recalling their experiences. Through this procedure they learn that they don’t have to be afraid of their memories.

Cognitive behavior therapy is often accompanied by psycho-education and parent involvement. Goals of family work include helping the child establish a sense of security, validating his or her emotions and anticipating situations when the child will need more support from the family. Clonidine or guanifacine may be helpful for sleep disturbances, persistent arousal and exaggerated startle.\(^{(44)}\)

1.5 Mood disorders:

Major depressive disorder, dysthymic disorder and bipolar are the three major types of affective disorders seen in children.

1.5.1 Depression:

Depression is characterized by dysphoria (which in children may present as irritability.) and an obvious loss of interest and pleasure in usual activities.\(^{(46)}\)
Dr Mirghani K and Bashaar T, studied depression in adolescent females in Sudan they included 1107 girl their age range was 12-19yr .11% were found to have sever depression.

**Etiology of depression:**

Many factors contribute to causing depression however there is strong evidence of genetic basis for major depressive disorders.
So family history is important .studies indicate that depression is three times more common in children whose biological parent suffer from depression.

Family environment is also important a drug dependant or alcoholic parent can not always provide the consistence a child need.

The loss of loved one through divorce or death is stressful as is enduring the long term illness of a parent or sibling or the child himself.

A child living with apparent who is psychologically, physically or sexually abusive must cope with incredible stress. All of these can contribute to depression. (47)

Many children from stable loving environment also develop depression for this reason scientists suspect that genetic, biology and environment work together to cause depression. (48)

**Symptoms of depression:**

- Sadness
- Hopelessness
- Feeling of worthlessness
- Excessive guilt
- Change in appetite
- Loss of interest in activities
- Recurring thoughts of death or suicide
- Helplessness
- Low self-esteem
- Inability to concentrate
- Change in sleep pattern.\(^{(46-49)}\)

**Treatment of depression:**

Both psychotherapy and pharmacotherapy are effective in treating depression in childhood and adolescence. Psychotherapy is especially important for patients with multiple diagnoses or precipitant related to family disruption or conflict.\(^{(50)}\)

Cognitive behavioral therapy 12-16 weeks is effective in about 70% of cases of adolescent depression. Studies have also shown that selective serotonin reuptake inhibitors reduce depressive symptoms in about 70% of cases.

**1.5.2 Dysthymic disorder:**

This disorder is less severe than depression but more protracted involving depressed mood for at least one year. Poor appetite, sleep problems, decreased energy and low self-esteem are characteristic.
Dysphoria is less intense but more chronic, with only brief periods of normal mood. The prevalence of dysthymic disorder in children is 0.6-1.7% and in adolescents 1.6-8.0%.(46)

Untreated dysthymic disorder is generally chronic and is associated increased risk for the subsequent development of major depression (70%), bipolar disorder (13%) and substance abuse (15%). Frequently children with dysthymia have a co-occurring second psychiatric disorder.

Treatment of dysthymia:

Antidepressant treatment is useful though there are few studies of dysthymia in children. When dysthymic symptoms are associated with other a second condition (anorexia, somatisation, substance abuse, physical illness) both condition require intervention.

Often a full spectrum of therapies, including dynamic psychotherapy, family therapy parent management training and pharmacotherapy is indicated.(51,52)

1.5.3 Mania:

Mania is a state of elevated expansive or irritable mood lasting at least one week. Brumback et al in Texas studied the patterns of presentation of affective illness in children and adolescent in relation to family history
They included 100 child and adolescent in the study. Seven patterns of affective disorder were identified, the commonest pattern was mania/hypomania (72%) while mania constituted only (3%).

This mood is also accompanied by at least three of the following symptoms:
1. inflated self-esteem or grandiosity
2. decreased need for sleep
3. increased talkativeness or pressure to keep talking.
4. racing thought or flight of ideas
5. distractibility
6. increased activity or psychomotor agitation
7. excessive involvement in pleasurable activities that have high potential for painful consequences.\(^{(53)}\)

1.5.4 Bipolar disorders:

Children with this disorder have episode of mania and depression just like adult bipolar disorder but there are some differences;
- The cycling is fast, often a child will cycle between depression and mania many times a day.
- The episodes are short, rarely will they have days of any one state.
- Often mania and depression are mixed together at the same time.\(^{(54,55)}\)

Epidemiology of bipolar disorders:
About 1% of adult have a type of bipolar illness, it was thought that people get bipolar illness for the first time in their twenties. But recent studies showed that 50% had their first episode of bipolar illness before the age of 17 year and 20% between 10-14 yr. The most remarkable thing was that 10% had their first episode between 5-9yr. (55)

Toni et al. in Italy studied the patterns of co morbid anxiety and attention deficit hyperactivity disorder and conduct disorder in a sample of children and adolescent with bipolar disorder.

Only 11.6% pt have no other psychiatric disorder, 27.9% have co morbid externalizing disorders, 23.5%pt did not show any co morbid anxiety disorder. (55)

**Causes of bipolar disorders:**

1. genetics, if a child has two parent who have had mood disorder nearly every child will have a mood disorder if one parent has mood disorder about quarter of the children will get a mood disorder.
2. drugs, a number of drugs can make a person manic or look like manic. Steroids are the most common prescription that cause this however antidepressant may cause mania.
3. infections, AIDS may cause mania.
4. hormones, too much thyroid hormone can make you manic but this is very rare in children.
5. other rare conditions like stroke, multiple sclerosis and epilepsy can cause mania in children. (55)
Symptoms of bipolar disorders:

Defined episodes of depression alternating with euphoria, grandiose, high activity level, pressured speech, distractibility, hypersexuality and hallucination and delusions are characteristic of classic bipolar disorder.

Treatment of bipolar disorders:

Therapy of bipolar disorder typically require the use of mood stabilizing medication, psychotherapy alone is ineffective for bipolar disorders.

Lithium carbonate is effective in the treatment of bipolar illness and manic symptoms in about 60% of cases. The antiepileptic carbamezapine and valproic acid are effective in rapid cycling adult type bipolar disorder.\(^{(56)}\)

1.6 Personality disorders:

Personality is a consistent style of behavior uniquely recognizable in each individual. Personality disorders refers to personality characteristic of a form or magnitude that are unchanging, chronic, occur in most setting and cause poor life functioning. Many children display characteristics of adult personality disorder eg,

The passive compliance of the dependant personality, the shallowness of hysterical personality, the punctuality,
pedantry and premising, of the obsessive personality the aggressive impulsiveness of aggressive sociopaths.

Clinician hesitate to use these diagnostic labels in childhood they imply lead to an expectation of enduring abnormalities when in fact children have immense capacities for change.\(^{(57-61)}\)

1.7 **Pervasive developmental disorders:**

Pervasive developmental disorders include autistic disorder, Asperger disorder, childhood disintegrative disorder and Rett disorder.\(^{(62)}\)

1.7.1 **Autistic disorder:**

Autism develops before 36 month of age and is characterized by qualitative impairment in verbal and non verbal communication there is also impairment in imaginative activity and in reciprocal social interaction.

Recent studies showed prevalence rate of 10-20% per 10,000 children. Autism is more common in males than females 3-4:1.\(^{(63)}\)

**Etiology:**

The cause of autism is multifactorial. genetic factors play a significant role there is 60-90% concordance rate for monozygotic twins and less than 5% concordance rate for dizygotic twins.
Theories of causation have also centered on a variety of other possibilities, especially pre- or perinatal brain injury, deficit in the reticular activating system, structural cerebellar changes, forebrain, hippocampal lesions and neuroradiological abnormalities have been documented.

A number of excellent epidemiological studies have established that there is no association between the use of measles-mumps-rubella vaccine and autism.\(^{64}\)

**Clinical manifestations of autism:**

Failure to use language for the purpose of communication, with some children having no speech at all, an anxiously obsessive desire for maintenance of sameness. They also have fascination for objects, high level of fine motor skills and good cognitive potentialities at least in some areas of functioning which distinguish autistic from mentally defective children.

Autistic children avoid eye gaze, also they have repetitive motor activity with flapping of hands, fine finger movement, mouthing and staring at objects.\(^{63}\)

**Treatment of autism:**

There is compelling evidence that intensive behavioral therapy beginning before three years of age and targeted toward speech and language development is successful both in improving language capacity and later social functioning.
Parent education, training and support is always indicated. Pharmacotherapy for certain target symptoms may be helpful.

The use of objective measures such as childhood autism rating scale (CARS) to measure behavior and behavioral change, enhancement of skills and acceptance by the environment of autism related deficit are beneficial. Also the use of intervention based on cognitive and behavior therapy and use of visual structure for optimal education are emphasized ways of management.\(^{65-67}\)

### 1.7.2 Asperger disorder:

The prevalence of Asperger disorder is approximately 3 per 1000 children. Children with Asperger present by repetitive behavior, impaired development of reciprocal social interaction. However they don’t have the severe language impairment that characterize autism.\(^{67}\)

### 1.7.3 Childhood disintegrative disorders:

This is a rare disorder characterized by normal development up to 2-4 years followed by severe deterioration of mental and social functioning with regression in language, social skills and there may be loss of bowel and bladder control.\(^{67}\)
### 1.7.4 Rett disorder:

This is an x linked dominant disorder which affect girls exclusively, affected boys die at birth. The prevalence of Rett is 1 in 10,000 children. Children having this disorder develop normally until the age of 1-2 years then they present with midline, stereotypic hand wringing, ataxia, scoliosis, regression of language and motor development and profound intellectual handicap.\(^{(68)}\)

### 1.8 Childhood schizophrenia:

The prevalence of adult schizophrenia is 1% the typical age of onset is late adolescence to early adulthood early onset schizophrenia is very rare.\(^{(69)}\)

**Clinical manifestation of schizophrenia:**

In childhood schizophrenia prominent symptoms include thought disorder disorganized speech, delusions and hallucinations. The later two symptoms in addition to later onset, higher intelligence score, differentiates schizophrenia from autism. Children with schizophrenia may have paranoid delusion, aggressive behavior, social withdrawal and alternating mood not related to environmental stimuli.\(^{(69)}\)
**Treatment of schizophrenia:**

A multimodal therapeutic approach is necessary to manage this illness. Parent training is important to teach effective techniques to modify the schizophrenic child behavior and to improve social functions. Individual therapy and school and community liaison work can establish and maintain a day to day schedule for the patient. Neuroleptic therapy eg risperidone is effective in managing hallucination and delusions. Clozapine appears to be the most effective antipsychotic medication for refractory cases but the risk of agranulocytosis and seizure limits its use. (69)

**1.9 Precipitating factors of psychiatric disorders:**

Childhood is a period of rapid change in physique and personality it is also a time at which environmental influences exert enormous effects.

In fulfilling their child rearing functions parent and teachers modify the behavior of children by endowing it with meaning, setting goals, conveying expectations, encouraging, rewarding, disapproving, punishing, setting limits and often consciously act as role models.

When a child repeatedly fail to conform to his parent or teacher standards he is likely to be identified by them as deviant.

So identifications of behavior disturbances in children depend very much on the symptoms tolerance of parent,
caregivers and teachers and this is influenced by both cultural and personal factors.

Because children have long exposure to the parent and teachers who create their environment, many stresses in their lives, apart from accidents, death and illness; spring from personality disorders of the parent and adverse classroom experiences.

While parental attitude and child rearing practices on the one hand and childhood on the other hand largely reflect social class differences, psychiatric disorders in parent are one of the most important causes of child psychiatric disorders.

Personality disorders of parent and sociopaths in particular, are most strongly implicated in the genesis of conduct disorders in boys.

Marital discord, excessive drinking, family disorganization, separation experiences and domestic violence are all known precipitating factors of childhood psychiatric disorders.

When the mother is dead or handicapped unless the father is exceptionally warm and competent infants and children up to puberty are at risk not only of lack of basic protection care but of chronic stress and deprivation of normal maternal vigilance, responsiveness and affection\(^\text{(70)}\).

Psychiatric disorders in childhood, especially of adolescence, often manifest as delinquency which is highly associated with parental criminality even in the absence of parental discord and hostility to the child (Quinton & Rutter 1985).
The effects of parent loss through death are most evident in older children and in boys can lead to antisocial conduct, mood disorder and social withdrawal.

The effects of parent loss through separation and divorce are more serious, boys with single mothers are more at risk than girls especially of antisocial disorders and depression.

Physical illness and physical handicap constitute powerful cause for child psychiatric disorders. More children now survive formerly fatal illnesses and more children reach adult life with some permanent disabilities or after a childhood punctuated by hospital attendances and surgical interventions (3).

The emotional and conduct disorders associated with illness and its treatment depend on the age of the child at the time and his cognitive appraisal then of his circumstances.

Algazali et al studied mental health problems among school children in U.A.E prevalence risk factors positive family history and consanguinity were the most significant factors associated with learning disorders in addition to low socioeconomic status and large number of children the family. Physical abuse is one of the factors that have major emotional consequences that affect the child behavior, development and learning ability.

Physical abuse is most likely to occur when a high risk parent are responsible for the care of high risk child undergoes stress and react to stress with violence. High risk children include premature infants, children with chronic medical conditions and children with learning or behavior problem.
the child may be normal but misperceived by inexperienced parent as difficult or abnormal. Normal behavior such as soiling and spilling may cause the parent to lose control and injure the child.

The occasion precipitating abuse may be associated with family crisis, such as loss of a job or home, marital strife, death of sibling, physical exhaustion or development of acute or chronic physical or mental illness in the parent or child.

Exposure to violence disrupts the healthy development of many children. Beyond injuries violence affects the children psychologically and behaviorally; it may influence how they view the world and their place in it.

Children may come to the world as a dangerous and unpredictable place this fear may thwart their exploration of the environment, which is essential to learning in childhood. Furthermore, high exposure to violence in children correlates with poorer performance in school, symptoms of anxiety and depression and lower self esteem.

Research suggest that high level of witnessing violence places children at risk for psychological, social, academic and physical problem as well as engaging in violent acts themselves. Mental health effects may include depression, aggression and substance abuse. (72)

A child may disclose sexual abuse to the mother if the mother does not believe the child, the child may delay further comment indefinitely or later tell a friend, relative or school counselor.

Sexual abuse should be considered as cause of symptoms such as:
-vaginal pain, discharge, bruising and erythema
-chronic dysuria, enuresis, or encopresis.
rarely early puberty in females. certain behavior are more likely to be associated with sexual abuse eg sexualized activity with peer, animal or object, seductive behavior and age inappropriate sexual knowledge.
non specific behavior include suicide gestures, fear of individual or place, sleep disturbance, aggression poor school performance and anxiety. (73-74)

1.10 parent attitude towards their child with psychiatric disorder:

Existing studies reveal that very often parent have negative attitude towards their child with psychiatric disorder or disability.
The parent are plagued with feeling of pessimession, hostility shame and denial.
Projection of blame, guilt withdrawal, rejection and acceptance are the usual parental reactions. some parent go through periods of disbelief depression.
On the other hand there is some parent who cope will with their child illness and react positively to help the child to overcome his problem. These parent show great sympathy toward the child and give him or her more care and support.
It is well established that positive reaction of the family towards children with psychiatric disorders gives better prognosis (80).
Review of Researches in the Region

Behavioral and emotional disorders:

Fattah M et al, studied emotional and behavioral problems among Saudi school children and adolescents prevalence and risk factors. the study included only males, Among 1239 investigated school children, the
most common emotional and/or behavioral problems were anxiety (13.5%), Schizophrenia (11.9%) and depression (8.6%), followed by somatic disorders (7.0%), obsession (6.9%), hyperactivity (6.1%), aggression (4.0%) and finally delinquency (3.6%). While among adolescents, the most common encountered emotional and/or behavioral problems were anxiety (13.5%), somatic disorders (12.2%), obsession (10.8%), followed by aggression (8.1%), schizophrenia (6.8%), delinquency and depression (4.1%).

Al-Hussaini A, Al-Sharbi M in Alein screened 620 children from 321 households for psychiatric morbidity. The age range was 6–18 years. The study included 315 boys (50.8%) and 305 girls (49.2%). Of the boys and girls, 12.5% and 11.1% respectively were positive for psychiatric morbidity. Of the 321 households, 16.4% had 1 child who was positive for psychiatric problems and 3.1% had 2 children who were positive for psychiatric problems. Conduct, emotional and hyperactivity problems were noted in 12.0%, 10.6% and 11.1% of households, respectively.

The prevalence of conduct problems was higher among boys than among girls (sex ratio = 1.4:1), while that of emotional problems was higher among girls than among boys (sex ratio = 1.3:1). This pattern is consistent with previous studies in Western and non-Western settings.

Al-Sharbi M, Al-Hussaini A studied the behavior of 1502 school boys, aged 6 to 14 years, from 8 randomly selected public elementary schools in Muscat (2002). Of the 1502 school boys, 117 (7.8%) had
aggressive, stealing, and lying behaviour more than their counter group. Also, they had poor school achievement in both the first term of the current school year, as well as failure(s) in the previous year. The birth order of the group exhibiting hyperactivity and the total number of their siblings did not differ significantly from the rest of the sample. The paternal education of the boys showing hyperactivity was lower than that of the normoactive group, while the maternal education was more or less similarly distributed in both groups. This study confirms the presence of hyperactivity in Omani boys and is consistent with results of other studies.\(^{76}\).

Another study was conducted in turkey by Serel TA, he studied enuresis in Turkish children. The study included 1247 child Of the subjects, 48.7 % were males and 51.3 % were females. Their mean age was 9.17 years.

Among analyzed children, 111 (8.9 %) had enuresis. Of the enuretic patients, 53.2 % were males and 46.8 % were females, and enuresis was found in 9.7 % of males and 8.1 % of females. No gender predominance was observed.

Of the cases, 24.3 % had secondary enuresis, and 75.7 % had primary enuresis. Most of the cases were observed before or at 8 years of age, while only 0.3 % occurred at the age of 12.\(^{78}\)

**Post traumatic stress disorders:**

Research on the "Prevalence of PTSD among Palestinian children during Gaza Strip” showed that children developed PTSD as a result of the Severe conditions.
The most prevalent types of trauma exposure for children in the community areas is for those who had witnessed funerals 94.6%, witnessed shooting 83.2%, and 66.9%; saw a friend or a neighbor being injured or killed 61.6% and were tear gassed 36.1%. (79)

Similar study was conducted in southern Sudan by Paardekooper (1999). He compared a group of Sudanese children to a group of Ugandan children who did not have the experiences of war and flight. Compared to Ugandan children, the Sudanese reported significantly more PTSD-like complaints such as trouble with sleep, nervousness, traumatic memories, and behavioral problems as well as depressive symptoms and psychosomatic complaints.

The Sudanese refugee children had experienced far more traumatic events than the comparison group. Sudanese children experienced more daily stressors than Ugandans children. This is mainly caused by the situation of poverty in the camps. The refugee children report suffering from lack of food, lack of clothes, lack of school materials. (74)

**Depression:**

Okasha et al (1988) studied the prevalence of depression in Egypt. The prevalence rates of depression among selected samples of children from an urban and a rural population in Egypt were found to be 11.4% and 19.7%, respectively. Dysthymic disorder was the most common diagnostic category in the urban population (4.1%), whereas adjustment disorder with depressed mood was more frequently encountered in the rural population (6.7%). Major affective disorder according to DSM–III criteria was diagnosed in 1.9% of the urban population compared with 3.3% of the rural population; the total prevalence was 2.5% (77).
JUSTIFICATIONS
1. Many children who present to hospital with physical illness have psychological problems primarily so we need to know the patterns of these problems to identify and manage them early.

2. Childhood is a critical stage of life during which any trivial stress can disturb the psychological balance. Any chronic illness may cause psychological disturbance but we have to know what illnesses are more likely to cause psychological disorder.

OBJECTIVES

1. To study the pattern of psychological disorders in young children and adolescent.

2. To evaluate the possible precipitating factors of psychiatric disorders in children and the association of social factors, medical conditions and the occurrence of psychiatric disorders in children.
3. To study the attitude of parents towards their child with the psychiatric disorder.

PATIENT AND METHODS

Study design:

This is a Cross sectional hospital based study.
Study area:

The study was conducted in Khartoum state in four hospitals, Eltegani Elmahi hospital, Khartoum teaching hospital, Military hospital, and Bahri hospital.

Duration of study:

The study was conducted in the period from March 2005 to August 2005.

Time frame:

<table>
<thead>
<tr>
<th>activity</th>
<th>1\textsuperscript{st} month</th>
<th>2\textsuperscript{nd} month</th>
<th>3\textsuperscript{rd} month</th>
<th>4\textsuperscript{th} month</th>
<th>5\textsuperscript{th} month</th>
</tr>
</thead>
<tbody>
<tr>
<td>preparations</td>
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<td>Data analysis</td>
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<tr>
<td>Draft report</td>
<td></td>
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<td></td>
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<tr>
<td>Final report</td>
<td></td>
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</tbody>
</table>

Study population:

Diagnosed children with psychiatric illness in the age range 2 to 18 years.

Sample size:
N = \frac{z^2 - PQ}{d^2}

N: sample size =
Z: 1.96
P: probability 0.95%
Q: 1-p 0.05
D: desired margin of error

Calculated sample size is 72

**Inclusion criteria:**

- Age group 2 to 18 years.
- All children with psychiatric illness and children with medical conditions complicated by psychiatric illness.
- A child will be included after verbal consent from parents or care taker.

**Exclusion criteria:**

1. Children less than 2 years
2. Children with mental retardation.
3. Denied consent.

**Research tools:**
1) Questionnaire which assess the child behavior, development and his social and familial backgrounds in addition to examination. Also there a section testing parent attitude towards their child with psychological disorder and their preference for management.

2) IQ scale (Wescler scale for children) was applied by psychologist for children who are suspected to have mental retardation to exclude them.

**Research team:**

Author
Psychiatrists, psychologist.

**Statistical analysis:**

Data was coded and arranged into master sheet. Tables were drawn and chi square test was used to test for significant differences between variables using statistical package for social studies (SPSS) computer program for analysis. P value < 0.05 was regarded as significant

**Ethical considerations:**

Verbal consent from patient, parents and care taker
A letter was issued to psychiatric consultant units asking for their acceptance and cooperation.
The information's collected from patient were highly confidential.
RESULTS

3.1 Demographic characteristic of children in the study population:

3.1.1 Age and sex:

The study included 72 patients; Male to female ratio was 2:1. fig (1).
Concerning the age groups in the study, 2 children (2.8%) were below 5 years, 34 child were in the age range of 5-10 years(47.2%) Those above 10 years were 36 (50%). Fig(2)

3.2 Pattern of presentation:
Fig (3) shows that the commonest cause of presentation was the behavioral abnormalities 57 patient presented with abnormal behavior (79.2%).

Among the behavioral abnormalities enuresis was the presenting symptom in about 21 patient (29.2%) fig (4).

While 20 children have aggressive behavior (28.7%) this is rather high frequency.

Antisocial behavior was manifested by 5 patient (6.9%), Encopresis was present in only two patient (2.8%), while 8 children show wandering as abnormal behavior.

Stealing as manifestation of conduct disorder was shown by 3 children (4.2%). fig (4)

Sleep disturbance mainly insomnia was present in about 9 children (11.1%). Fig (4).
Fig (1): Distribution of the study group by gender
n = 72

- Male: 67%
- Female: 33%
Fig (2) : Age distribution in study group
n = 72

- <5 years: 3%
- From 5-10 years: 50%
- > 10 years: 47%

Legend:
- <5 years
- From 5-10 years
- > 10 years
Fig (3) : Presence of abnormal behaviour in study group
n = 72

- Yes: 79%
- No: 21%
3.3 Family backgrounds and interfamilial relationships:

3.3.1 Family size:
Fig (5) shows family size of the study population, (31.9%) were from small families of less than four sibs, (55.8%) were from moderate size families of 4-7 sibs, and large families of 7 or more sibs were (15.3%).

3.3.2 Relation with sibs:
More than half were having close relation with their siblings, while the relation was not close in nine patients. Some patient had poor relation with their siblings these were 26 (36.1%). Fig (6).

3.3.2 Relation with fathers:
Table (1) shows that the relation between the patients and their fathers was good in 48 family (66.7%), while 3 children (4.2%) had fair relation with their fathers and 12 (16.7%) have disturbed relation with their fathers. about 8 children (11.1%) were orphans.

3.3.3 Relation with mothers:
Table (1) shows that children with intimate relation with their mothers were 45(62.5%), 5 patients have fair relation with their mothers (6.9%). The study included two children whose mothers were dead and two patients with no relation with their mothers .about 18 child (25%) had poor relation with their mothers.
Table (1): Relation with parent in the study group

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>51%</td>
</tr>
<tr>
<td>Moderate</td>
<td>13%</td>
</tr>
<tr>
<td>Poor</td>
<td>36%</td>
</tr>
<tr>
<td>Relation with Parent</td>
<td>Father n (%)</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Good</td>
<td>48 (66.7)</td>
</tr>
<tr>
<td>Moderate</td>
<td>3 (4.2)</td>
</tr>
<tr>
<td>Poor</td>
<td>12 (16.7)</td>
</tr>
<tr>
<td>None</td>
<td>1 (1.4)</td>
</tr>
<tr>
<td>Dead</td>
<td>8 (11.1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72 (100)</strong></td>
</tr>
</tbody>
</table>

3.3.4 Family history of psychiatric problems:
More than a third had positive family history of psychiatric illness were, two of them their own parent have history of psychiatric illness, Fig (7).

3.3.5 Socioeconomic status of the families:

Fig (8) shows the distribution of families according to the income, the study population was divided into three categories high social class which constitutes 9.7% of the total population, the most dominant category was the middle social class about 35 family (48.6%) while (41.7%) had low socioeconomic status.

3.4 Relation with peers:

Fig (7) shows patient relation with peers 36 children have good relation and interaction with their peers in spite of their illness, 27 patient (37.5%) have poor relation with peers while 9 patient (12.5%) have no relation or interaction with peers.

3.5 School performance:

In the study population 24 children were not attending school 9 children have good school performance, 15 children showed moderate performance while 24 children (33.3%) have bad performance. Fig (8).

3.6 Pattern of psychiatric illnesses:

The commonest psychiatric disorder was attention deficit hyperactivity disorder it was the presenting pattern in 22 children (30.6%). The second common disorder was enuresis, 13 children (18.1%) have although a total of 21 patient complain of enuresis some of them were having another psychiatric disorder.

Ten children had depression, learning difficulties were present in seven patient (9.7%) conduct disorders and autism occurred in three patient one child had post traumatic stress disorder.
Bipolar disorder occurred in only two patients (2.8%). Obsessive compulsive disorder manifested by one patient (1.4%) and anorexia nervosa has the same frequency of OCD in this study. Organic psychosis and childhood psychosis ranged between 1.4-4.2%. Lastly, two patients (2.8%) manifested sexual abuse with abnormal sexual behavior. Table (2).
Fig (7): Family history of Psychiatric illness in the study group
n = 72

- Yes: 36%
- No: 64%
Table (2): Pattern of psychiatric disorders in the study group

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperactivity</td>
<td>22</td>
<td>30.60%</td>
</tr>
</tbody>
</table>

Fig (8) Distribution of social class of study group
n = 72
<table>
<thead>
<tr>
<th>Disorder</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enuresis</td>
<td>13</td>
<td>18.10%</td>
</tr>
<tr>
<td>Depression</td>
<td>10</td>
<td>13.90%</td>
</tr>
<tr>
<td>Learning difficulty</td>
<td>7</td>
<td>9.70%</td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>3</td>
<td>4.20%</td>
</tr>
<tr>
<td>Psychosis</td>
<td>3</td>
<td>4.20%</td>
</tr>
<tr>
<td>Autism</td>
<td>3</td>
<td>4.20%</td>
</tr>
<tr>
<td>Bipolar disorders</td>
<td>2</td>
<td>2.80%</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>2</td>
<td>2.80%</td>
</tr>
<tr>
<td>Speech difficulty</td>
<td>2</td>
<td>2.80%</td>
</tr>
<tr>
<td>Obsessive compulsive</td>
<td>1</td>
<td>1.40%</td>
</tr>
<tr>
<td>PTSD</td>
<td>1</td>
<td>1.40%</td>
</tr>
<tr>
<td>Organic psychosis</td>
<td>1</td>
<td>1.40%</td>
</tr>
<tr>
<td>Psychomotor epilepsy</td>
<td>1</td>
<td>1.40%</td>
</tr>
<tr>
<td>Anorexia nervosa</td>
<td>1</td>
<td>1.40%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

3.7 Chronic illnesses in the study group:
Fifty two patient (72%) have no associated chronic illness, 15 children had epilepsy, one patient was asthmatic (1.4%) , two patient have chronic renal failure and one patient was deaf (1.4%). Table (3).

3.8 Association of psychiatric disorders with social factors and medical conditions:

3.8.1 Hyperactivity in relation sex and age:

Hyperactivity occurred in 16 male (33%) compared to 6 females (25%). Table (4).

Hyperactivity predominates in the age groups of under 5 and 5-10 years, (50%) and (44.1%) of children in this age groups had AHDA. While 16% of teenagers had this disorder. The age difference was statistically significant. Table (5)

3.8.2 Hyperactivity in relation to physical illness and social factors:

There was marked dominance of hyperactivity in patient with epilepsy, seven patient with hyperactivity had epilepsy compared to eight patient (53.3%) with other psychiatric disorders who had epilepsy. Table (6). Hyperactivity was present in all social classes. One patient from high social class had hyperactivity, 14 child of moderate socioeconomic status and seven children (23%) are from a low social class. table(7)

Table (3): chronic illness in the study group
### Table (4): Hyperactivity in relation to sex

<table>
<thead>
<tr>
<th>Gender</th>
<th>Hyperactivity</th>
<th>No Hyperactivity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>16 (33.3%)</td>
<td>32 (66.7%)</td>
<td>48 (66.6%)</td>
</tr>
<tr>
<td>Female</td>
<td>6 (25%)</td>
<td>18 (75%)</td>
<td>24 (33.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>22 (30.6%)</td>
<td>50 (69.4%)</td>
<td>72 (100%)</td>
</tr>
</tbody>
</table>

P = 0.6

### Table (5): Hyperactivity in relation to age

<table>
<thead>
<tr>
<th>Chronic Illness</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>1</td>
<td>1.40%</td>
</tr>
<tr>
<td>Asthma</td>
<td>1</td>
<td>1.40%</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>15</td>
<td>20.80%</td>
</tr>
<tr>
<td>Renal failure</td>
<td>2</td>
<td>2.80%</td>
</tr>
<tr>
<td>No illness</td>
<td>52</td>
<td>72.20%</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>100%</td>
</tr>
<tr>
<td>Age</td>
<td>Hyperactivity</td>
<td>No Hyperactivity</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------</td>
<td>------------------</td>
</tr>
<tr>
<td>&lt;5years</td>
<td>1(50%)</td>
<td>1(50%)</td>
</tr>
<tr>
<td>From 5-10years</td>
<td>15(44.1%)</td>
<td>19(55.9%)</td>
</tr>
<tr>
<td>&gt;10years</td>
<td>6(16.6%)</td>
<td>30(83.4%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22(30.6%)</strong></td>
<td><strong>50(69.4%)</strong></td>
</tr>
</tbody>
</table>

P=0.03

Table (6): Hyperactivity in relation to chronic illness (epilepsy)

<table>
<thead>
<tr>
<th>Chronic illness</th>
<th>Hyperactivity</th>
<th>No hyperactivity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>epilepsy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7(46.7%)</td>
<td>8(53.3%)</td>
<td>15(20.8%)</td>
</tr>
<tr>
<td>No</td>
<td>15(26.3%)</td>
<td>42(73.7%)</td>
<td>57(79.1%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22(30.5%)</strong></td>
<td><strong>50(69.4%)</strong></td>
<td><strong>72(100%)</strong></td>
</tr>
</tbody>
</table>

P=0.2
Table (7): Hyperactivity in relation to social class

<table>
<thead>
<tr>
<th>Social class</th>
<th>Hyperactivity</th>
<th>No Hyperactivity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>1 (14.3%)</td>
<td>6 (85.7%)</td>
<td>7 (9.7%)</td>
</tr>
<tr>
<td>Moderate</td>
<td>14 (40%)</td>
<td>21 (60%)</td>
<td>35 (48.6%)</td>
</tr>
<tr>
<td>Low</td>
<td>7 (23.3%)</td>
<td>23 (76.7%)</td>
<td>30 (41.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>22 (30.5%)</td>
<td>50 (69.4%)</td>
<td>72 (100%)</td>
</tr>
</tbody>
</table>

P=0.2
3.8.3 Enuresis in relation to sex and age:

Nine males had enuresis compared with four females (16.7%). Table (8).
Enuresis occurred in all age groups of, 5-10 years and more than 10 years constituting (17.6%) and (16.6%). Those below 5 years one child show enuresis. Table (9).

3.8.4 Enuresis in relation to social class:

Enuresis occurred equally in all social. Table (10).

3.8.5 Learning difficulties in relation to sex and age:

Learning difficulties are more common in females than males, four males (8.3%) compared to three females (12.5%) presented with learning difficulty. Table (11).

11.8% of children in the age range of 5-10 years had learning difficulties and 8.3% children above 10 years had learning difficulty. Table (12).

3.8.6 Learning difficulties in relation to social factors and language development:

8.6% of Children from middle social class had learning difficulty and 13.3% of children from low social class suffered learning difficulty.
All children with learning difficulties have 4-7 sibs, no one was from very large sibship, the relation with family size was statistically significant (P= 0.03). Table (13,14)
delayed language development occurred in 25% of children with learning with learning difficulty compared 87% of children with other disorder who had simple delay, the association with language delay was statistically significant (P= 0.03). Table (15).
Table (8): Enuresis in relation to sex

<table>
<thead>
<tr>
<th>Gender</th>
<th>Enuresis</th>
<th>No enuresis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>9(18.8%)</td>
<td>39(81.2%)</td>
<td>48(66.7%)</td>
</tr>
<tr>
<td>Female</td>
<td>4(16.7%)</td>
<td>20(83.3%)</td>
<td>24(33.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>13(18.1%)</td>
<td>59(81.9%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.9

Table (9): Enuresis in relation to age:

<table>
<thead>
<tr>
<th>Age</th>
<th>Enuresis</th>
<th>No Enuresis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>1(50%)</td>
<td>1(50%)</td>
<td>2(2.8%)</td>
</tr>
<tr>
<td>from 5-10</td>
<td>6(17.6)</td>
<td>28(82.4%)</td>
<td>34(47.2%)</td>
</tr>
<tr>
<td>&gt;10</td>
<td>6(20%)</td>
<td>30(80%)</td>
<td>36(50%)</td>
</tr>
<tr>
<td>Total</td>
<td>13(18.1%)</td>
<td>59(81.9%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.4
Table (10): Enuresis in relation to social class

<table>
<thead>
<tr>
<th>Social class</th>
<th>Enuresis</th>
<th>No enuresis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>2(28.6%)</td>
<td>5(71.4%)</td>
<td>7(9.7%)</td>
</tr>
<tr>
<td>Moderate</td>
<td>8(22.9%)</td>
<td>27(77.1%)</td>
<td>35(48.6%)</td>
</tr>
<tr>
<td>Low</td>
<td>3(10%)</td>
<td>27(90%)</td>
<td>30(41.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>13(18.1%)</td>
<td>59(81.9%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.3

Table (11): Learning difficulty in relation to sex

<table>
<thead>
<tr>
<th>Gender</th>
<th>Leaning difficulty</th>
<th>No learning difficulty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4(9.3%)</td>
<td>44(91.7%)</td>
<td>48(66.7%)</td>
</tr>
<tr>
<td>Female</td>
<td>3(12%)</td>
<td>21(88%)</td>
<td>24(33.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>7(9.7%)</td>
<td>65(90.3%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.8
Table (12): Learning difficulty in relation to age

<table>
<thead>
<tr>
<th>Age</th>
<th>Learning difficulty</th>
<th>No learning difficulty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 years</td>
<td>0(0%)</td>
<td>2(100%)</td>
<td>2(2.8%)</td>
</tr>
<tr>
<td>from 5-10 years</td>
<td>4(11.8%)</td>
<td>30(88.2%)</td>
<td>34(47.2%)</td>
</tr>
<tr>
<td>&gt;10 years</td>
<td>3(8.3%)</td>
<td>33(91.7%)</td>
<td>36(50%)</td>
</tr>
<tr>
<td>Total</td>
<td>7(9.7%)</td>
<td>65(90.3%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.7

Table (13): Learning difficulty in relation to social class

<table>
<thead>
<tr>
<th>Social class</th>
<th>Learning difficulty</th>
<th>No learning difficulty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>0(0%)</td>
<td>7(100%)</td>
<td>7(9.7%)</td>
</tr>
<tr>
<td>Moderate</td>
<td>3(8.6%)</td>
<td>32(91.4%)</td>
<td>35(48.6%)</td>
</tr>
<tr>
<td>Low</td>
<td>4(13.3%)</td>
<td>26(86.7%)</td>
<td>30(41.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>7(9.7%)</td>
<td>65(90.3%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.5
Table (14): Learning difficulty in relation to family size

<table>
<thead>
<tr>
<th>No. of sibs</th>
<th>learning difficulty</th>
<th>No learning difficulty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;4</td>
<td>0(0%)</td>
<td>23(100%)</td>
<td>23(31.9%)</td>
</tr>
<tr>
<td>from 4-7</td>
<td>7(8.4%)</td>
<td>31(81.6%)</td>
<td>38(52.8%)</td>
</tr>
<tr>
<td>&gt;7</td>
<td>0(0%)</td>
<td>11(100%)</td>
<td>11(15.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>7(9.7%)</td>
<td>65(90.3%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.03

Table (15): Learning difficulty in relation to delayed language development

<table>
<thead>
<tr>
<th>Language development</th>
<th>Learning difficulty</th>
<th>No learning difficulty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed</td>
<td>4(12%)</td>
<td>14(88%)</td>
<td>16(22.2%)</td>
</tr>
<tr>
<td>Normal</td>
<td>3(8.6%)</td>
<td>53(91.4%)</td>
<td>56(77.8%)</td>
</tr>
<tr>
<td>Total</td>
<td>7(9.7%)</td>
<td>65(90.3%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.03
3.8.7 Depression in relation to sex and age:

Depression was commoner in females, 16.6% of females had depression and 12.5% of males had depression. Teenagers were affected by depression more than young children, nine of them had depression while one young child had depression (P= 0.02). The age difference was statistically significant. Tables (16,17).

3.8.8 Depression in relation to physical illness and social factors:

The majority of patients with depression have no associated chronic illness, two children had chronic renal failure both had depression. The relation between depression and chronic illness was statistically significant. Table (18).

Regarding the family size depression was commoner in large families, depression in (45%) of children with more than seven sibs, 7.8% of children who had 4-7 sibs and two patients have less than four sibs, the association of depression with large family size was statistically significant. Table (19).

Most of children suffering from depression were of low socioeconomic status (25%), three patients with depression belong to middle social class (8.5%) and one child was from high social class. Table (20).
Table (16): Depression in relation to sex in the study group

<table>
<thead>
<tr>
<th>Gender</th>
<th>Depression</th>
<th>No Depression</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6(12%)</td>
<td>42(88%)</td>
<td>48(66.7%)</td>
</tr>
<tr>
<td>Female</td>
<td>4(16.7%)</td>
<td>20(83.3%)</td>
<td>24(33.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>10(13.9%)</td>
<td>62(86.1%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.6

Table (17): Depression in relation to age in the study group

<table>
<thead>
<tr>
<th>Age group</th>
<th>Depression</th>
<th>No Depression</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5Years</td>
<td>0(0%)</td>
<td>2(100%)</td>
<td>2(2.8%)</td>
</tr>
<tr>
<td>from 5-10 years</td>
<td>1(3%)</td>
<td>33(97%)</td>
<td>34(47.2%)</td>
</tr>
<tr>
<td>&gt;10 years</td>
<td>9(25%)</td>
<td>27(75%)</td>
<td>36(50%)</td>
</tr>
<tr>
<td>Total</td>
<td>10(13.9%)</td>
<td>62(86.1%)</td>
<td>72(100%)</td>
</tr>
</tbody>
</table>

P=0.02
Table (18): Depression in relation to chronic illness

<table>
<thead>
<tr>
<th>Chronic illnesses</th>
<th>Depression</th>
<th>No Depression</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>0</td>
<td>1(100%)</td>
<td>1(1.4%)</td>
</tr>
<tr>
<td>Asthma</td>
<td>0</td>
<td>1(100%)</td>
<td>1(1.4%)</td>
</tr>
<tr>
<td>Renal failure</td>
<td>2(100%)</td>
<td>0</td>
<td>2(2.8%)</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>0</td>
<td>15(100%)</td>
<td>15(20.8%)</td>
</tr>
<tr>
<td>Others</td>
<td>1(100%)</td>
<td>0</td>
<td>1(1.4%)</td>
</tr>
<tr>
<td>No illness</td>
<td>7(13.5%)</td>
<td>45(86.5%)</td>
<td>52(72.2%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10(13.9%)</strong></td>
<td><strong>62(86.1%)</strong></td>
<td><strong>72(100%)</strong></td>
</tr>
</tbody>
</table>

P=0.0006

Table (19): Depression in relation to family size

<table>
<thead>
<tr>
<th>No of sibs</th>
<th>Depression</th>
<th>No Depression</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;4</td>
<td>2(8.7%)</td>
<td>21(91.3%)</td>
<td>23(31.9%)</td>
</tr>
<tr>
<td>From 4-7</td>
<td>3(7.9%)</td>
<td>35(92.1%)</td>
<td>38(52.8%)</td>
</tr>
<tr>
<td>&gt;7</td>
<td>5(45.5%)</td>
<td>6(54.5%)</td>
<td>11(15.3%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10(13.9%)</strong></td>
<td><strong>62(86.1%)</strong></td>
<td><strong>72(100%)</strong></td>
</tr>
</tbody>
</table>

P=0.004
Table (20): Depression in relation to social class

<table>
<thead>
<tr>
<th>Social class</th>
<th>Depression</th>
<th>No Depression</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>1 (14.3%)</td>
<td>6 (85.7%)</td>
<td>7</td>
</tr>
<tr>
<td>Moderate</td>
<td>3 (8.6%)</td>
<td>32 (91.4%)</td>
<td>35</td>
</tr>
<tr>
<td>Low</td>
<td>6 (20%)</td>
<td>24 (80%)</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10 (13.9%)</strong></td>
<td><strong>62 (86.1%)</strong></td>
<td><strong>72 (100%)</strong></td>
</tr>
</tbody>
</table>

P=0.4
3.8.9 Bipolar disorders in relation to age and sex:

Bipolar disorder was not a common problem in the study population only two patient show this disorder they were males and their age was above 10 years.

3.8.10 Conduct disorders in relation to age and sex:

Conduct disorders occurred in two males (4.1%) and one female (4.2%).

All patient with conduct disorder were teenagers this is similar to other studies which reported higher occurrence among adolescents, concerning social background of the three patient having conduct. Disorders two belong to high social class the relation with social class was statistically significant. P(0.002).

3.9 Possible precipitating factors of psychiatric disorders among the study population:

Risk factors that usually cause psychological disturbance, which may lead to psychiatric disorder, were studied; the commonest precipitating cause in this study was hospital admission in 18.1% of children. Separation from parent was experienced by 11.1% Physical abuse in (8.3%) children while accident occurred in (4.2%) violence in the family context was attended by 1.4% and 2.8 children were sexually abused. About 24 patient did not show clear risk factor other than genetics. Table (21)

3.10 Parent response toward their affected children:

3.10.1 Fathers response toward their children with psychiatric problem:

The majority of fathers showed great sympathy towards their affected children, (6.9%) of father have a feeling of guilt while (8.3%) deny any psychiatric problems in their children.
(9.7%) of fathers think that the illness of their children is due to evil spirits and consult the local religious leader (Elsheikh). It is striking that 9 fathers were unresponsive to their children illness while Anxiety was shown by 4.1% of fathers. (6.9%) of fathers tend to blame the mothers for the child illness. While (2.8%) of fathers reacted by offering more care to the affected children.

5.5% of fathers were aggressive and started physically abuse the child.

Table (22)

3.10.2 Mothers response towards their children with psychiatric problems:

Mothers response was similar in one way to fathers response, Many mothers were sympathetic with their affected children (41.7%). Only one mother have a feeling of guilt towards her affected child. About 2.8% of mothers go to (Elsheikh). Mothers who rejected the diagnosis were (5.6%). Anxiety was more common in mothers than fathers (23.6%) of mothers were anxious about their child illness. (6.9%) of mothers start to feel that their affected child is a burden these were 1.4% of mothers give more care to the affected child while (6.9%) were unresponsive to the condition. Table(22)
Fig (9) : Relation with Peers in the study group
n = 72

- Good: 49%
- Poor: 38%
- None: 13%
Fig (10): School Performance in the study group n=72

- 33% good
- 33% moderate
- 21% poor
- 13% not attendante
Table (21) precipitating factors of psychiatric illness

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Frequency</th>
<th>Percentage</th>
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<tr>
<td>hospitalization</td>
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<tr>
<td>separation from parent</td>
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<td>11.1%</td>
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<td>change of home</td>
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<tr>
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<tr>
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<td>2.8%</td>
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<tr>
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<td>1.4%</td>
</tr>
<tr>
<td>violence</td>
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<td>1.4%</td>
</tr>
<tr>
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<tr>
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<td>33.30%</td>
</tr>
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<td><strong>Total</strong></td>
<td><strong>72</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Parent response</td>
<td>Father response No (%)</td>
<td>Mother response No (%)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>rejection of diagnosis</td>
<td>6(8.3)</td>
<td>4(5.6)</td>
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<tr>
<td>sympathy</td>
<td>22(30.6)</td>
<td>30(41.7)</td>
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<tr>
<td>feel of guilt</td>
<td>5(6.9)</td>
<td>1(1.4)</td>
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<tr>
<td>anxious</td>
<td>3(4.2)</td>
<td>17(23.6)</td>
</tr>
<tr>
<td>depressed</td>
<td>1(1.4)</td>
<td>3(4.2)</td>
</tr>
<tr>
<td>aggressive</td>
<td>4(5.6)</td>
<td>2(2.8)</td>
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<tr>
<td>giving more care</td>
<td>2(2.8)</td>
<td>2(2.8)</td>
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<tr>
<td>blaming the mother</td>
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<td>\cdot</td>
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<tr>
<td>Burden</td>
<td>0</td>
<td>5(6.9)</td>
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<tr>
<td>go to elfaki</td>
<td>7(9.7)</td>
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</tr>
<tr>
<td>dead</td>
<td>8(11.1)</td>
<td>2(2.8)</td>
</tr>
<tr>
<td>none</td>
<td>9(12.5)</td>
<td>5(6.9)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72(100)</strong></td>
<td><strong>72(100)</strong></td>
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DISCUSSION

Characteristics of the study population:

**Gender and age:**

The study included 72 children with a predominance of males, male to female ratio was 2:1. Although the age groups were divided into three groups generally children below 10 years were equal to those above 10 years (teenagers). The preschool children were the least represented group in this study, compared to Robert E, who studied prevalence of psychopathology among children and adolescents. He reviewed 52 studies and reported a median rate of psychopathology of 8% in preschoolers, 12% for preadolescents and 12% for adolescents.\(^{(21)}\)

**Pattern of presentation:**

The commonest mode of presentation was behavioral abnormalities and this is similar to all other studies which found that behavioral deviancy are the most sound cause of presentation of psychiatric disorders among children\(^{(4)}\).

The commonest behavioral abnormalities shown in the study included hyperactivity, enuresis, aggression, sleep disturbances, conduct disorders and antisocial behavior.

Conduct behavior was not as prominent as in other studies this may be because other studies included larger numbers of children and adolescents. Conduct disorders are the largest single group of psychiatric illness in adolescents it affect 9% of boys and 2% of girls under 18 years.\(^{(1)}\). Alhussaini A, studied behavioral disorders in Al-Ain he included 620 children, conduct disorders occurred in 12% of children.\(^{(76)}\)

**Family size:**
Families in the study were three groups small frame families, moderate size families and very large families which were the least common (15.3%). This reflects that people now are preferring to have fewer children than previously due to the increasing socioeconomic impact associated with large families.

**Relation with sibs:**

Patients who show disturbed relation with sibs were (36.1%) and this because some psychiatric disorders affect patient relation with their sibs especially the hyperactivity and autism. Because autistic children may stiffen and resist affection, even those who want to make friends have troubles understanding normal social interaction\(^{(63)}\).

**Relation with fathers:**

The inter familial bond between patient and fathers in about 48 child but 12 child have poor relation with their fathers and this occurred in families when there is divorce or the father is abroad in some cases father were not concerned with their kids problems and this has weakened the relation between them. About eight children were orphan and this clearly adds to psychological impact on children.

**Relation with mothers:**

The relation between patients and their mothers was good in (62.5%) of cases. While (25%) have poor relation with their mum due to divorce, maltreatment; which have psychobiological sequels in children with great risk for intergenerational cycles of abuse and neglect. Marital discord and mother reaction towards child’s behavior also disturbed the interfamilial relations. Two patient were not having any relation with mum and this was because of their psychiatric illness mainly\(^{(73)}\).

**Family history of psychiatric illness:**
Around (36.1%) of children had a family history of psychiatric disorder and this support the theory of genetic basis in the causation of psychiatric disorders. Heredity as a causative factor of primary enuresis has been confirmed by the identification of agene marker associated with the disorder. Danish researchers evaluated 11 families with primary enuresis the trait showed nearly complete penetrance in these families.\(^{(9)}\)

**Relation with peers:**

Patient relation with peers was good in (50%) of cases and (37.5%) of children had poor relation with peers, most of children with ADHA disorders have unaccepted behavior that disturbed their relation. This is supported by Bagwell et al study (2001) he included 111 child with ADHA and 100 child with out ADHA he reported greater peer rejection in children with ADHA. In addition, autistic children tend to have minimal relation if any with peers. Depressed children have low self-esteem and are less confident in maintaining relation with others.\(^{(14)}\)

**School performance:**

Among the study population 24 child were not attending school and this mainly due to their illnesses some of them interrupt, schooling others did not inter school from the start. Poor school performance was probably due to illnesses impact, in comparison with Al sharbati M, study of behavioral disorder among 1502 school boy he also find poor school achievement among children with behavioral problems.\(^{(76)}\)

**Socioeconomic status:**

The high social class was the least frequent class among the study population and the majority of patient belong to the middle or low social classes and this seem to be similar to the general population.
Chronic illnesses:

The commonest chronic illness in the study population was epilepsy constituting about (20.8%) this may be because frequently epileptics are referred to psychiatrist so there is early detection of psychiatric disorders among them.

Patterns of psychiatric disorders:

The most frequently observed psychiatric disorder was hyperactivity, this is similar to other studies; hyperactivity affect 3-10% of children in America. (14)

The second common was enuresis.

Of the affective depression was the most common (13.9%) the age group affected by depression was the teenagers. This finding is supported by Brumback study in 2001 in USA which reported that manic disorders predominates in younger children while depression is more evident with pubertal maturation. (47)

Bipolar disorders constitute only 2.8% of the psychiatric disorder and no child show mania.

Learning difficulty was present in (9.7%) of cases and many parent did not attribute this to psychiatric problem and try to force children beyond their capacities. Anorexia nervosa was found in one patient she was a female this was expected as the disorder is commoner in females. Organic psychosis was present in (1.4%) of cases and childhood psychosis in 4.2% because this condition is rare in (1.4%) of patient the psychosis was induced by substance abuse. Two patient were subjected to sexual abuse which had lead them to have abnormal sexual behavior and one of them start to be sexual abuser. (73)
Association of psychiatric disorders with social factors and medical conditions:

Hyperactivity is one of the disorders which are commoner in male but there was no remarkable gender differences in my study although other studies that hyperactivity is ten times more common in boys. Hyperactivity predominates in the under 5 and 5-10 years age range this is the usual affected age groups rather than adolescents. The association of hyperactivity with epilepsy in this study appears to be accidental. Hyperactivity was found to be commoner in middle social class, this because most of the study population belong to this class.\(^{(14)}\)

Enuresis occurred in 16.6% of females and 18.8% of males. Enuresis occurred in all age groups, compared to Serel TA, study he included 1247 child with a mean age of 9, 8.9% had enuresis, 53.2% were males and 46.8% females in both studies showed minimal gender differences.\(^{(78)}\)

Learning difficulties were common in females and the affected age groups were 5-10 and >10 years because at this age parent are very concerned with schooling as children at this age are very dependant on parent follow up in learning tasks. Children with learning difficulties were from middle and lower social classes although no postulation that learning difficulties are less common in higher social classes, All children with this disorder have 4-7 sibs this show that there is correlation between family size and learning difficulties. This is similar to Elgazali finding in a study in U.E.A, he found association between learning difficulties and large sib ship.

About 25% of children with learning difficulties have delayed language development; children with language attainment delay tend to experience writing and reading difficulties later in life.\(^{(25)}\)
Depression was common in adolescent males in this study, 25% of teenagers had depression. This finding is similar but lower than Brumbak study which showed predominance of depressive pattern of affective disorders in adolescents (61%). Depression was found to be related to chronic renal failure this because chronic illnesses have psychological impact on these patients.

It was commoner in large families 45% had depression, this because adequate parenting is difficult in large families and large families are usually associated with financial problems that may cause marital disharmony and weaken interfamilial relations. Twenty percent of children belonging to low social class had depression. (47)

Bipolar disorder were manifested by two adolescent males who were from low social class this disorder was not a common one in the study group.

Conduct disorders affected and females equally, usually it is commoner in males it immerge at the teenage. Around 28% of children from high social class had conduct disorder, they present with steeling, which is known to occur in children who do not need to steel. They are not financial deprived but may be emotionally deprived. (6)

Possible precipitating factors of psychiatric disorders:

The precipitating factors were not clear in every patient, on the other hand some patient were having more than one risk factor for developing psychiatric disorder. Hospital admission and surgical operations were one of the leading risk factors because the environment in the hospital, the frequent injections, the unfamiliar surroundings in addition to the illness that cause the admission all contribute to stresses suffered by the child and disturbed his internal peace and makes him vulnerable to psychiatric problems later. (71)
Another leading factor was the issue of parenting, separation from mothers was associated with behavioral problems in a number of patients, uni-parent families were more than 10 in this study.(9)
Violence was one of the risk factors it was followed by PTSD in one patient who witnessed violence. Violence is a known risk factor for PTSD, Buka et al. studied violence prevalence, risks and consequences (2001) in USA he reported high rates of stresses, depression and aggression among those who witnessed violence. Degree of family conflict, domestic violence and family support were demonstrated to modify impact of violence.(42)
Change in the living environment by changing the family composition and changing the country of living was another factor.
Sexual and physical abuse was clearly associated with psychiatric disorder because children who suffer abuse feel that they are unsafe. (73)
About 33.3% of children were not having apparent precipitating factor, their illness may be due to genetic factors.

**Parent responses towards their children with psychiatric illness:**

Sympathy towards affected children was the commonest response while feeling of guilt was experienced more by father who were away from their children when they develop the disorder most of them were abroad collecting money to maintain the family stability.
Fathers were blaming the mothers in most cases of enuresis because they think that toilet training is the mothers job and in failure in this side is her responsibility.
Mothers of children with hyperactivity some of them feel that the child is burden because it was difficult for them to control the child behavior. These responses are comparable to Bengt study of parent coping strategies and attitude in two groups of autistic and non-autistic children, attitudes ranged from loving care, worry, stress and guilt feeling. Worry and guilt
feeling were present in both groups but sense coherence had strong stress reducing effect.

The group of parents who reject the diagnosis of their children initially were unaware of the magnitude of their children disorder. Some unresponsive parents have psychiatric disorder and others have another family and are ignoring the problem of this child. Some parents were aggressive and start physical abuse to change the abnormal behavior and this adds more to the child disturbance.\(^{(73)}\)

CONCLUSION
Different patterns of psychiatric disorders were identified. The majority of children have behavioral disorders, other disorders; affective disorder learning disorder, mood disorders, autism and post traumatic stress disorders occurred in a minority of children.

Attention deficit hyperactivity disorder was the commonest disorder with predilection toward males. ADHA appeared in all age groups but projected more in the age range between 5-10 years.

The second common disorder was enuresis which predominates in male coming from deprived families.

The occurrence of psychiatric disorders has correlation with social factors and chronic illnesses.

Members of large families suffered from learning difficulties more often. Also delayed language development was significantly associated with learning difficulties.

Most of the depressed children were adolescents. Two of depressed children have chronic renal failure. Half of the patients suffering depression were members of large families.

Two third of patient who showed conduct disorders were adolescent male.

Hospital admission puts great psychological impact on children which contributed to the occurrence of psychological disorders in vulnerable children.

Unstable families, separation experiences and domestic violence were other precipitating factors of psychiatric disorders among children. In addition to major changes in living environment such
as moving from one country to another one with different cultures and settings.

- Generally parent were sympathetic towards their children experiencing psychiatric disorders. Mothers were more anxious towards their affected children than fathers.
- Parent unresponsiveness was the reflection of marital discord and disturbed interfamilial relationships.

Because of social stigma of psychiatric illnesses and ignorance some parent preferred traditional healers.

**RECOMMENDATIONS**
• The use of media to address the community in the support of families with psychiatric illness.

• Enrolling psychologist or social workers in school health teams for early screening of psychological disorders among school children.

• Supporting families of children with psychiatric disorders by the health team, psychologist and social workers through counseling and social support.

• Campaigns of health education to raise the community awareness about psychiatric disorders

• Training courses for teachers about behavioral deviances in children and importance of early assessment and counseling. Because they may help in early referral to appropriate health services.

• Raising awareness of parent of children with psychiatric disorders on how to handle their children.

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64- Robbins DI, Fein D, Barton MI, Green JA. The modified checklist for autism in toddlers: an initial study investigating the early detection of autism and pervasive developmental disorders. Journal of Autism and Developmental Disorders 2001; 31(2): 149-151


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Questionnaire

Serial No................

Personal Data:

1- gender : 1.1 male 1.2 female

1. 2- age : 2.1 <5 2.2 5-10 2.3 >10

3- abn. behavior:
3.1 yes 3.2 no ,

4- If yes
4.1 sleep 4.2 enuresis 4.3 encoperisis 4.4 social 4.5 antisocial
4.6 wandering 4.7 truant 4.8 lying 4.9 stealing 4.10 aggressive 4.11 motor 4.12 eat:

5- age of the father 5.1 <30 5.2 30-40 5.3 >40

6- age of the mother 6.1 <30 6.2 30-40 6.3 >40

7- No. of sibs. 7.1 <4 7. 7.3 >7

8- Relation with sibs.: 8.1 good 8.2 poor 8.3 moderate

9- relation with parent :
9.1 good 9.2 poor 9.3 moderate

Father:

9.1.1 good 9.1.2 poor 9.1.3 moderate 9.1.4 others

Mother:

10- history of psycho .problem in one of the parent or family member

10.1 yes 10.2 no

11- developmental history :
11.1 social:
11.1.1 normal 11.1.2 delayed
11.2 gross motor:
11.2.1 normal  
11.2.2 delayed

11.3 language:
11.3.1 normal  
11.3.2 delayed

11.4 fine motor:
11.4.1 normal  
11.4.2 delayed

12-relation with peers:
12.1 good  
12.2 poor  
12.3 none

13- school performance:
13.3 poor  
13.4 not attendant  
13.1 good

13.2 moderate

14- social class:
14.1 high  
14.2 moderate  
14.3 low

15- important events :
15.1 accident  
15.2 hospital admission  
15.3 separation from
parent  
15.4 death of parent  
15.5 change in family
composition  
15.6 change of school  
15.7 change of the
house  
15.8 no events  
15.9 others

16-history of chronic illness:
16.1 diabetes  
16.2 asthma  
16.3 renal failure  
16.4 malignancy

16.5 no  
16.6 epilepsy  
16.7 others

Examination

17-size & body build :
17.1 average  
17.2 below average  
17.3 above average

18-eye to eye contact :
18.1 positive  
18.2 negative

19- Motor behavior:

19.1 normal  
19.2 over active  
19.3 immobile

19.4 repetitive movement

20 motor skills :
20.1 normal  
20.2 tremulous  
20.3 clumsy

21-mood:
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<th>irritable</th>
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<td>Obsessional thoughts</td>
</tr>
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26 diagnosis: ............

27- father response towards his child with psycho. Problem:  
27.1 rejection of the diagnosis 27.2 sympathy 27.3 feel of guilt 27.4 go to alfaki 27.5 others ...........

28- mother response towards her child with psycho. Problem:  
28.1 rejection of the diagnosis 28.2 sympathy 28.3 feel of guilt 28.4 Others…

29 -Father preference for management of the child:  
29.1 Continue with psychiatrist 29.2 elsheikh 29.3 both 29.4 others

30- Mother preference for management of the child:  
30.1 Continue with psychiatrist 30.2 elsheikh 30.3 both 30.4 others