



Napata College
Faculty of medicine

**Anxiety and depression among mothers of children with
intellectual and developmental disability in Khartoum, 2022**

A thesis submitted for partial fulfillment of the requirement of MBBS degree

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Declaration

**This research is my original work and has not been presented for a degree in
any other university**

Signature

date

Supervision declaration

**This research has been submitted for review with our approval as university
supervisor**

Signature

date

Dedication

To my parents,

Brothers and sisters,

Colleagues and friends,

And to all who seek knowledge

ACKNOWLEDGEMENT

Firstly, all thanks to Allah from the start to the end.

Secondly Our supervisor, DR. Ghada Alamin Alriah

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Abstract

Intellectual and developmental disabilities (IDDs) are disorders that are usually present at birth and that negatively affect the trajectory of the individual's physical, intellectual, and/or emotional development. "IDD" is the term often used to describe situations in which intellectual disability and other disabilities are present. In this study, The age group of mothers >15 years reported in (0%) of women , between 15-25 years (16%) , between 25-35 years (44%) and above 35 years (48%) , University level of education reported in (32%) , school in (34%) , educate (32%) and non reported in (10%) , Residence from rural areas reported in (42%) of people and from town (58%) , The age group of children >1 years reported in (19%) of children , between 1 - 5 years (33%) , between 5 - 10 years (31%) and above 10 years (17%) , children diagnosed during pregnancy reported in (16%) of children , neonate (33%) , infant (21%) , preschool (18%) and at school age (10%) , Children with cerebral palsy reported in (23%) , syndrome (53%) and with special needs (24%) , The level of disability reported in mild (39%) , moderate (24%) and in severe (37%) , The follow up of mothers during the pregnancy show (87%) with follow up and (13%) without follow up , 97% was counseled and 21% was not , The figure show 21% of children admitted to main stream , 60% to special centers and 19% stay at home , On academic achievement the ability to understand is poor in (37%) , good in (40%) and excellent in (23%) , On behavior of a children (25%) are calm and (75%) are with difficult contact with others , 32% of children with family history of disability and 68% without family history of disability , The effect of child illness on child life style is about 83% of children and the other 17% are normal or without effect , About marital status (73%) married and relative relation , (7%) divorced and (20%) widow , The effect of illness on marital status is present in 56% of them , The social acceptance of child disability is poor in (43%) of children , good in (30%) and excellent in (27%) , anxiety symptoms that appears in mothers of children with illnesses is about (67%) , depression symptoms that appears in mothers of children with illnesses is about (33%) , financial status that is low in (61%) , moderate in(29%) and high in (10%) , 27% of affected mothers is on chronic medications and 73% are not on chronic medication and 86% of them doing physiotherapy and 14% not . Mental health providers need to be aware of these issues, so appropriate mental health screening can be utilized among the care givers of children with IDD. It is important that these mothers receive adequate support in order to manage their mental health so that they can better provide for their child's needs.

الخلاصة

الإعاقات الذهنية والنمائية (IDDs) هي اضطرابات عادة ما تكون موجودة عند الولادة وتؤثر سلبًا على مسار النمو الجسدي و/أو الذهني و/أو العاطفي للفرد. في هذه الدراسة، تم الإبلاغ عن الفئة العمرية للأمهات < 15 عامًا في (0%) من النساء، بين 15-25 سنة (16%)، بين 25-35 سنة (44 في المائة) وما فوق 35 سنة (48 في المائة)، أبلغ مستوى التعليم الجامعي في (32%)، المدرسة في (34%)، التعليم (32%) وغير المبلغ عنه في (10%)، الإقامة من المناطق الريفية المبلغ عنها في (42%) من الناس ومن المدينة (58 في المائة)، الفئة العمرية للأطفال < 1 سنة المبلغ عنها في (19%) الأطفال الذين تتراوح أعمارهم بين 1 5 سنة (33% سنوات) بين 5 - 10 سنوات (31 في المائة) وما فوق 10 سنوات (17 في المائة)، تم الإبلاغ عن الأطفال الذين تم تشخيصهم أثناء الحمل في (16 في المائة) من الأطفال حديثي الولادة (33 في المائة) والرضع (21 في المائة) ومرحلة ما قبل المدرسة (18%) وفي سن المدرسة (10%)، تم الإبلاغ عن الأطفال المصابين بالشلل الدماغي في (23%) ، متلازمة (53%) وذوي الاحتياجات الخاصة (24%)، مستوى الإعاقة المبلغ عنه في 39% خفيفة ، و moderate (24%) (37) sever .(، متابعة الأمهات أثناء عرض الحمل (87 في المائة) مع المتابعة و (13 في المائة) بدون متابعة، و 97 في المائة تم تقديم المشورة و 21 في المائة لم يتم تقديمها، ويظهر الشكل أن 21 في المائة من الأطفال المقبولين في التيار الرئيسي، و 60 في المائة في المراكز الخاصة، و 19 في المائة يبقون في المنزل، وفيما يتعلق بالتحصيل الأكاديمي، فإن القدرة على الفهم ضعيفة في (37%)، جيد في (40%) وممتاز في (23%)، في سلوك الأطفال (25%) هادئة و (75%) مع اتصال صعب مع الآخرين، و 32% من الأطفال الذين لديهم تاريخ عائلي من الإعاقة و 68% بدون تاريخ عائلي من الإعاقة، وتأثير مرض الطفل على نمط حياة الطفل هو حوالي 83% من الأطفال و 17% الأخرى طبيعية أو غير مؤثرة، حول الحالة الزوجية (73 في المائة) متزوجة وقريبة، (7 في المائة) مطلقة و (20 في المائة) نافذة، تأثير المرض على الحالة الزوجية موجود في 56 في المائة منها.

CHAPTER ONE

- INTRODUCTION
- PROBLEM STATEMENT
 - JUSTIFICATION
 - *Objectives*

CHAPTER ONE

1.1. Introduction

Intellectual and developmental disabilities (IDDs) are disorders that are usually present at birth and that negatively affect the trajectory of the individual's physical, intellectual, and/or emotional development. Many of these conditions affect multiple body parts or systems. Intellectual disability starts any time before a child turns 18 and is characterized by problems with both intellectual functioning or intelligence – which includes the ability to learn, reason, problem-solve, and other skills – and adaptive behavior, which includes everyday social and life skills¹. The term "developmental disabilities" is a broader category of often lifelong disability that can be intellectual, physical, or both. "IDD" is the term often used to describe situations in which intellectual disability and other disabilities are present. Examples of developmental disabilities include autism, behavior disorders, brain injury, cerebral palsy, Down syndrome, fetal alcohol syndrome, intellectual disability, and spina bifida.² (Developmental Disabilities Assistance and Bill of Rights Act of 2000). Anxiety is an emotion which is characterized by an unpleasant state of inner turmoil and includes feelings of dread over anticipated events³ Anxiety is a feeling of uneasiness and worry, usually generalized and unfocused as a overreaction to a situation that is only subjectively seen as menacing.⁴ Depression is a mental state of low mood and aversion to activity⁵ Classified medically as a mental and behavioral disorder, the experience of depression affects a person's thoughts, behavior, motivation, feelings, and sense of well-being.⁶

1.2. Problem statement

Bringing up a child is hard enough for any family, but for the parent of a disabled child, worries about their future can be overwhelming, especially because these parents often lack the financial and professional support necessary. Parents may be at a greater risk of depression and anxiety, due to a number of associated stressors, such as increased caregiver demands and financial strain.

1.3. Justification

From observation many Sudanese families have children with IDD and these increase incidences of psychiatric problems that affect the mothers.

Khartoum state was selected because many people with different backgrounds and different socioeconomic status live there.

1.4. Objectives

1.4.1. General objective:

To study the prevalence of anxiety and depression among mothers of children with IDD in Khartoum 2022.

1.4.2. Specific objectives:

To estimate the risk factors of anxiety and depression among mothers of children with IDD.

To identify factors associated with depression and/or anxiety in mothers of children with IDD.

CHAPTER TWO

LETRETURE REVIEW

CHAPTER TWO

LETRTURE REVIEW

2.2. Definition of disability in general

One of the common definitions of disability is (that it is a sensory or physical deficiency as a result of hereditary or acquired factors, as it has economic, psychological and social effects that prevent the disabled from acquiring intellectual and professional knowledge performed by the average individual with a sufficient degree of skill and success)⁷, and there has been a development in this concept through a group of studies carried out by scientists in the World Health Organization, with great disabilities,⁸, in science and knowledge, where it was mentioned in another definition (disability is a condition that limits the ability of an individual to perform one job One or more jobs that are considered the basic elements of our daily life, such as inheriting bin Hisham, self-care, practicing social relations or economic activities within the limits that are considered normal. The disability may arise due to a physical, nervous or mental defect of a physiological nature, or related to the structure of the body⁹. There are other concepts of disability, including the medical concept that defines a person with a disability as (a person who is limited in performing normal actions, in a clear and continuous manner due to a physical, sensory or mental deficiency). Sociologists on disability, who says (that disability is the failure to respond to the requirements of a specific social milieu that requires certain capabilities)¹⁰. There is a concept, but a distinction must be made from a social point of view between disability and disability. Defining the concept of disability for sociologists does not mean a final judgment, but rather a circumstantial judgment. Because experience has shown that the handicapped can respond relatively and in some cases completely to the requirements of society. This terminology suggested by the World Health Organization is included in the International Classification of Disorders, Disabilities and Handicaps¹¹. Where the classification shows that the occurrence of the disease proceeds according to a specific pattern, which is: the causes of the disease → the occurrence of the disease. This pattern reflects the phases of the natural history of the disease, but it is not the manifestations of the disease.

It completely reflects the results of the disease, especially long-term diseases, as the sick person sees changes in his routine functions and social roles, and if these changes lasted for a long time or were severe enough to show the results of chronic diseases, they were deprived of other blood. They are: imbalance, disability, general and untreatable or not related to the disease itself. In this case, the most important three stages of imbalance emerge: It is a loss or nudity in the structure or physiological function or sinews or anatomical. Disability: the restriction or inability to perform any activity in the manner or to the extent considered normal for a human being. Disability: It is an unfavorable situation for a person, as a result of a defect or disability that restricts or prevents the performance of a role that is considered normal for that person. A 16-year-old had a traffic accident, as a result of which his leg was amputated. In this case, the defect becomes the loss of the leg, and the disability is the decreased ability to walk, and the disability is the decreased ability to work and enjoy natural and social activities. It is indispensable for some additional terms proposed by UNESCO (1994 AD) ¹², which are the most recent and consistent with these concepts despite the different wording of the term, namely: injury - deficiency - disability. Injury: It is a genetic defect or disease during or after pregnancy that leads to fibrous deficiency in various situations. Deficiencies: is the incapacity or functional deficiency. In different situations. Disability: It is a characteristic that appears in the interaction between the individual and some stimuli in the environment as a result of deficiency. Those with functional impairments or deficiencies become disabled if they are denied access to the various systems and institutions of society. Like education, they become adults dependent on their society and form a burden on it instead of contributing to its development, and the impact of disability is not limited to the disabled person, but rather includes his family and other members of society, and the following is a good example of that. Infect: functional deficiency=Negative directions disability 'Positive attitudes towards inclusion, equality and full participation .The category of disability definition mental disability | A below-average functional level that begins during the developmental period and is associated with deficiencies in adaptive behavior (mental performance of 70 degrees or less).learning difficulties: Disturbance in the basic psychological processes needed to use or understand language or learn to read, write and calculate. Hearing Impairment The disability is the loss of the sense of hearing from birth, before learning to speak, or once learning to speak, so that this affects the child's ability to use the sense of smell to communicate and learn through normal educational methods.. Disability Loss of visual vision in

whole or in part, which affects the visual vision and education by normal educational methods, even after correcting the situation with surgery or lenses Physical strikes are the total or partial loss of one or more organs, or the total or partial loss of their function. Behavioral disorders are behavior deviations of a significant degree, which makes the person need special educational methods Language and speech disorders Total starvation Linguistic delay or lack of development of the educational language Or A noticeable disorder in pronunciation, fluency, or receptive language, which requires special educational and treatment programs¹³. Evaluation of mental disability and how to identify it: Mental disability is presented by two scales: the mental capacity scale and the adaptive behavior scale, and this is done in specialized centers where these scales are available, but volunteers can In community rehabilitation projects, some cases of disability are diagnosed without the use of these measures. For example, by: Observing the shape from the general shape, people with mental disabilities can be identified, such as if the shape is irregular in growth (the head is small, the eyes are narrow, similar, or bright, the nose is snub, the mouth is small and the tongue is large. Or we find the mouth open and the tongue sticking out of it. Or the fingers may be short and the back of the head is more flat than usual). b Skills test: After knowing the age of the disabled person, his ability to do the things that others do at the same age is measured; To find out to what extent the disabled person has mastered the skills of early childhood, cradle age, sitting, crawling, standing, walking, talking, defecation, dressing, washing face and hands, toothpicks, and bathing. school age skills; Such as reading and writing, and whether he understands commands and instructions. If a person does the same work as others of his age, this indicates that he does not have difficulty learning. But if it is slower than others in the same Age or failure to carry out the activities that they do, he undoubtedly suffers from learning difficulties, and to confirm this, the test can be repeated again. This method is divided into items that include a preferred description of how to assess the growth of a child according to his age compared to other children, such as the evaluation methods for children with mental disabilities: Early on whether the child has a mental disability or not¹⁴add some indicators that would facilitate the process of evaluating the mentally handicapped, namely: Does not avoid familiar dangers at home (knife - matches - electricity .. etc.) Obeys the tradition of building simple shapes from cubes Attention deficits and focus. You find it difficult to draw simple geometric shapes. Can't remember things in sequence like numbers, alphabets. He cannot tell a story sequentially. Has difficulty understanding dissimilar objects (smaller/larger, more/less,

heavier/lighter). It does not distinguish the primary colors. B indicators that electricity..etc) does not understand the meaning of the pictures. He does not know his body parts. He does not know the sounds made by familiar things. He does not understand the meaning of the words that refer to the locations of things (under-up-up-down). He doesn't seem to learn by experience, he doesn't know his age. February does not distinguish between things according to their size. Likewise, he who appeared clear about his involuntary states should be aware of the levels of mental disability: He cannot count to ten. Does not distinguish the difference between forms. He does not distinguish missing things from things. (Educable) There are four levels of mental disability, which are: 1. Mild Retardation (from 51 to 69 degrees) (able to learn) lacking TV 2. Moderate Retardation (from 36 to 50 degrees) (Trainable) for training). Severe disability (from 35 to 20 degrees) (comparable to 4. Severe or complete disability (Profound retardation) from 19 degrees. The degree of deficiency in mental performance and consensual behavior is what determines the path in which the individual acts. Once the level of Behavior or performance, we need to prepare an evaluation for the specific training of the harmonious behavior of the individual, and to develop a program that is completely dependent on others for training the development and growth of mentally. Special Education Services in Sudan the Concept of Special Education: Scholars of the Arab-Islamic heritage dealt with issues of disability. Interest in the disabled, as a group with its own needs of education and rehabilitation, began in the eighteenth century, and Heward and Orlensky¹⁵ defined (Special Education) as its tools, methods, and research efforts that focus as a whole on developing the play process and improving the methods of assessing educational needs. For children and adults with blood needs and individuals with special needs are those whose performance deviate from normal performance and is clearly above average or below average, which requires special education programming and this group includes the gifted and the handicapped. One of the eighteenth century French scientists was Jean Itard (1772-1838),¹⁶ where The individual curriculum - or individual education for the mentally handicapped - was invented, just as the Frenchman Edward Sobhan endorsed the possibility of teaching pain Then the two French scientists Louis Braille (1854-1809) invented the salient points system for teaching the blind¹⁷, and the world Alfred Binet (11-1857) was the first to introduce the measurement of intelligence¹⁸. In the field of the deaf, the scientist Thomas Joe emerged (1787 A.D. - 1851 A.D.), where he introduced the use of spelling with fingers, as confirmed by the world Italian Maria Montessori Effectiveness of early intervention for disability¹⁹. Through the

contributions of all of them, the concept of special education is crystallized as an integrated service of methods applied to persons with disabilities individually and in groups in which there is an educational / learning condition and educational and therapeutic methods with an appropriate design that uses methods, materials and aids in order to improve self-sufficiency, skills and academic achievement. Prevalence of disability in Sudan: The most recent international statistics indicate that the percentage of disability in the world ranges between 5% and 7%²⁰. And if we listen to learning difficulties 3% and behavioral disorders 2%, the disability rate will be between 10% and 12%. As for Sudan, according to the fourth population census, the disability rate is 1.7%, or about (510,000) disabled persons (out of 30 million aunts). Sudan exceeded this number due to the circumstances of the civil war that lasted for more than four decades, and drought and desertification in 1988 AD. Therefore, the number highlighted by the fourth population census is far from the lived reality and global statistics. If this difference indicates anything, it indicates that Sudanese families do not recognize their disabled children and remember their existence. This is also an indication of the need for Sudanese families to raise awareness of the issue of disability, ways to reduce it, and the importance of accepting and integrating disabled children into society. This also explains the society's need to have knowledge of disability, in order to change the negative view towards the disabled, and for parents to be convinced that caring for their disabled children and accepting them helps greatly in their training... The Rehabilitation Committee shall determine the time for holding community awareness seminars, so that the time of the seminars fits with most of the members of the academy to ensure the attendance of the largest possible number. Introduction: The family is the institution that embraces the child, especially the child in need of blood. It is concerned with his upbringing and education, and providing all means for the success of the rehabilitation programs and therapeutic services that are provided to him. The family needs the contribution of the rest of the community members to touch and strengthen its role. Disability and how to deal with it, and from here arises the need for community awareness, which means owning the disabled and helping him to rely on himself. About disability for the members of the society in which the disabled lives and until it is accepted by all people. Community awareness represents the first step with which rehabilitation begins within the community care community for the disabled. Through awareness programs, volunteers can be attracted to God in rehabilitation projects and the community is introduced to the benefit of community rehabilitation and the preparation for

its establishment and advancement for disability and early intervention to reduce its effects. Community awareness defining the causes of disability, ways to prevent it, and early detection

First: causes of disability many scholars classified the causes of mental disability into genetic and environmental causes²¹. The causes of mental disability into medical causes, including infections and poisoning, brain injuries, prenatal factors, and metabolic disorders. Chromosomal disorders. Contraceptives. Psychological disorders. Some scholars also added another factor, which is the social and cultural factor. Over the past decades, intensive efforts have been made to identify the causes of mental disability, but it is still going on. The causes of disability are unknown, and some scholars have indicated that 50% of mental disability cannot be determined conclusively, and (Cartwright and his colleagues 1989) went on to count that and said that the causes of mental disability cannot be determined conclusively in 75% of cases²². The causes of mental disability are divided into hereditary causes and ecologic.

Prevention of disability: I want to pay attention to prevention, because it does not require effort and money, as is the need for treatment. In addition, the financial provisions for treatment are less than the demand for it, and there is an urgent need in the developing countries of the world to start planning preventive programs on sound scientific bases. Prevention includes three levels:

- D The first level of prevention includes all measures to reduce the occurrence of defects.
- D The second level of prevention includes all measures taken to reduce the transformation of the defect into disability.
- D The third level of prevention includes all measures that turn disability into disability²³.

The mothers of children with mental disabilities, according to the researchers' opinion and observation, suffer from their son's mental disability, and they are deeply shocked when they know this. This is followed by feelings of rejection, denial, and lack of acceptance of their son's condition, then fear and anxiety, and an attempt to coexist with reality and accept it, and strive to find the appropriate treatment for their son's condition. All these negative feelings, anxiety and fear make mothers of children fall under the influence of psychological and physical pressure, which continues with them as their child progresses in the age stages, and the resulting difficulty in controlling his behavior and fear for his future..The definitions of psychological stress differed according to the different scholars who make these definitions depending on their theoretical attitudes. Among these definitions, the following are examples of these definitions:

Levine and Scotch (1970) define stress as: a state of disorder and insufficiency of cognitive functions, and includes situations in which the individual realizes that there is a difference between what is asked of him, whether internal or external, and his ability to respond to it²⁴

2.3. Anxiety disorders

Anxiety is a normal biological reaction to stress and an important part of living. It helps us get out of harm's way and prepare for important events, and it warns us when we need to take action. But you may experience anxiety that is persistent, irrational, seemingly uncontrollable, and overwhelming. If it's an excessive, irrational dread of everyday situations, it can be disabling. When anxiety interferes with daily activities, you may have an anxiety disorder. The term "anxiety disorder" refers to generalized anxiety disorder (GAD), obsessive-compulsive disorder (OCD), panic disorder, posttraumatic stress disorder (PTSD), social anxiety disorder (also called social phobia), and specific phobias. Anxiety disorders often run in families and have a biological basis, much like allergies or diabetes. These are real, serious disorders that are treatable¹⁶. Symptoms of anxiety are both somatic and psychological.

Type of symptom

Somatic (Motor tension) : Trembling , twitching , shakiness ; muscle tension, aches or soreness, restlessness; easily fatigued

Somatic (Autonomic hyperactivity): Shortness of breath or smothering sensations ; hyperventilation; palpitations or tachycardia ; chest pain; sweating or cold clammy hands ; dry mouth; lightness; headache ; nausea , diarrhea ; flushes; chills; frequent urination; dysphagia

Psychological (Autonomic vigilance and scanning) : Feeling keyed up or on edge ; exaggerated startle response ; fear; difficulty concentrating, disturbed sleep; irritability

keyfeature panic disorder : Fear of losing control , dying or going crazy

Avoid situations in which attacks may Occur

Agoraphobia .Fear of situations from which escape may be difficult or help unavailable (crowds , bus , bridge etc.)

OCD Intrusive , unwanted thoughts or urges (obsessions) and / or repetitive behaviors or mental acts (compulsions)

Fear of harm , uncertainty , uncontrollable actions

Generalized Anxiety regarding a number of everyday Anxiety events

Future and uncertainty difficult to accept

Social Anxiety :Fear of humiliation, embarrassment by others.

PTSD :Re-experiencing trauma through flashbacks, dreams, recollections,

Specific phobia: fear of a specific object, animal or situation.

Generalized anxiety disorder excessive anxiety and worry about a number of events or activities, occurring more days than not for at least 6 months

Difficult to control the worry associated with three of the

following. Restlessness , difficulty concentrating , muscle tension , fatigue , sleep disturbances , irritability Not due to a substance , medical condition or other mental disorder Causes clinically significant distress or impairment in functioning GAD – Treatment; Pharmacotherapy : 1st line SSRI or SNRI 2nd line Benzodiazepine Only recommended for short term elderly use Ta 3rd line Adjunctive olanzapine or risperidone Mirtazapine. An optimal trial involves 9-12 months Treatment resistant patients should be assessed for co morbid medical and psychiatric conditions GAD – Treatment ; Psychological treatment : CBT as effective as medication (also 1st line) DCBT involves : • Psycho education Cognitive interventions (addressing cognitive distortions , unrealistic beliefs) • Exposure • Relaxation strategies²⁵

2.4. Depression and depressive disorder

The term “depression” often characterizes feelings of being sad, discouraged, hopeless, unmotivated, as well as a general lack of interest or pleasure in life. When these feelings last for a short period of time, it may be called a passing case of “the blues.” But when they last for more than two weeks and interfere with regular daily activities, it’s likely you have a depressive disorder. Research shows that depression and anxiety are risk factors for suicide: More than 90 percent of people who commit suicide have a diagnosable mental disorder. Early diagnosis and intervention with appropriate treatment are critical steps to feeling better. Depressive disorders, also known as mood disorders, include three main types: major depression, dysthymia, and bipolar disorder, and they can occur with any anxiety disorder. Major depression involves a combination of symptoms that are disabling and interfere with your ability to work, study, eat, and sleep. It may occur once or twice in your lifetime or more frequently. Or you may experience it in relation to the death of a loved one, a romantic breakup, a medical illness, or other life event. Some people may experience physical aches and pains, leading them to believe that these are symptoms of an undiagnosed physical ailment. Others may feel that life is not worth living, and a small number may attempt to end their lives. Depression is different in each person. No two people experience the same combination, severity, frequency, and duration of symptoms²⁶

Symptoms of major depression:

- Persistent sad, anxious, or “empty” mood

- Feelings of hopelessness, pessimism
- Feelings of guilt, worthlessness, helplessness
- Loss of interest or pleasure in hobbies and activities, including sex
- Decreased energy, fatigue, feeling “slowed down”
- Difficulty concentrating, remembering, making decisions
- Insomnia, early-morning awakening, or excessive sleeping
- Low appetite and weight loss or overeating and weight gain
- Thoughts of death or suicide, suicide attempts
- Restlessness or irritability

Persistent physical symptoms that do not respond to treatment, such as headaches, digestive disorders, and pain for which no other cause can be diagnosed Dysthymia, or dysthymic disorder, is a chronic form of depression that usually continues for at least two years. Although it is less severe than major depression, it involves the same symptoms, mainly low energy, poor appetite or overeating, and insomnia or oversleeping. It can show up as stress, irritability, and mild anhedonia, which is the inability to derive pleasure from most activities. Bipolar disorder, once called manic-depression, is characterized by moods that shift from severe highs (mania) or mild highs (hypomania) to severe lows (depression). During the manic phase, a person may experience abnormal or excessive elation, irritability, a decreased need for sleep, grandiose notions, increased talking, racing thoughts, increased sexual desire, markedly increased energy, poor judgment, and inappropriate social behavior. During the depressive phase, a person experiences the symptoms of major depression.

Major Depressive Disorder Treatment

Biophysiological; Pharmacotherapy (i.e. SSRIS, SNRIs ...) Electroconvulsive therapy Psychotherapy Cognitive behavioral therapy Social Light to moderate Psychotherapy, Moderate to severe Medication with or without psychotherapy, (ECT) Depression with psychotic features Combination of antidepressant and antipsychotic , gold standard is ECT.

Major Depressive Disorder Up to 15% of patients with mood disorders will die by suicide Prognosis at 1 year 40% still meet criteria 20% have partial symptoms 40% have no mood disorder²⁷

CHAPTER THREE

METHODOLOGY

CHAPTER THREE

METHODOLOGY

3.1 Study design

A descriptive cross sectional hospital based study design.

3.2 Study area

Khartoum State is one of the eighteen states of Sudan. Although it is the smallest state by area, it is the most populous. It contains the country's largest city by population, Omdurman, and the city of Khartoum, which is the capital of the state as well as the national capital of Sudan

3.3 Study population

Mothers with disability child who have gone to re-educated and re habitation centers

3.4. Sample size (88)

$$n=N/1+ND^2$$

Where D=sample size

N=population

$$D= 0.04$$

3.5. Sample technique

Simple random technique

3.6. Data collection

The data was being collected using a questionnaire specially designed for this research.

3.7. Data analysis

Data will be analyzed using manual analysis. Data will be presented in tables and charts.

3.8. Ethical consideration

*Ethical approval will be obtained from IRB – Napta collage.

*Verbal consent was obtained from each subject who agreed to be part of the study.

CHAPTER FOUR

RESULTS

CHAPTER FOUR

RESULTS

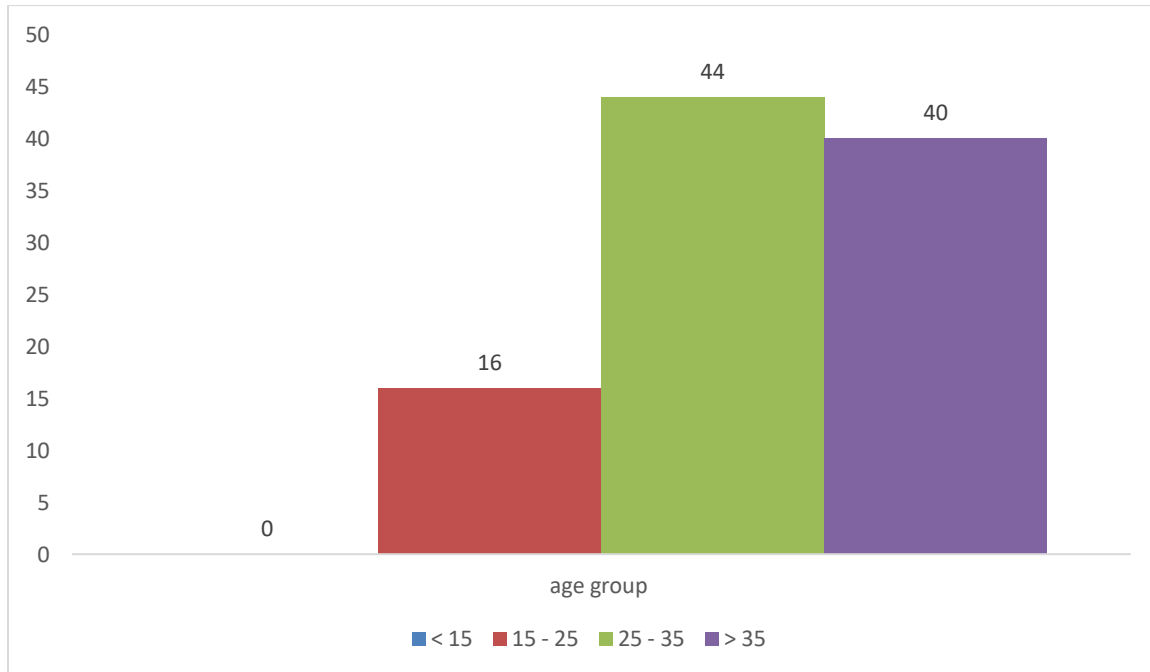


Fig.1: distribution of the participant among age groups

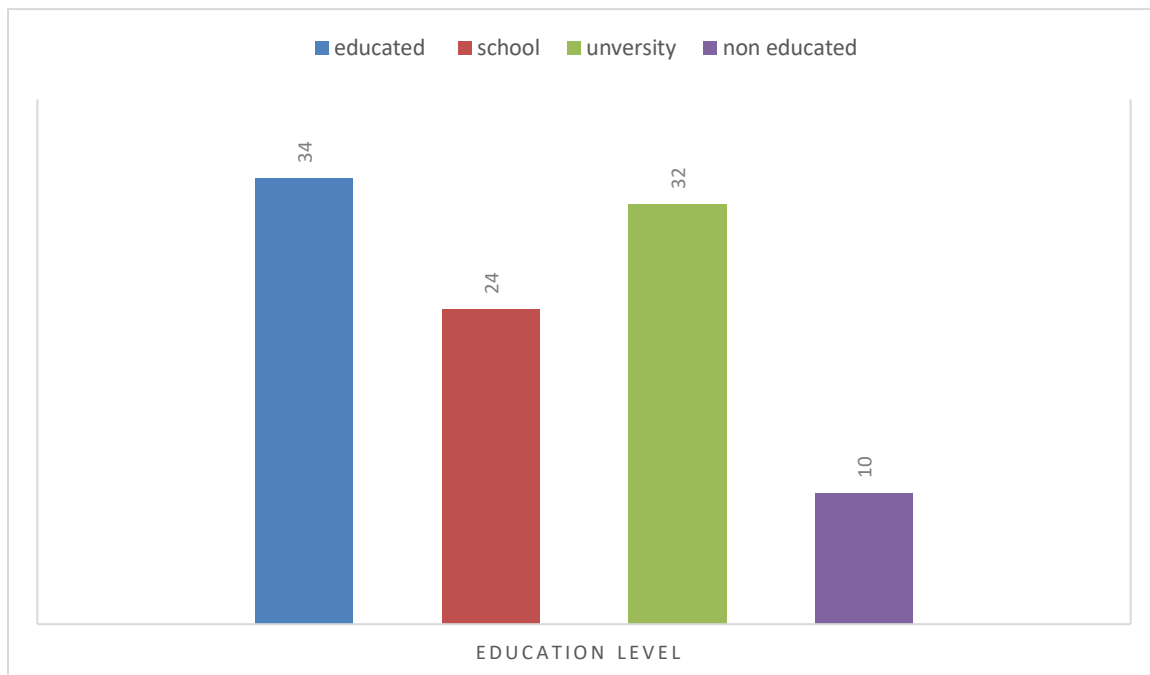


Fig.2: distribution of the participant among education level

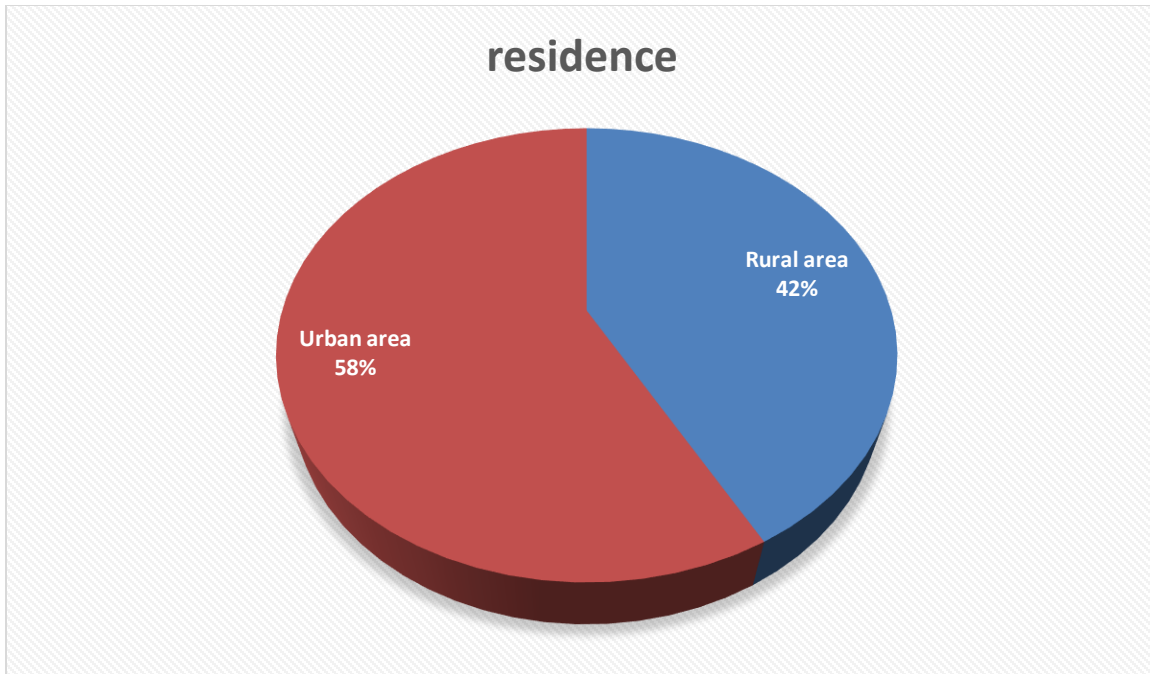


Fig.3: Distribution of the participant among resident

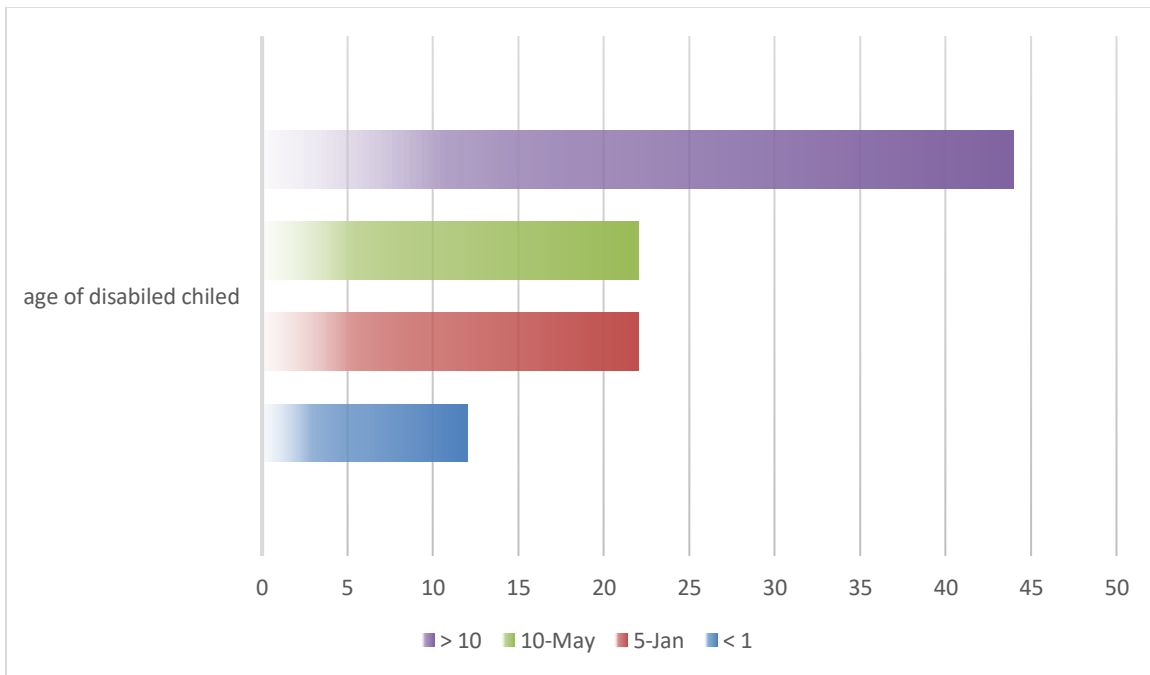


Fig.4: Age of disabled child

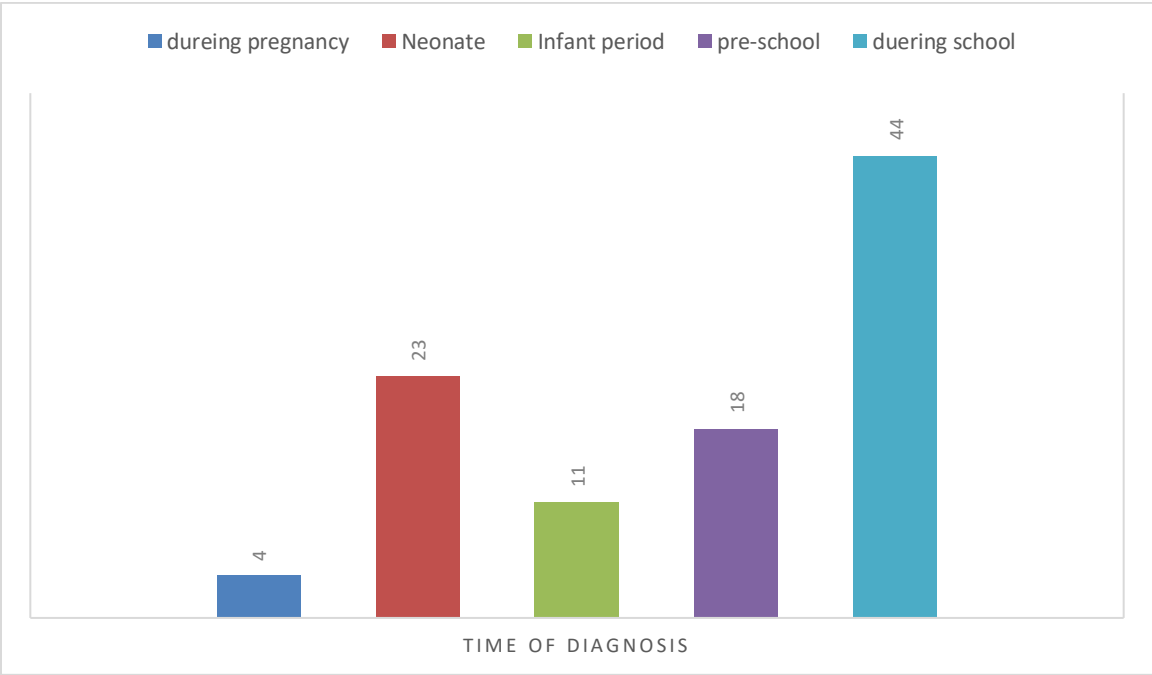


Fig.5: Distribution of participant during time of diagnoses

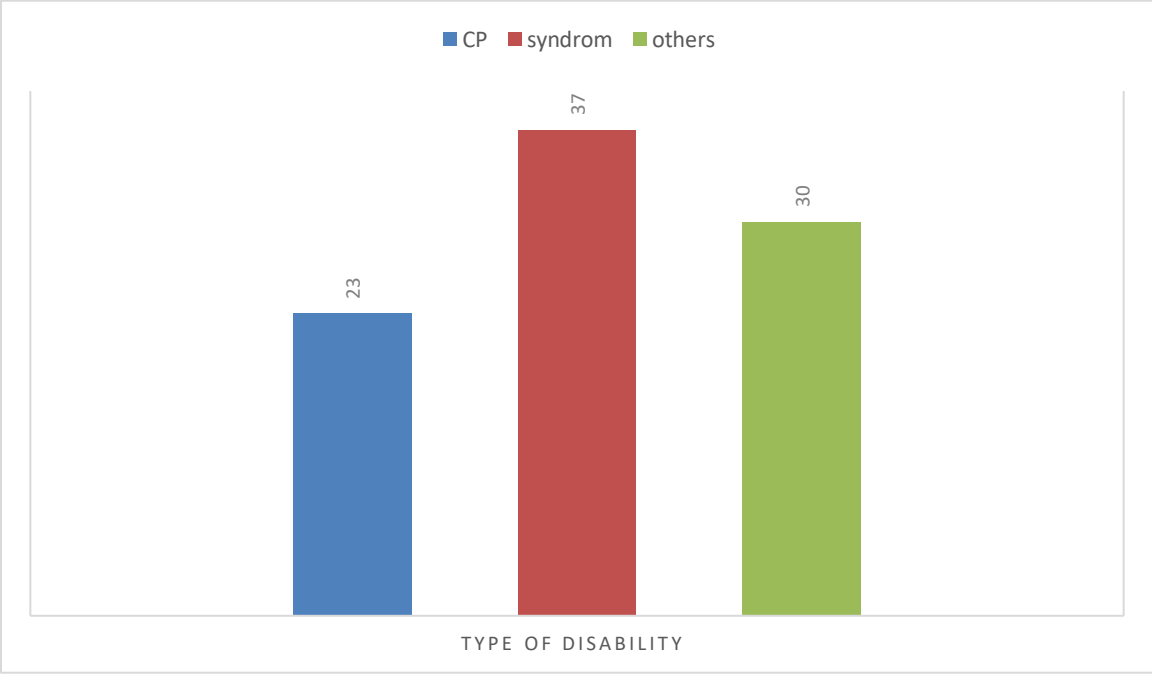


Fig.6: Distribution of the chilled among types of disability

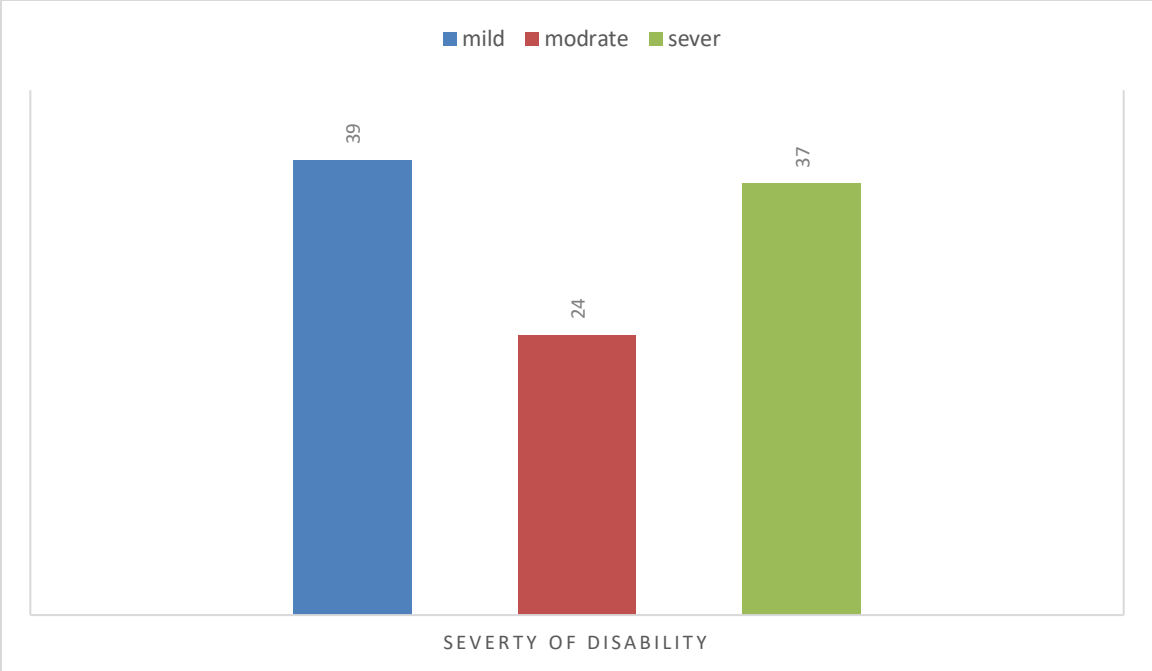


Fig.7: Distribution of participant among severity of disability

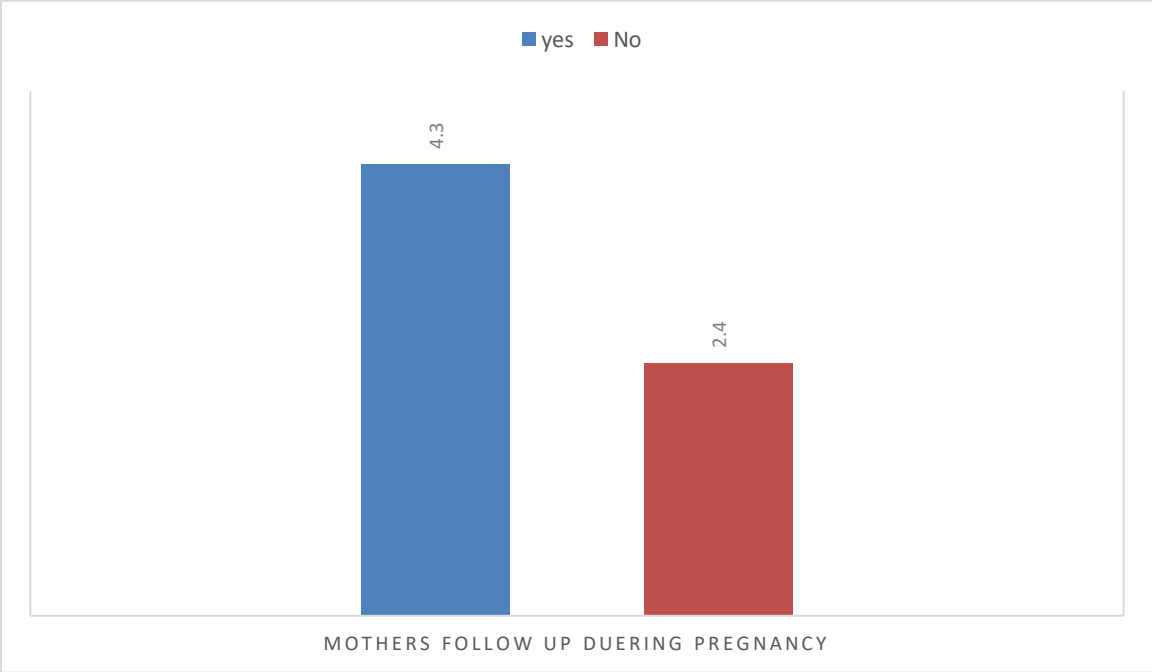


Fig.8: mothers follow up during pregnancy

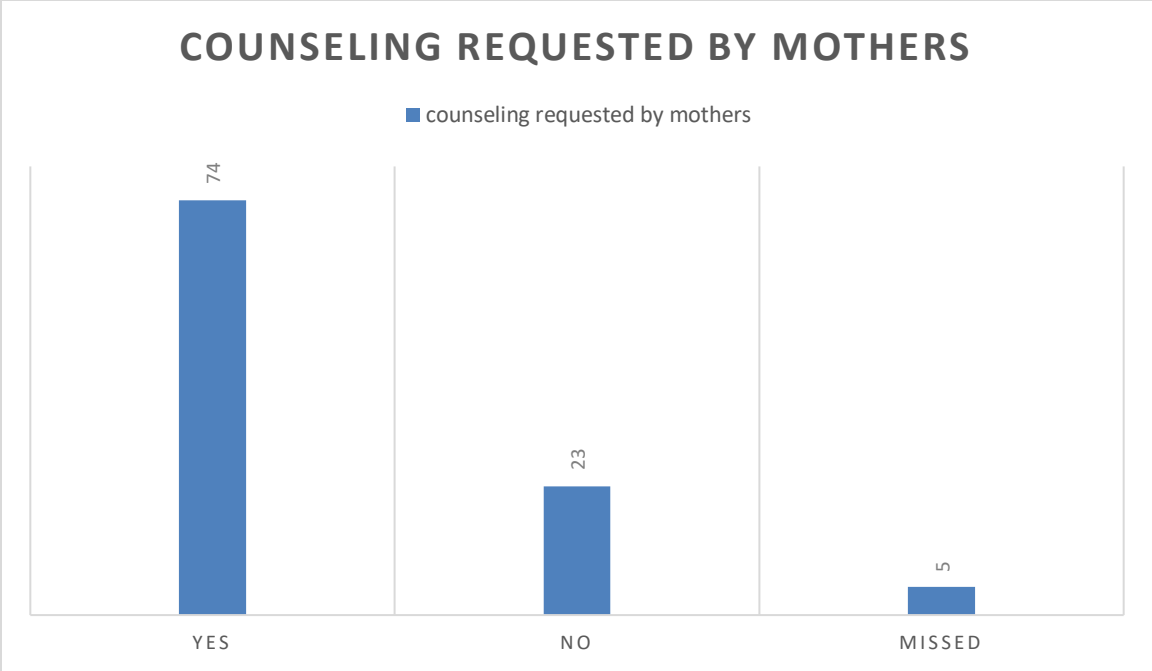


Fig.9: Distribution of participant among counseling requested by mother

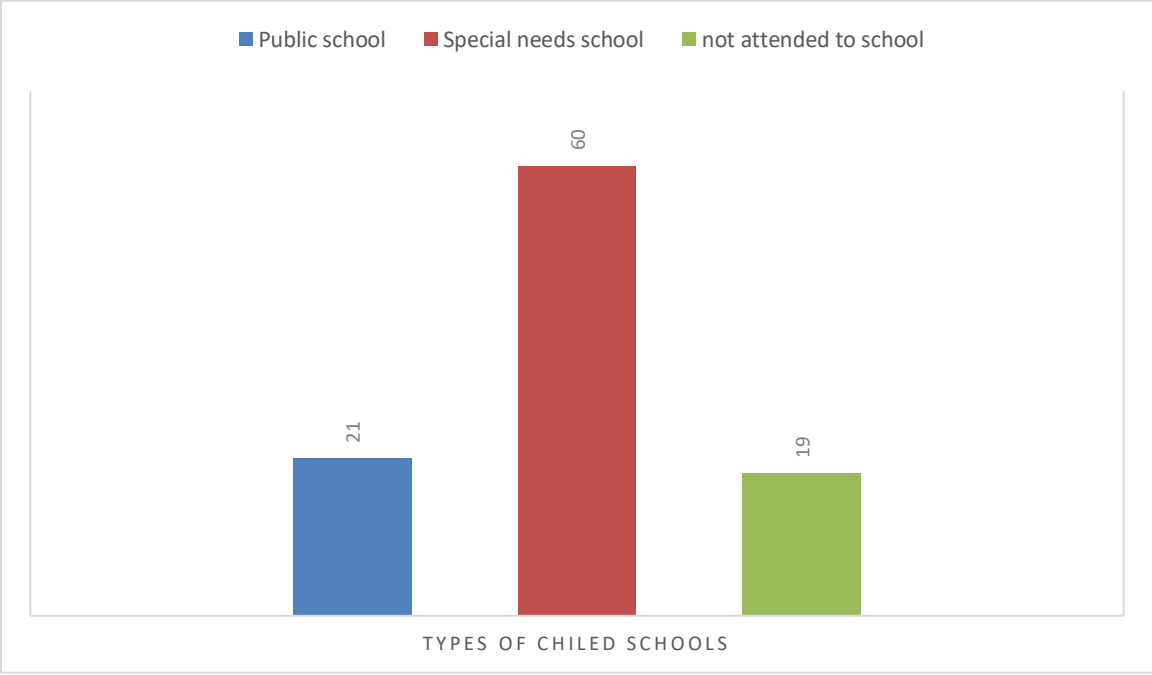


Fig.10: types of chilled schools

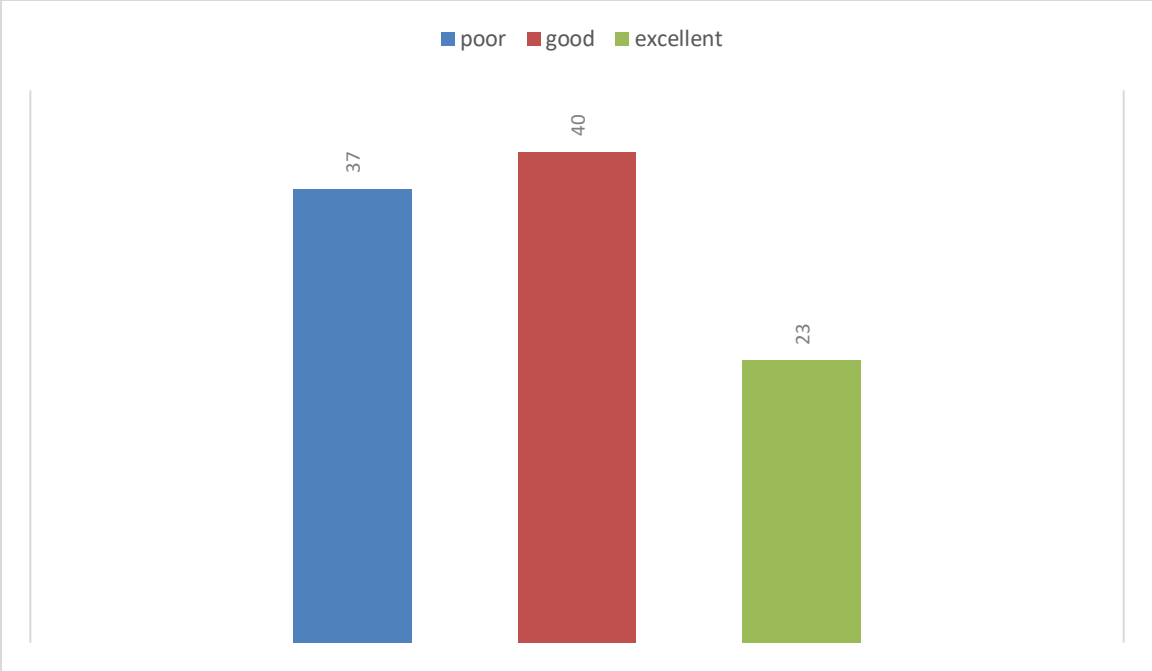


Fig.11: Distribution of chilled among academic achievement

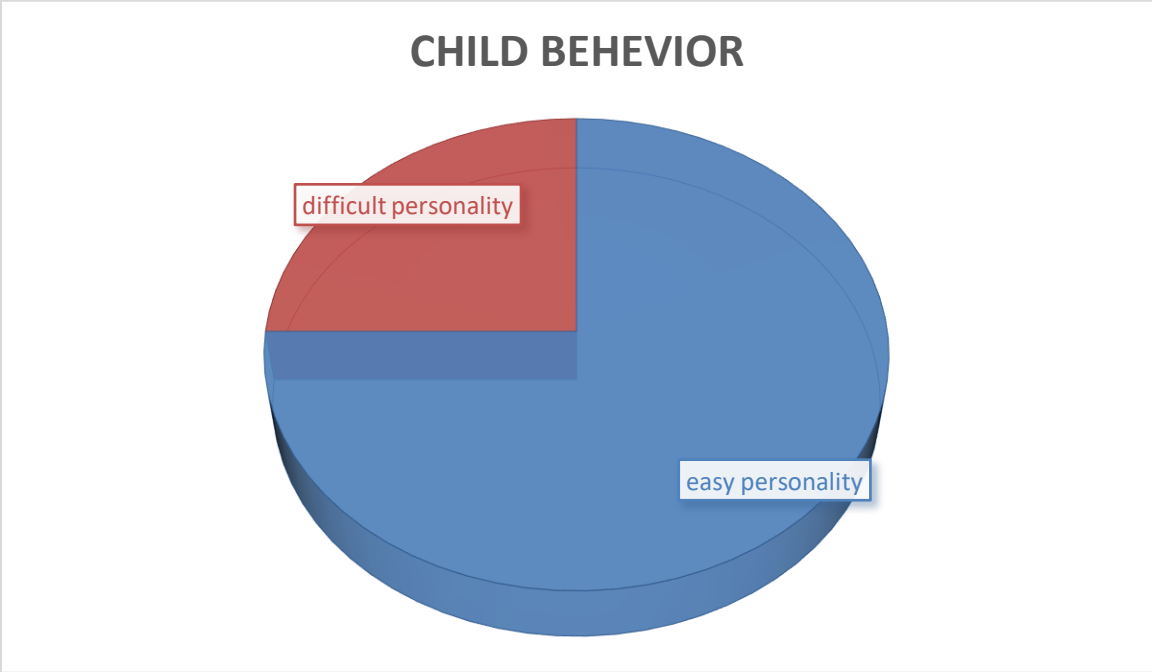


Fig.12: chilled behavior

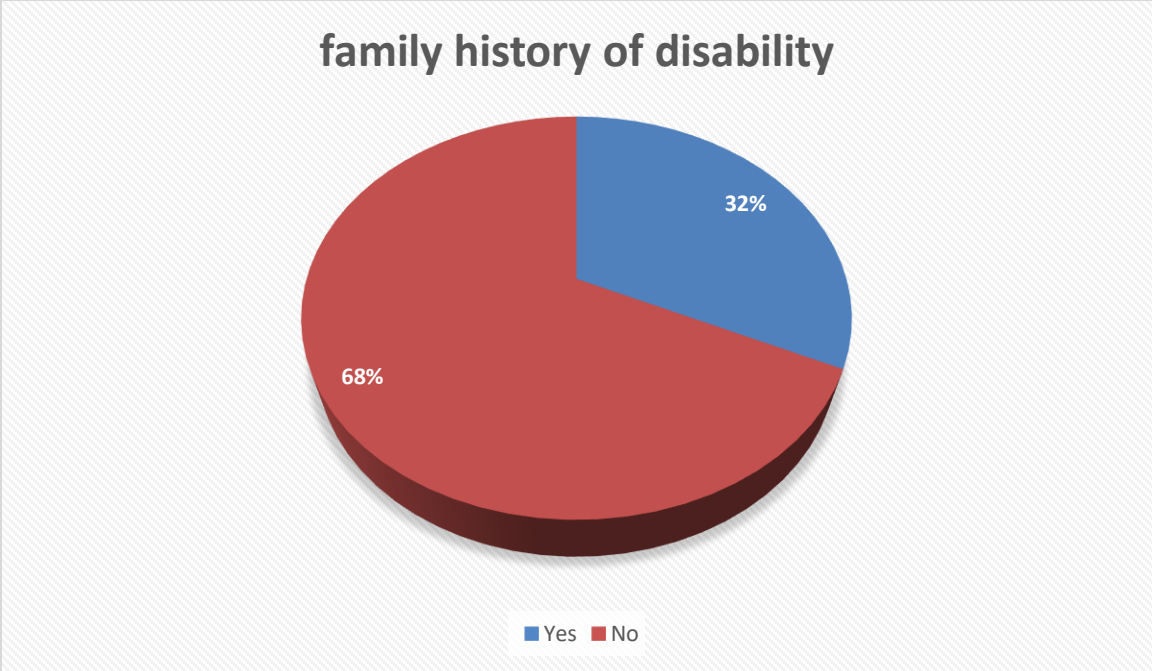


Fig.13: Distribution of participant among family history of disability

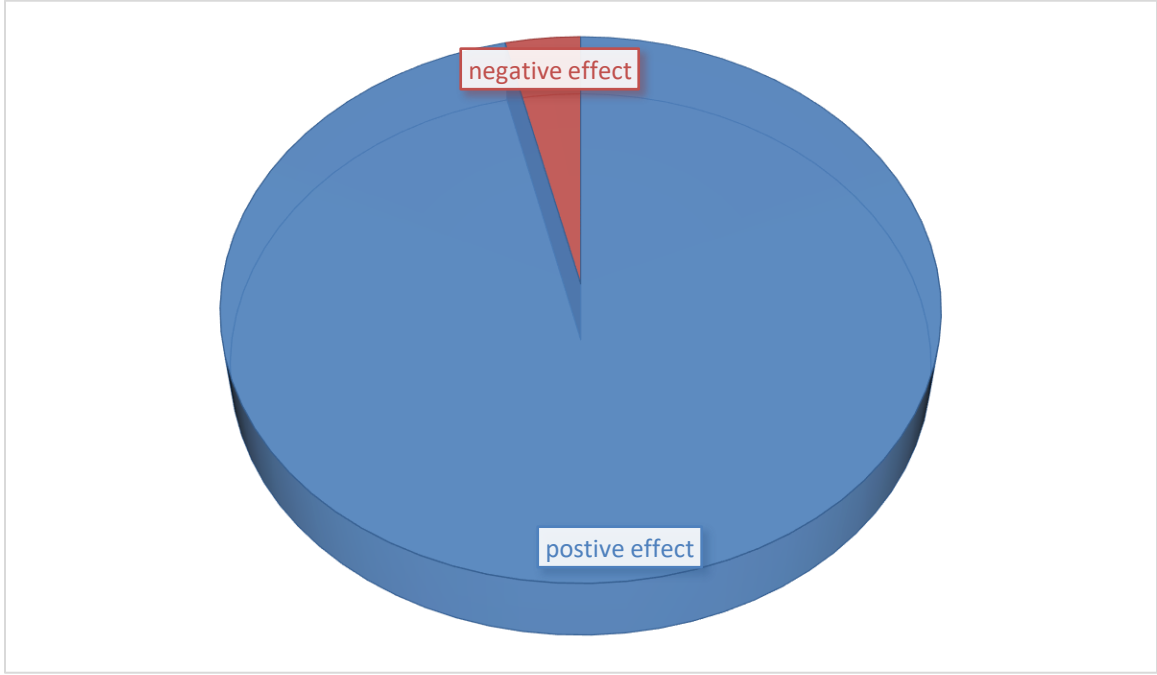


Fig.14:Economic, social or psychological effects on the family caused by the child's illness

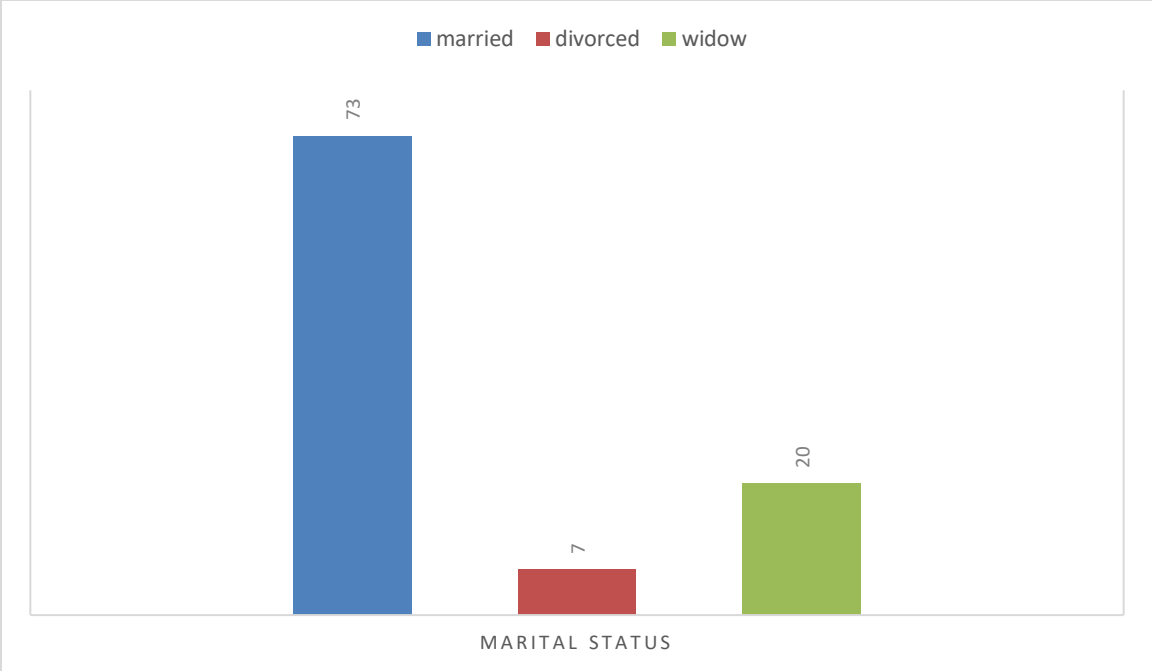


Fig.15: Distribution of participant among marital state

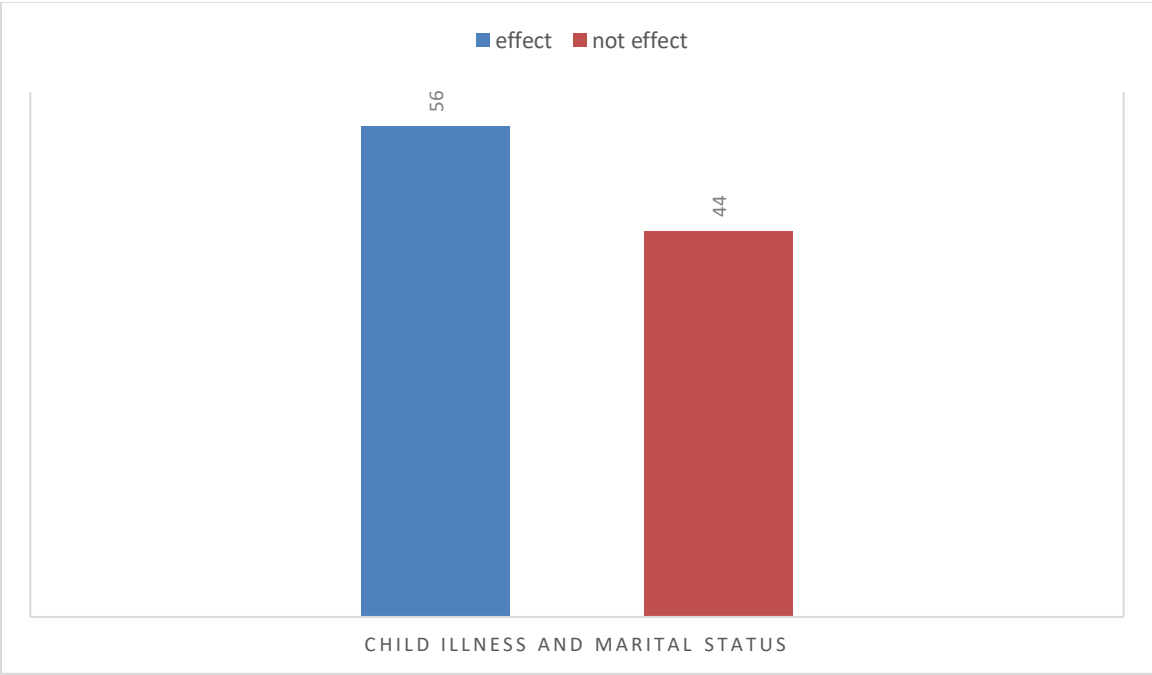


Fig.16: Effects of chilled illness and marital status

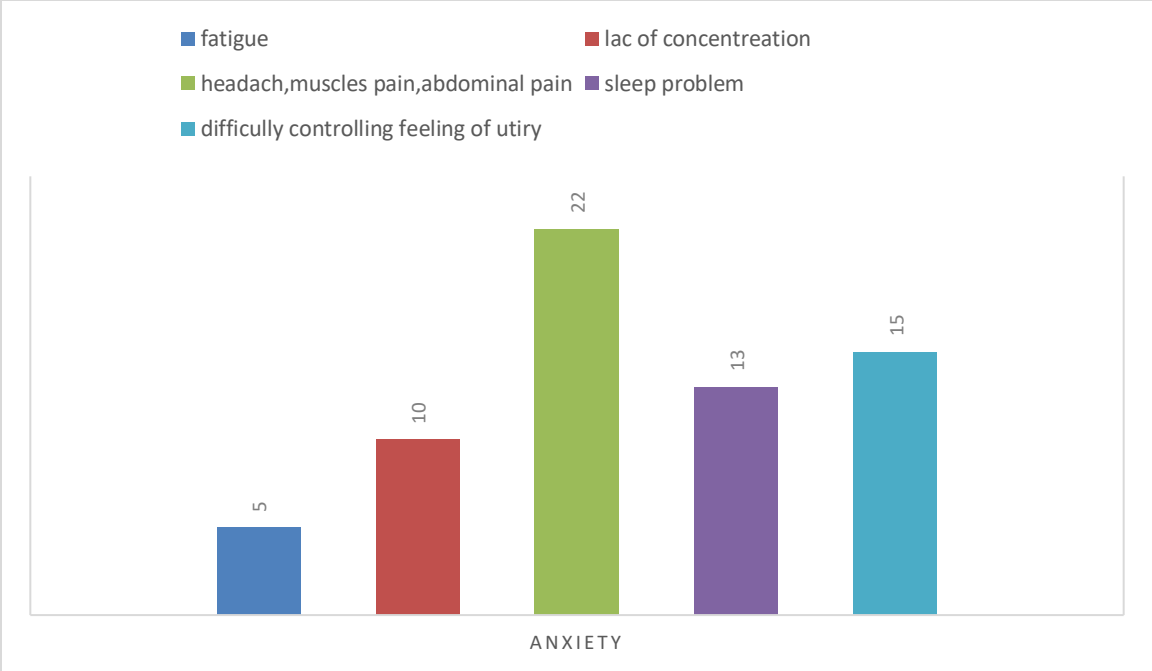


Fig.17: distribution of participant with anxiety disorder

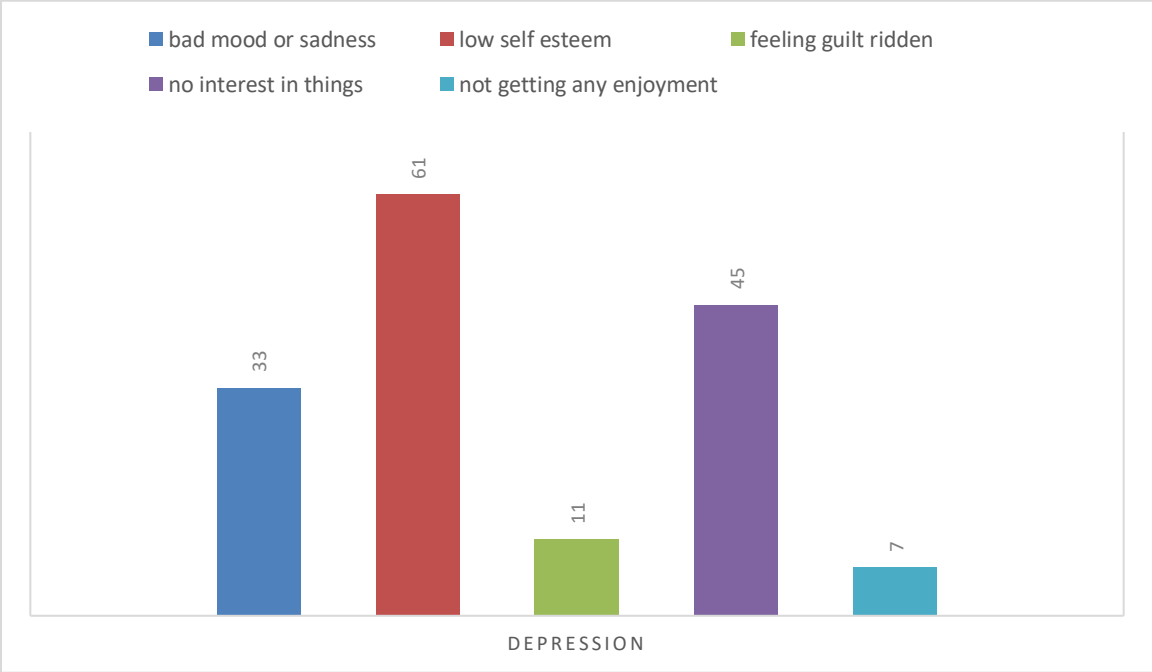


Fig.18: distribution of participant with depression

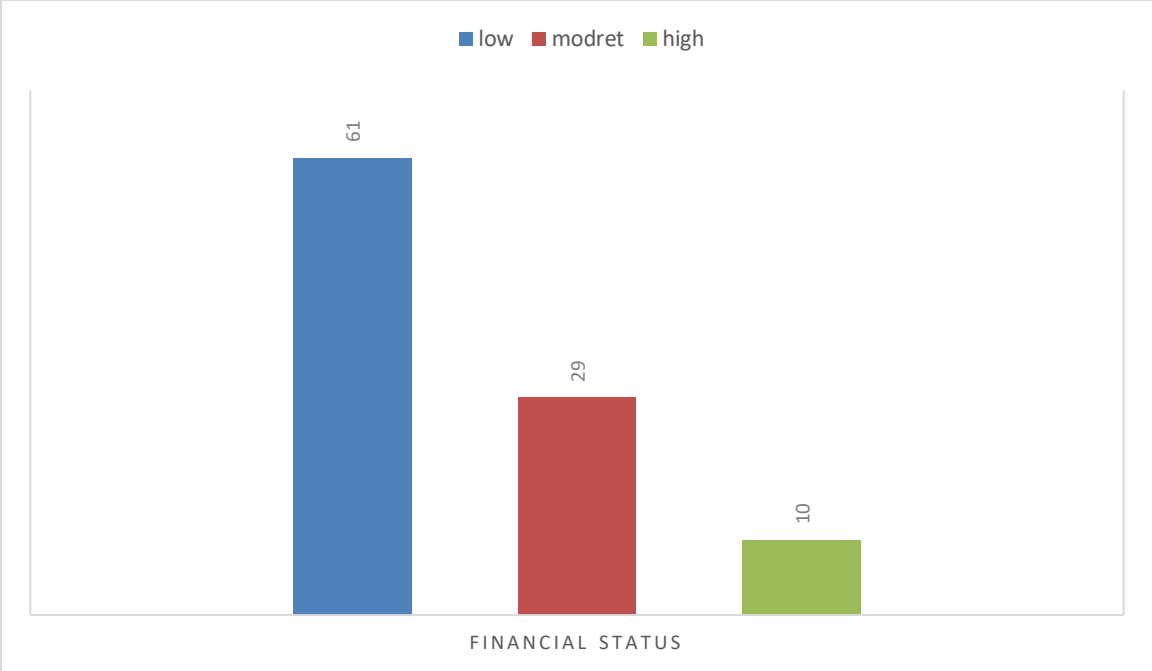


Fig .19: financial status

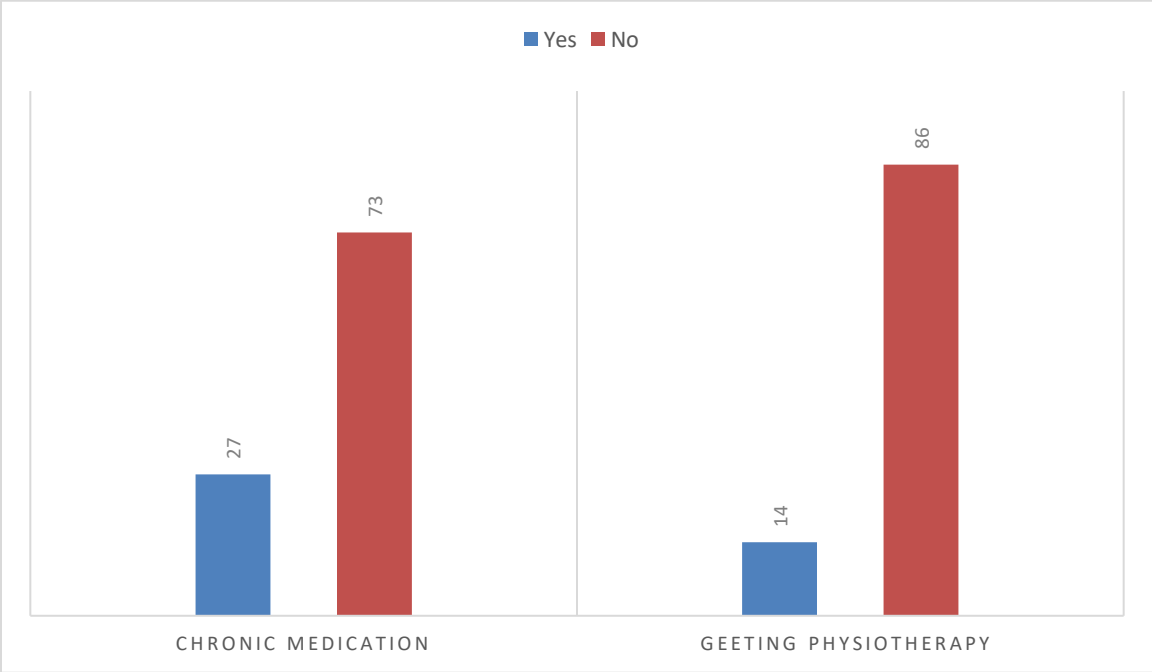


Fig. 20: participant who tacks medications and who have physiotherapy

CHAPTER FIVE

- *discussion*
- *COMCOLUSSION*
- *Recommendations*

CHAPTER FIVE

DISCUSSION

Depression and anxiety are two of the most common mental health issues faced by mothers of children with intellectual and developmental disabilities (IDD). It is estimated that up to one-third of mothers of children with IDD experience depression or anxiety, which is significantly higher than the rate among mothers of typically developing children (Meyer et al., 2018). This is a concerning statistic, as depression and anxiety can have a significant impact on the mother's ability to care for her child and can lead to long-term negative outcomes for both the mother and her child. In this discussion, we will explore the causes of depression and anxiety in mothers of children with IDD, as well as potential interventions that may help to reduce these symptoms.

In this study, The age group of mothers >15 years reported in (0%) of women , between 15-25 years (16%) , between 25-35 years (44%) and above 35 years (48%) , University level of education reported in (32%) , school in (34%) , educate (32%) and non reported in (10%) , Residence from rural areas reported in (42%) of people and from town (58%) , The age group of children >1 years reported in (19%) of children , between 1 - 5 years (33%) , between 5 - 10 years (31%) and above 10 years (17%) , children diagnosed during pregnancy reported in (16%) of children , neonate (33%) , infant (21%) , preschool (18%) and at school age (10%) , Children with cerebral palsy reported in (23%) , syndrome (53%) and with special needs (24%) , The level of disability reported in mild (39%) , modrate (24%) and in sever (37%) , The follow up of mothers during the pregnancy show (87%) with follow up and (13%) without follow up , 97% was counseled and 21% was not , The figure show 21% of children admitted to main stream , 60% to special centers and 19% stay at home , On academic achievement the ability to understand is poor in (37%) , good in (40%) and excellent in (23%) , On behavior of a children (25%) are calm and (75%) are with difficult contact with others , 32% of children with family history of disability and 68% without family history of disability , The effect of child illness on child life style is about 83% of children and the other 17% are normal or without effect , About marital status (73%) married and relative relation , (7%) divorced and (20%) window , The effect of illness on marital status is present in 56% of them , The social acceptance of child disability is poor in (43%) of children , good in (30%) and excellent in (27%) , anxiety symptoms that appears in mothers of children with illnesses is about (67%) , depression symptoms that appears

in mothers of children with illnesses is about (33%) , financial status that is low in (61%) , moderate in(29%) and high in (10%) , 27% of affected mothers is on chronic medications and 73% are not on chronic medication and 86% of them doing physiotherapy and 14% not .

Depression and anxiety are common among mothers of children with intellectual and developmental disabilities (IDD). According to a study conducted by the American Academy of Pediatrics, mothers of children with IDD are twice as likely to experience depression and anxiety as mothers of typically developing children²⁸. This is likely due to the additional stressors that come with parenting a child with IDD, such as financial strain, social isolation, and lack of access to resources. The effects of depression and anxiety can be far-reaching for both the mother and her child. Mothers who experience depression or anxiety may have difficulty providing emotional support for their child, which can lead to behavioral issues in the child²⁹. Additionally, mothers may be less likely to advocate for their child's needs if they are struggling with their own mental health. It is therefore important that mothers of children with IDD receive adequate support in order to manage their mental health. Support can come in many forms, such as therapy, medication, or support groups. It is also important for mothers to practice self-care by engaging in activities that bring them joy and relaxation. This could include taking a walk outside, reading a book, or spending time with friends. By taking care of themselves first, mothers can better provide for their children's needs. Interventions for Depression and Anxiety in Mothers of Children with IDD, Fortunately, there are several interventions that can help reduce symptoms of depression and anxiety in mothers of children with IDD. One such intervention is cognitive behavioral therapy (CBT), which has been shown to be effective in reducing symptoms such as worry, rumination, intrusive thoughts, avoidance behavior, and negative self-talk²⁹. Additionally, CBT has been found to be effective at improving overall functioning in individuals suffering from depression or anxiety²⁹. Other interventions that have been found to be helpful include mindfulness-based stress reduction techniques such as meditation or yoga; support groups; psychotherapy; medication; lifestyle changes such as exercise or healthy eating; and relaxation techniques such as deep breathing exercises or progressive muscle relaxation²⁹.

5.2. Conclusion:

There was a high rate of anxiety and depression among mothers of children with IDD in this study. Rates of anxiety are even higher among mothers as compared with depression. Mental health providers need to be aware of these issues, so appropriate mental health screening can be utilized among the care givers of children with IDD. The service provided for children with IDD need to include appropriate systems interventions and support for their caregivers.

In conclusion, depression and anxiety are common among mothers of children with IDD. It is important that these mothers receive adequate support in order to manage their mental health so that they can better provide for their child's needs.

5.3. Recommendations:

Doctors must educate mothers and clearly explain the child's disability. Follow-up of maternal mental health. And providing suitable and well-equipped centers with qualified caregivers

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