



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
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Assessment of Anxiety During Hospitalization in Preschool Children in Atbara Hospitals

*A thesis Submitted in the Partial Fulfillment for the Requirements of the Master
Degree of Pediatric Nursing Sciences*

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قال تعالى :

* الرِّحْمَنُ * عَلَّمَ الْقُرْآنَ * خَلَقَ الْإِنْسَانَ
* عَلَّمَهُ الْبَيَانَ *

صدق الله العظيم

سورة الرحمن - الآية (1-4)

Dedication

*I Dedicate this research and effort to who taught me the meaning of life on loyalty and sincerity, diligence, patience and consistency to those More precious than my life
My father and my mother*

To all my teachers:

*Who are teaching me giving without taking and patience without tedium. AND stop beside me of a professor at the
Faculty of Nursing Shendi University*

*And then dedicate it to Dr. ahlam who helped me at all time
And then dedicate it to my brothers and sisters and my husband who helped me and stood beside me and to my precious son, Mohamed*

To all my friends:

*Those who precede me and no longer with me,
Those who precede me and are still among me,
Those with me, and to those who will follow me*

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2.7.2 .Separation Anxiety	18
2.7.2.1. Stages of Separation Anxiety: Table2	19
2.7.3 .Loss of Control	20
2.8. Reactions Based on Developmental Level	20
2.9. Factors Affecting a Child’s Response to Illness and Hospitalization	21
2.10. The Hospitalized Child’s Family	22
2.10.1 Reactions of Parents	22
2.10.2. Effects of a hospitalized child on parents	22
2.11.Information and psychosocial support	24
2.12. Children in hospital should be provided with	24
2.13.Discharge from hospital	24
2.13.1.discharge and post-hospital effects	25

Chapter three

Material&Methods	26-27
3. 1.Type of study	26
3.2. Study duration:	26
3.3. Study area:	26
3.4.Study population:	26
3.5.Sampling:	26
3.6.Sample size	26
3.7. Inclusion criteria	26
3.8. Exclusion criteria	27
3.9. Data collection tool	27
3.10. Data collection technique	27
3.11. Data analysis and presentation	27

Chapter four

Results	29-50
4.1. Personal character:	29-32
4.2. Hospitalization and illness:	33-37
4.3-Anxiety assessment	38-50

Chapter five

Discussion	51-55
5.1. 1.Socio demographic character:	51
5.1. 2. Hospitalization and illnesses:	51
5.1.3. Anxiety assessment:	52
Conclusion	56
Recommendations	57

Chapter six

6.1References	58-60
Appendix	61-64
6.2. Preschool anxiety scale	65
6.3. Parent report	66

List of contents

Contents	Page No	
الشكر والعرفان	I	
ملخص البحث	II	
Abstract	III	
List of tables	IV	
List of figures	V	
Chapter one		
Introduction	1-2	
Rationale		
Objectives	3	
Chapter tow		4
Literature review	5	
2.1. Hospitalization	5	
2.2 .The preschool period	6	
2.2.1 .Emotional and social development	6	
2.2.2. Common Fears of the preschooler	6	
2.2.3. The preschooler in the healthcare facility:	7	
2.2.4. What you might observe in preschool children:	7	
2.3. Anxiety	8	
2.3.1. Preschool anxiety scale (Parent Report)	9	
2.3.2.Items	11	
2.4. Pediatric Hospitalization	12	
2.5. Preparing the ill child and family for hospitalization	14	
2.5.1The reasons for medical admission are shown in Table 1.1	15	
2.6. The Meaning of Illness to Children	15	
2.7. Children's Reactions to Hospitalization	16	
2.7.1 .Fear and Anxiety	17	

ملخص الدراسة

مرحلة ما قبل المدرسة هي الفترة ما بين 3 و 6 سنوات من العمر، وهذا هو وقت لاستمرار النمو والتطور عند الاطفال . ويعتبر القلق شعور او احساس غير سار عاطفيا أو ظهور اعراض تشملها في كلمة "العصبية" ولايزال دخول المستشفى تجربة مرهقة ومثيرة للقلق للكثير من الأطفال على الرغم من مشاركة الأم المطلقة وتحسينات كبيرة في بيئات المستشفى. وقد ثبت ان دخول المستشفى يكون مرهق ومصدر قلق أيضا بالنسبة للآأم وبالنسبة للطفل.

وقد أجريت هذه الدراسة الوصفية، في مستشفيات مدينة عطبرة في عام 2016، وهذه الدراسة شملت 60 طفلا من الاطفال الذين كانوا يتواجدون بعنابر الأطفال أثناء فترة الدراسة. تم جمع البيانات باستخدام استبيان وقائمة تحقق . تم تحليل البيانات التي تم جمعها عن طريق استخدام برامج الكمبيوتر برنامج (SPSS)، لتقييم القلق عند الأطفال قبل سن المدرسة أثناء العلاج في عنابر الأطفال بمستشفيات عطبرة.

وتوصلت الدراسة علي أن ظاهرة القلق بمعدل 63.3% من الأطفال (مجموعة الدراسة). وكانت أعراض القلق الأكثر انتشارا في مرحلة ما قبل المدرسة هو القلق المتعلق بالمخاوف من إصابات الجسدية بمعدل 34.2% ، وقلق الانفصال يمثل نسبة 23.7%، والقلق الاجتماعي يمثل 21.1%، والقلق العام 15.8%. والوسواس القهري يمثل 5.2% و أقل من نصف مجموعة الدراسة ليس لديها ظاهرة القلق. تمثل بنسبة 36.7% وتشمل بعض السلوكيات التي لاحظها الآباء في الأطفال هي القلق، والانسحاب والخوف.

توصلت الدراسة الي عدة توصيات تمثلت في توفير إعداد جيد للطفل والأم قبل قبولهما و دخولهم للمستشفى للعمل علي خفض الضغط أثناء العلاج في المستشفيات. تشجيع المشاركة النشطة من جانب الوالدين في خطة رعاية الأطفال. و ينبغي أن تشمل الممرضات الآباء والأمهات في تقديم المعلومات بحيث يمكن أن تساعد في تخفيف القلق للأطفال.

Abstract

The preschool period is the period between 3 and 6 years of age, this is a time of continued growth and development. Anxiety is regarded as an unpleasant affective state or condition, which is characterized by all that is covered by the word, 'nervousness'.

Hospitalization remains a stressful experience for many children despite unrestricted parent participation and considerable improvements in hospital environments.

Hospitalization has been demonstrated to be equally stressful for the Parent and their children.

This Descriptive, hospital-based study, was conducted in Atbara city, Atbara hospitals in 2016, it include 60 children in the pediatrics ward, questioner and observational check list were used for data collection. The collected data was analyzed by using Computer software SPSS program).it was done to assess the anxiety in preschool children during Hospitalization.

Anxiety was found in 63. 3% in the children (study group).The most prevalent anxiety symptoms in preschoolers related to fears of physical injury (34. 2%), but some separation and social anxiety symptoms were also relatively common, Separation anxiety (23.7%), Social anxiety (21.1%), General anxiety (15.8%), Obsessive compulsive disorder (5.2%).Some observed behaviors by parents in the children include anxiety, withdrawal and fear. The study recommended to provide good preparation prior to admission to the child and parent to decreased stress during hospitalization and to encourage active participation of parent in the plan of child care. The nurses should involve parents in the delivery of information so that they can help relieve children's anxieties

List of tables

Tables title	Page
Table (1): Socio demographic data of mothers in the study group (age –level of education – Occupation).	30
Table (2): Age and sex of studied children	32
Table (3): Causes of admission to hospital either acute or chronic	34
Table (4) the acute illness and chronic illness which led to admission	34
Table (5): Relation between children age the causes to hospital admission	35
Table (6): Frequency and duration of hospital stay	37
Table (7): confinement of a child in the hospital	37
Table (8): Relation between frequency of hospitalization and child reaction to admission	39
Table (9): Mothers feeling during hospitalization	41
Table (10): Relation between the mothers feeling during hospitalization and their level of education	41
Table (11): Mothers assistance of staff during some procedure	41
Table (12): Causes of child distress	43
Table (13): Relation between children age the reason that cause child distressed	43
Table (14): The common fears of children	43
Table (15): Relation between the mothers feeling during hospitalization the symptoms observed in your child during hospitalization	45
Table (16): distribution of children According to preschool anxiety scale	50
Table (17): Distribution of anxiety types	50

List of Figures

Figures title	Page
Figure No (1): Child reaction to hospital admission	39
Figure No (2) :The sign and symptoms observed in your child during hospitalization	45
Figure NO (3):The changes observed on anxious child	47
Figure NO (4): What do you think the nurse should do to minimize stress for children	48

Chapter One

- **Introduction**
- **Rational**
- **objective**

1.1. Introduction

Hospitalization is required when the child becomes ill and the level of care requires more in-depth treatment than can be provided by a primary health care provider in the office or clinic. When a child enters the hospital, it may be an entirely new experience where both the child and family are exposed to an unfamiliar medical environment. The hospital may be a specialty Hospital located in a separate building especially designed for children or may be part of a general care hospital ⁽¹⁾.

Hospitals are acute care settings that provide many health care services, such as emergency care, specialized in-patient care, surgery, critical care, diagnostic tests and treatments, therapies, patient education, and other specialized services.

Children's hospital is a specialty pediatric hospital that is specially designed and managed specifically for children that provides various health care services, such as emergency care, specialized in-patient care, surgery, critical care, diagnostic tests and treatments, patient education, and other specialized services where physicians, nurses, child life specialists, other health care providers, and employees are specially trained to work with children ⁽¹⁾.

Many hospitals have a child-life program to make Hospitalization less threatening for children and their parents. These programs are usually under the direction of a child-life specialist whose background is in psychology and early childhood development ⁽²⁾.

Day hospital is a specialized hospital that serves children who require medical treatments such as blood transfusions, chemotherapy, steroid pulse therapy, intravenous hydration, intravenous antibiotic therapy, immunoglobulin therapy⁽³⁾.

Ambulatory surgery centers are a surgical center is where children receive minimal surgical treatment, recover from the procedure, and are discharged soon after the surgery. When caring for children and their families in hospitals, nurses must use evidence-based theory and provide care that takes into account the effects of hospitalization and separation on the child and family. Typically, healthy children have a single and brief encounter when Hospitalized⁽¹⁾.

The stressors are real, but not as pronounced as for children who have chronic illnesses. Some of the issues experienced during hospitalization include separation from the child's parents and family, fear of the unfamiliar, and sometimes events that are painful or disturbing⁽¹⁾.

1.2. Rational:

Children are high-risk for disease due to many causes this lead to the need for hospitalization.

There is lack of information about the relationship between the anxiety, child hospitalization and disease in the society specific in the mother rather than other, and the children are sensitive group in community who need more health care.

The nurse and the health teaching play important role in the community to help families in prevent their children from disease and disabilities.

1.3. Objectives

1.3.1. General objective:

To assess anxiety in preschool children during hospitalization.

1.3.2. Specific objectives:

1. To identify the effects of hospitalization on the preschool child.
2. To assess the major causes of stress or anxiety in the hospitalized children.
3. To determine the type of child anxiety during hospitalization.
4. To determine the association between frequency of hospitalization and child reaction to admission.
5. To determine the association between socio demographic characters and reaction to hospital admission.

Chapter Two

▣ Literature review

2. Literature review

2.1. Hospitalization:

The hospitalization of a family member often triggers crisis that requires assistance and interventions from various outside sources. The scope of the family's needs is related to their resources, level of adaptability, and prior experience. In most situations, intervention includes treatment and education provided by the physician, care and additional education provided by the nurse, and discharge planning with community support arranged by designated hospital staff⁽¹⁾.

As with any illness, children may perceive a chronic illness as punishment for a bad thought or action, depending on the child's developmental stage at the time of diagnosis. This perception is also influenced by the attitudes of parents and peers. Rejection by caregivers, for example, may further convince the child that the illness is a punishment.

The child's perception is also shaped by whether the dysfunctional body part is visible. Problems such as asthma, allergies, and epilepsy are difficult for young children to understand because "what's wrong" is inside, not outside⁽²⁾.

Also hospitalization creates a series of traumatic and stressful events in a climate of uncertainty for children and their families, whether it is an elective procedure that is planned in advance or an emergency situation resulting from trauma⁽³⁾.

At times, the nurse is responsible for identifying and coordinating these resources to facilitate the patient's and family's transition and may involve various other interventions⁽¹⁾.

2.2 .The preschool period:

Is the period between 3 and 6 years of age, this is a time of continued growth and development. Physical growth continues much more slowly compared to earlier years ⁽³⁾.

Gains in cognitive, language, and psychosocial development are substantial throughout the preschool period. The child has learned to tolerate separation from parents, has a longer attention span, and continues to learn skills that will lead to later success in the school-age period ⁽³⁾.

2.2.1 .Emotional and social development:

By the time a child enters kindergarten, he or she should have developed a useful set of social skills that will help him or her have successful experiences in the school setting as well as in life in general. Preschoolers tend to have strong emotions. The preschool child has a vivid imagination, and fears are very real to preschoolers. Most children this age have learned to control their behaviors ⁽³⁾.

Preschoolers are developing a sense of identity Parents can encourage and assist preschool children with developing the social and emotional skills that will be needed when the child enters school. Preschool children thrive on one-to-one communication with a parent ⁽³⁾.

2.2.2. Common fears of the preschooler:

Because preschoolers' imagination is so active, this can lead to a number of fears. Fears of the dark, mutilation, and separation or abandonment are all very real to a preschooler. These can rise in incidence when combined with the stress of an illness or hospitalization ⁽⁴⁾.

Fears are very real to preschoolers because of their active imaginations and may result in a variety of emotions. Parents should validate the feeling or

emotion, then discuss with the child alternatives for dealing with the emotion⁽³⁾.

Although most of these fears can be handled by comforting from parents, in some children, fears are so intensified that They need therapy such as desensitization to the fear⁽⁴⁾.

2.2.3. The preschooler in the healthcare facility:

The preschooler may view hospitalization as an exciting new adventure or as a frightening, dangerous experience, depending on the preparation by caregivers and health professionals. As mentioned, play is an effective way to let children act out their anxieties and to learn what to expect from the hospital situation. Preschoolers are frightened about intrusive procedures; therefore, it is preferable to take the temperature with an oral or tympanic thermometer, rather than with a rectal one⁽²⁾.

The hospitalized preschooler may revert to bed-wetting but should not be scolded for it. Assure the family that this is normal. Explanations of where the bathrooms are and how to use the call light or bell to get help can help avoid problems with bed-wetting. If a child is afraid of the dark, a night light can be provided⁽²⁾.

2.2.4. What you might observe in preschool children:

Remember, young children do not always have the words to tell you what has happened to them or how they feel. Behavior is a better gauge and sudden changes in behavior can be a sign of trauma exposure.

- Separation anxiety or clinginess towards teachers or primary caregivers.
- Regression in previously mastered stages of development (e.g., baby talk or bedwetting/toileting accidents).

- Lack of developmental progress (e.g., not progressing at same level as peers).
- Difficulty at naptime or bedtime (e.g., avoiding sleep, waking up, or nightmares).
- Increased somatic complaints (e.g., headaches, stomachaches, overreacting to minor bumps and bruises).
- Changes in behavior (e.g., appetite, unexplained absences, angry outbursts, decreased attention, withdrawal).
- Over- or under-reacting to physical contact, bright lighting, sudden movements, or loud sounds (e.g., bells, slamming doors, or sirens).
- Increased distress (unusually whiny, irritable, moody).
- Anxiety, fear, and worry about safety of self and others.
- Worry about recurrence of the traumatic event.
- New fears (e.g., fear of the dark, animals, or monsters).
- Statements and questions about death and dying ⁽⁵⁾.

2.3. Anxiety:

Anxiety is regarded as an unpleasant affective state or condition, which is characterized by all that is covered by the word, ‘nervousness’. Freud conceived of anxiety as a signal indicating the presence of a dangerous situation and differentiated between objective anxiety and neurotic anxiety largely on the basis of whether the source of the danger was from the external world or from internal impulses⁽⁶⁾.

Anxiety disorders are among the most common psychiatric complaints in children. While children commonly experience transient anxieties at various developmental points, clinically significant anxiety must be recognized as a problem. It is important to distinguish between developmentally expected anxiety, anxious temperament, and symptoms of a disorder⁽¹⁾.

Also the term anxiety is therefore defined as a "feeling or emotion of fear, apprehension and impending disaster, albeit not as crippling as in conditions of anxiety disorders". However, there are additional terms found in the library that to refer to anxiety, such as anxiety to dental treatment, performance anxiety and separation anxiety⁽⁷⁾.

Many approaches have been used to measure anxiety in children. Those approaches include self-report measures and behavioral/observational methods⁽⁶⁾.

Nursing staff are faced with the most varied situations of anxiety when caring for children who have been hospitalized. It is therefore important that the family play an active role in the care process, working with the health team to reduce the levels of anxiety that result from hospitalization and, consequently, to prevent anxiety disorders that are triggered by this process⁽⁷⁾.

The nurse understands that some degree of separation anxiety is normal at various stages of development and during transitions, but if the anxiety is severe and excessively disruptive, and if it persists for longer than 4 weeks, the child should be evaluated by a mental health professional.

In(GAD) generalized anxiety disorder, children experience excessive worry about everything, including peer relationships, social acceptance, and pleasing others. Specific phobia refers to unrelenting fear of certain objects or situations (i.e., spiders, storms, snakes, water)⁽¹⁾.

2.3.1. Preschool anxiety scale (Parent Report):

Also the term anxiety is therefore defined as a "feeling or emotion of fear, apprehension and impending disaster, albeit not as crippling as in conditions of anxiety disorders". However, there are additional terms found in the

library that to refer to anxiety, such as anxiety to dental treatment, performance anxiety and separation anxiety⁽⁷⁾.

A pre-school version (The Preschool Anxiety Scale) was adapted from the SCAS (Spence children's anxiety scale) by Dr Susan H Spence and Professor Ron Rapee in 1999.

Below is a list of items that describe children:

1. Has difficulty stopping him/herself from worrying.
2. Worries that he/she will do something to look stupid in front of other people.
3. Keeps checking that he/she has done things right (e.g., that he/she closed a door, turned off a tap).
4. Is tense, restless or irritable due to worrying.
5. Is scared to ask an adult for help (e.g a preschool or school teacher).
6. Is reluctant to go to sleep without you or to sleep away from home.
7. Is scared of heights (high places).
8. Has trouble sleeping due to worrying...
9. Washes his/her hands over and over many times each day.
10. Is afraid of crowded or closed-in places.
11. Is afraid of meeting or talking to unfamiliar people.
12. Worries that something bad will happen to his/her parents.
13. Is scared of thunder storms.
14. Spends a large part of each day worrying about various things.
15. Is afraid of talking in front of the class (preschool group) e.g., show and tell.
16. Worries that something bad might happen to him/her (e.g., getting lost or kidnapped), so he/she won't be able to see you again.
17. Is nervous of going swimming.

18. Has to have things in exactly the right order or position to stop bad things from happening.
19. Worries that he/she will do something embarrassing in front of other people.
20. Is afraid of insects and/or spiders.
21. Has bad or silly thoughts or images that keep coming back over and over.
22. Becomes distressed about your leaving him/her at preschool/school or with a babysitter.
23. Is afraid to go up to group of children and join their activities
24. Is frightened of dogs.
25. Has nightmares about being apart from you.
26. Is afraid of the dark...
27. Has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening.
28. Asks for reassurance when it doesn't seem necessary⁽¹⁵⁾.

2.3.2.Items:

Generalized anxiety : 1 + 4 + 8 + 14 + 28

1. Difficulties stopping worry 4. Irritability / restlessness 8. Trouble sleeping 14. Spends time worrying 28. Seeks reassurance).

Social anxiety: 2 + 5 + 11 + 15 + 19 + 23

2. Worries will look stupid 5. Scared to ask for help 11. Scared of unfamiliar people 15. Scared of talking in front of class 23. Scared to join group activities 19. Worries doing something embarrassing in public).

Obsessive compulsive disorder : 3 + 9 + 18 + 21 + 27

3. Keeps checking 9. Repeated hand washing 21. Repetitive thoughts / images) 27. Special thoughts 18. Right order to stop bad outcome.

Physical injury Fears : 7 + 10 + 13 + 17 + 20 + 24 + 26

4. Fears heights 10. Fears crowds 13. Fears storms 17. Fears swimming 20.
Fears insects / spiders 24. Fears dogs 26. Fears the dark)

Separation anxiety: 6 + 12 + 16 + 22 + 25

5. Fears sleeping alone 12. Worries about potential harm to parent 16. Fears bad event will cause separation 22. Distressed when separated from parent 25. Nightmares about being separated)⁽¹⁵⁾.

2.4. Pediatric hospitalization:

Millions of children under 17 years of age are hospitalized each year in the United States. Whether planned or unplanned, it is a time of stress and challenge for children and families because they are thrust into experiences of unknowns, uncertainties, and discontents ⁽⁸⁾.

Some children and families are simultaneously coping with other untoward circumstances and recent disruptions in their lives such as ongoing physical, behavioral, or learning problems; recent losses or separations; and other major changes or difficulties in relationships ⁽⁸⁾.

Foremost in the preparation of children for hospitalization on any unit is preparing the family. If the family is well informed about and understands the child's illness, confidence in their medical recommendations, and the support of understanding nurses, then they are more likely to be able to assist in preparing the child for the hospital experience. Hospitalization may be planned or unexpected. When the hospitalization is planned, the caregivers and child have time to prepare for the event ⁽⁹⁾. The confinement of a child or infant in a hospital for diagnostic testing or therapeutic treatment. Regardless of age or the degree of illness or injury, hospitalization constitutes a major crisis in the life of a child, and the emotional trauma may

elicit various behavioral reactions that the nurse must recognize and be prepared to cope with to facilitate recovery⁽¹⁰⁾.

In today's health care environment, children receive much of their care for illnesses in community health settings such as physician's offices, urgent care settings, or day surgery Centers⁽³⁾.

The dominant factors influencing stress, which vary according to the child's developmental age, his or her previous experience with illness, and the seriousness of the condition, include separation from the parents and familiar environment, disruption of routine patterns of daily life, loss of independence, and worry about bodily injury or painful experiences⁽¹⁰⁾.

Many hospitals have child life specialists, who are health-care professionals with extensive knowledge of psychology and early childhood development, trained to prepare the child and caregivers for hospitalization, surgery, and procedures. Their goals include maintaining normalcy, minimizing psychological trauma, and promoting optimal development of the child and family. A collaborative effort between the nurse, the child life specialist, and other healthcare providers ensures the best possible hospital experience for the child and family⁽⁹⁾.

Efforts should be directed towards reducing the need for hospitalization of children through increased use of day surgery and outpatient care and tertiary care only used as a last resort⁽¹⁰⁾.

In addition, hospital stays are often shorter due to economic trends in the health care environment, such as the delivery system of managed care and other factors that attempt to control costs⁽³⁾.

Short hospital stays occur more frequently than extended hospitalization, but even during a short stay, the child is often apprehensive. In addition, the child may pick up on the fears of family caregivers, and these negative

emotions may hinder the child's progress ⁽¹¹⁾. According to Child Health USA 2005, diseases of the respiratory system account for the majority of hospitalizations in children under 5 years of age, while diseases of the respiratory system, mental health problems, injuries, and gastrointestinal disorders lead to more hospitalizations in older children ⁽³⁾.

2.5. Preparing the ill child and family for hospitalization:

Many childhood illnesses such as febrile seizures, appendicitis, poisonings, and asthma attacks strike suddenly, making advance preparation for hospital admission impossible. However, when hospitalization such as orthopedic or second-stage surgeries is scheduled, preparation is possible. As a rule, parents eagerly seek guidance from nurses on what and how much to tell their children about an anticipated admission.

The preparation parents make for a child obviously varies according to the child's age and individual experience. No matter what the child's age, parents do best when they convey a positive attitude toward the hospitalization or surgery. Statements such as, "They'll make you behave in the hospital" or "Wait until you have to stay in bed all day" should be avoided ⁽⁴⁾.

Most pediatric admissions are of infants and young children under 5 years of age and are emergencies, whereas surgical admissions peak at 5 years of age, one-third of which are elective ⁽⁴⁾.

2.5.1 The reasons for medical admission ⁽¹²⁾:

Respiratory 31%	Asthma 11%, URTI 6%, Croup 4%, Bronchiolitis 4%, Pneumonia 3%, Tonsillitis 2.5%
Environment 22%	Head injury 12%, Poisoning 8%, Child protection 1.5%
Gastroenterology 15%	Gastroenteritis 7%, Constipation/soiling 2%, Abdominal pain/vomiting 2%, Failure to thrive 1%
Infection 10%	Viral infection 6%, Septicaemia/meningitis 1.5%,
Neurology 8%	Febrile convulsions 3%, Epilepsy 3%, Apnoea/cyanotic attacks 2%
Kidney and urinary tract 3%	Urinary tract infection 2.5%
Other 11%	

2.6. The meaning of illness to children:

The response of children to illness depends on their cognitive ability, past experiences, and level of knowledge. From early school age, children generally know quite a bit about the workings of their major body parts.

As general guidelines, early grade-school children are usually able to name the function of the heart, lungs, and stomach. They may not be able to do that for the bowel, kidneys, or bladder; this reflects the difficulty some parents have in discussing these body parts with their children⁽⁴⁾.

2.7. Children's reactions to hospitalization

In general, children are more vulnerable to the effects of illness and hospitalization because this is a change from their usual state of health and routine⁽³⁾.

Hospitalization may cause anxiety and stress at any age, also Fear of the unknown is always threatening. The child who faces hospitalization is no exception. Children are often too young to understand what is happening or are afraid to ask questions⁽¹¹⁾.

They also have limited understanding and coping mechanisms to assist them in resolving the stressors that might occur during this time. The stressors that children experience in relation to hospitalization may result in various reactions. Children react to the stresses of hospitalization before admission, during hospitalization, and after discharge⁽³⁾.

Besides the physiologic effects of the health problem, the effects of illness and hospitalization on a child include anxiety and fear related to the overall process and the potential for bodily injury, physical harm, and pain⁽³⁾.

In addition, children are separated from their homes, families, friends, and what is familiar to them, which may result in separation anxiety (distress related to removal from family and familiar surroundings). There are ways that the nurse can help parents cope with the stressful situation during a child's hospitalization⁽³⁾.

The nurse can minimize stress by preparing the child and family through pre hospital counseling; by encouraging active parental participation in the child's care through rooming-in facilities or frequent visits; by maintaining as normal a daily routine as possible, especially with eating, sleeping, hygiene, and play activities; by explaining all hospital procedures and the immediate and long-term prognosis in terms that the child can easily

understand; and by providing support and guidance for parents and siblings⁽¹⁰⁾.

The plan of care begins with admission to the health care facility. The completion of admission information includes previous data regarding the child and family as well as information regarding peers and play patterns, eating patterns, sleeping patterns, school history, normal activity patterns, fears, comfort measures, habits, primary language spoken, language development and level of understanding, usual reaction to pain, special routines, and perception of caregivers regarding prior or present hospitalizations⁽⁹⁾.

Parents play a significant role in reassuring their children and providing security and normality. Therefore nurses should involve parents in the delivery of information so that they can help relieve children's anxieties⁽¹⁰⁾.

Child life specialists can also be extremely helpful in teaching coping strategies to children and families during hospitalization. The nurse also may use the hospital experience to foster an improved parent-child relationship and to teach other members of the family about proper health care. Emergency admission greatly increases the emotional trauma of hospitalization, making the nurse's role in counteracting negative reactions even more significant⁽¹⁰⁾.

2.7.1 .Fear and anxiety:

For many children entering the hospital is like entering a foreign world. The result is fear and anxiety. Often anxiety stems from the rapid onset of the illness or injury, particularly when the child has limited experiences with disease or injury⁽³⁾.

Children become anxious and normal fears are exacerbated when they think about being in pain, harmed, or mutilated in some way or being separated

from caregivers. Regardless of the cause of illness or hospitalization, high levels of anxiety are also generated by fears and uncertainties of those responsible for their care ⁽⁸⁾.

The children expressed a range of fears and anxieties that were collated into two main themes: fears of ward environment and hospital staff and fears about investigations and treatments ⁽¹⁴⁾. Health professionals should be aware of how children can feel threatened and fearful about many aspects of the hospitalization. It is important that preparatory procedures and preadmission programmes' are made available for children ⁽¹⁴⁾.

The child becomes distressed about the unfamiliar environment, procedures, and situations, such as the strange words being used, ominous looking equipment, strangers in unusual attire (e.g., surgical caps, masks, gowns), unfamiliar and frightening noises and smells, or the sounds of other children crying ⁽³⁾.

Overall, hospitalization is a difficult experience for children. Normal fears of childhood include the fear of separation, loss of control, and bodily injury, mutilation, or harm. Children's fears are similar to adult fears of the unknown, including fear of unfamiliar environments and losing control. In the hospital, children may be exposed to people, situations, and procedures that may be new to them and cause them pain ⁽³⁾.

2.7.2 .Separation anxiety:

Separation anxiety is a major stressor for children of certain ages. Separation anxiety consists of three stages. The first phase, protest, occurs when the child is separated from the parents or primary caretaker. This phase may last from a few hours to several day ⁽³⁾.

Separation from parents because of hospitalization can have permanent psychological effects on children. Methods to reduce this include keeping

hospital stays as brief as possible, promoting open parent and sibling visiting, and providing primary or case management nursing ⁽⁴⁾.

The child reacts aggressively to this separation and exhibits great distress by crying, expressing agitation, and rejecting others who attempt to offer comfort. The child may also display anger and inconsolable grief. If the parents do not return within a short time, the child exhibits the second phase, despair. Detachment (also known as denial) is the third and final phase of separation anxiety ⁽³⁾.

2.7.2.1. Stages of separation anxiety:

Stage	Manifestations
Protest	The child cries loudly and demandingly; rejects any attempts to be comforted by nurse or substitute primary caregivers.
Despair	The child becomes less active and cries monotonously or wails in a state of mourning; may turn away from parent’s approach; often lies on abdomen, facial expression flat.
Denial	The child is silent, face expressionless; represses feelings for absent caregiver to protect self; deterioration in developmental milestones is apparent; may respond quickly but superficially to all caregivers; may have difficulty forming close relationships later in life ⁽⁴⁾ .

Most pediatric settings provide rooming-in facilities, where the caregiver can stay in the room with the child. Rooming-in helps minimize the hospitalized child’s separation anxiety and depression. Although separation from primary caregivers is thought to cause the greatest upset in children

younger than 5 years of age, children of all ages should be considered when setting up a rooming-in system⁽²⁾.

2.7.3 .Loss of control:

When hospitalized, children experience a significant loss of control. This loss of control increases the perception of threat and affects their coping skills. In the hospital, the child's usual routine is disrupted.

He or she cannot choose what to do and at what time. Confinement to the bed or crib worsens this loss of control. For example, if connected to tubes or intravenous lines, the child may not even be able to visit the bathroom alone. Hospitalization also affects the child's control over decisions related to his or her own body.

Many of the procedures and treatments that occur in the hospital are invasive or are at least disturbing to children, and much of the time they do not have the option to refuse to undergo them. Adults are presumed to be competent to make health care decisions, but generally children are not⁽³⁾.

Though the parents and nurses of hospitalized children have the children's best interest in mind, children often feel powerless when in the hospital, not having their feelings and wishes respected and having minimal control over events⁽³⁾.

2.8. Reactions based on developmental level:

The child's developmental level also plays an important Role in determining how he or she handles the stress of illness and hospitalization. When you understand the child's developmental needs, you may significantly improve the child's Hospital stay and overall recovery⁽²⁾.

The preschooler has better verbal and developmental skills to adapt to various situations, but illness and hospitalization can still be stressful. Preschoolers may understand that they are in the hospital because they are

sick, but they may not understand the cause of their illness. Preschoolers fear mutilation and are afraid of intrusive procedures since they do not understand the body's integrity ⁽³⁾.

Separation anxiety may not be as much of an issue as it is for toddlers since preschoolers may already be spending Time away from parents in preschool. They are, however, still acutely aware of the comfort and security that their family provides for them, so disruptions in these relationships lead to challenges.

He or she may quietly cry, refuse to eat or take medication, or generally be uncooperative. In addition, the hospitalized preschooler loses control over the environment. The preschooler is naturally curious about his or her surroundings and learns best by observing and working with objects. This might be limited during hospitalization ⁽³⁾.

2.9. Factors affecting a child's response to illness and hospitalization:

- amount of separation from parent/caregiver.
- Age.
- Developmental level.
- Cognitive level.
- Previous experience with illness and hospitalization.
- Recent life stresses and changes.
- Type and amount of preparation.
- Innate and acquired coping skills.
- Seriousness of the diagnosis/onset of illness or injury.
- (e.g., acute or chronic) .
- Support systems available, including the family and health care professionals.
- Cultural background.

- Parents' reaction to illness and hospitalization ⁽³⁾.

2.10. The hospitalized child's family:

Whether planned or unplanned, hospitalization increases the family's stress and anxiety level. The illness or serious injury of one family member affects all members of the family because the process disrupts the family's usual routines and may alter family roles. Parents and siblings have their own reactions to this experience ⁽³⁾.

2.10.1 Reactions of parents:

Watching a child in pain is difficult, especially when the Parent is assisting with the procedure by holding the child. The parent may feel guilty for not seeking care sooner. Parents may also exhibit other feelings such as denial, anger, depression, and confusion.

They may express anger, especially directed at the nursing staff, another family member, or a higher power because of their loss of control in caring for the child. Depression may occur because of exhaustion and the psychological and physical requirements of spending long hours in a hospital caring for a child. Confusion may develop because of dealing with an unfamiliar environment or the loss of a parental role ⁽³⁾.

2.10.2. Effects of a hospitalized child on parents:

Parenting an ill child can be stressful and demanding on both the child and the parent. During the period of illness, the child can begin to recover, become gradually sicker, or suddenly begin to exhibit behaviors that give the parents cause for great concern ^(1,3).

Although there may be similarities in responses to hospitalization, children and their families each have different life situations, giving rise to the importance of understanding children and caregivers as individuals as well as their roles and relationships to each other ⁽⁸⁾.

Symptoms such as withdrawal, lack of activity, or irritability in performing basic functions may be a signal that the child's condition is worsening. During these times, continued parenting of a hospitalized child has many dimensions, such as interpreting the child's behaviors, teaching the child new skills or how to perform basic functions again, helping a child understand the words and language of health care providers, and offering support during frightening experiences ^(1,3).

Hospitalization remains a stressful experience for many children despite unrestricted parent participation and considerable improvements in hospital environments. ⁽¹⁴⁾ Hospitalization has been demonstrated to be equally stressful for the parent as for the child. Parents may describe themselves as feeling incapable due to their loss of control over the situation and their inability to be able to protect their child. Some observed behaviors by parents include anxiety, denial and withdrawal, guilt and fear (including concerns by the parents that they may have had a causal effect on their child's illness) ^(1,3).

No mother wants to see her child hospitalized, but how she copes with it could impact the child's anxiety level. "Coping patterns are important because they facilitate a person's handling of a stressful experience. Provide extra resources that can help that person deal with the demand of a stressor. There are many coping strategies, both positive and negative, including exercising, seeking religious support, focusing on the positive, distancing one's self, acting out, eating, drinking and more ⁽¹³⁾.

2.11.Information and psychosocial support:

Detailed information should be provided, given personally and preferably also written and available in appropriate ethnic languages. Staff should be

sensitive to the family's individual needs according to their social, educational, cultural and religious background. Play specialists should be part of the ward team because they can help children understand their illness and its treatment through play. Emotional and psychological support should be given to all. For elective admissions, children and their families should be offered an advance visit and have details of proposed treatment and management explained at an appropriate level⁽¹²⁾.

2.12. Children in hospital should be provided with:

- Family centered care - holistic approach to family, parent able to stay and provide parental care.
- Child oriented environment - geared for child's age, together with education and play facilities.
- Information and psychosocial support - verbal and written information for both parents and child.
- The opportunity to have their views and fears listened to, if old enough.
- Skilled staff - specially trained to care for children
- multidisciplinary care
- Access to tertiary care - with shared care arrangements with local hospital and primary care⁽¹²⁾.

2.13. Discharge from hospital:

- Children should be discharged from hospital as soon as clinically and socially appropriate. Although there is increasing pressure to reduce the length of hospital stay to a minimum, this must not allow discharge planning to be neglected. Before discharge from hospital, parents and children should be informed of:
 - The reason for admission and any implications for the future.

- Details of medication and other treatment.
- Any clinical features which should prompt them to seek medical advice, and how this should be obtained.
- The existence of any voluntary self-help groups if appropriate.
- Problems or questions likely to be asked by other family members or in the community. These should be anticipated by the doctor and discussed. What do the nursery or school, baby-sitters or friends need to know? What about sports, etc⁽¹²⁾.

2.13.1. Discharge and post-hospital effects:

Throughout hospitalization, children and caregivers need to be prepared for discharge, post-hospital or post-surgical care, and the effects of this experience. This often involves extensive Teaching and preparation for the transition, especially when there has been prolonged hospitalization, painful treatments and procedures, or changes in body image. With shortened hospital stays every opportunity for teaching both children and families should be used to the greatest advantage⁽⁸⁾.

Chapter Three

➤ **Material & Methods**

3. Material & Methods

3.1. Type of study

Cross-sectional descriptive hospital based study.

3.2. Study duration:

From August-November 2016.

3.3. Study area:

Study Conducted At Pediatrics wards in Atbara hospitals (Atbara teaching Hospital, Military hospital, Police hospital, Alhyaa pediatric center ,A Islam hospital) .Atbara city, sometime (Atbara) in River Nile state, Sudan, which located in the north of Khartoum about 310KM, at the junction of the River Nile and Atbara river . It is an important railway junction and railroad manufacturing center. It's population about 111,399, most of them are related to rail line .

Atbara city now is one of the most important cities with multiple health care facilities .It has five main hospitals, Atbara teaching hospital ,Military hospital and Police man hospital, Health insurance hospital and Alslam hospital. It has also numbers of private medical centers for delivery of health care.

3.4. Study population:

All children who were admitted to pediatric wards during the period of the study.

3.5. Sampling:

Convenience sample.

3.6. Sample size:

60 children fulfilling the inclusion criteria.

3.7. Inclusion criteria:

- a. Age 3-6 years .
- b. Parent consent.

3.8. Exclusion criteria:

- a. Very ill child

3.9. Data collection tool:

Data was collected by questionnaire and preschool anxiety scale.

- a. Questionnaire: include socio demographic characters and questions about hospitalization like (the child age ,the common cause of hospital admission ,duration of hospital admission ,child reaction to admission ,and causes of child distress.
- b. The preschool anxiety scale: It include 28 questions. It is interpreted into items each one reflects type of anxiety.

3.10. Data collection technique:

The questionnaire and preschool anxiety scale were filled by the researcher while interviewing the mothers ,the purpose and content of the questionnaire and preschool anxiety scale were explained in Arabic language . Every mother took about 3-5minutes to answer all the questions.

3.11. Data analysis and presentation:

The data has been analyzed by using computer software by SPSS program. The results were presented in form of tables and figure. Chi² test was used for 95% confidence level of significant.

3.12. Ethical consideration:

The study was approved by research ethic committee.

Chapter Four

➤ **Results**

Results

Results were represented in 3parts:

Part 1: Personal character

Part 2: Hospitalization and illness

Part 3: Anxiety assessment

4.1. Personal character:

Table (1) showed that about (46.7%) of mothers had primary education and (46.7%) their age was distributed between (20-30) years, also most of them (78.3%) were House wives.

Table (1) : Socio demographic data of mothers in the study group (age – level of education – Occupation):

Age	Frequency	Percent
<20 years	7	11.7%
20-30 years	28	46.7%
31-40years	15	25.0%
>40years	10	16.7%
Total	60	100%
Level of education	Frequency	Percent
Primary school	28	46.7%
Secondary school	19	31.7%
Graduate	9	15%
Post graduate	4	6.7%
Total	60	100%
Occupation	Frequency	Percent
House wife	47	78.3%
working mother	13	21.7%
Total	60	100%

Table (2) showed that more than half (60 %) of study group were females, and most of them their age 3-4years old.

Table (2) : Age and sex of studied children

Age	Frequency	Percent
3-4years	34	56.7%
4 -5 years	11	18.3%
5-6 years	15	25.0%
Total	60	100%
Sex	Frequency	Percent
Male	24	40%
Female	36	60%
Total	60	100%

4.2. Hospitalization and illness:

Table (3) showed that more than half (65 %) of cause to hospitalization were acute illnesses, and (35%) were chronic illnesses. Acute illnesses include malaria(23%),Gastroenteritis(51.3%)while chronic include asthma (90.5%), Others like sickle cell anemia (9.5%) as shown in table (4).There was no significant association between child age and whether he was admitted for acute or chronic illness(table 5).

Table (3): Causes of admission to hospital either acute or chronic

Illness	Frequency	Percent
Acute illness	39	65%
Chronic illness	21	35%
Total	60	100%

Table (4): The acute illness and chronic illness which led to admission

Causes	Illness	Frequency	Percent
The acute	Malaria	9	23.0%
	Gastroenteritis	20	51.3%
	Head injury	1	2.6%
	Bronchial pneumonia	8	20.5%
	Other(Scorpion bite)	1	2.6%
	Total		39
Chronic	Illness		
	Asthma	19	90.5%
	Sickle cell anemia	2	9.5%
Total		21	100%

Table (5): Relation between children age the causes to hospital admission

Child age	Causes of admission to hospital		Total	P. value
	Acute illness	Chronic illness		
3-4years	23	11	34	0.942
4 -5 years	7	4	11	
5-6 years	9	6	15	
Total	39	21	60	

Regarding frequency of hospital admission (20%) of children were admitted to hospital for the first time while (80 %) had frequent hospitalization more than one. More than half (55 %) of children had duration of hospitalization ranged (72h-1week), (3.3%) of them had duration more than 2weeks and tow third (68.3%) of study group confinement in hospital for diagnostic and therapeutic together as illustrated in table (6) and table (7).

Table (6): Frequency and duration of hospital stay

Frequency of hospitalization	Frequency	Percent
First time	12	20.0%
Two – three	24	40.0%
>Three	24	40.0%
Total	60	100.0%
Duration of hospitalization	Frequency	Percent
Less than 48h	16	26.7%
72h-1 week	33	55.0%
1 weeks-2weeks	9	15.0%
More than2weeks	2	3.3%
Total	60	100

Table (7): Confinement of a child in the hospital

The confinement of a child	Frequency	Percent
Diagnostic testing	3	5.0%
Therapeutic treatment	16	26.7%
Both diagnostic and therapeutic	41	68.3%
Total	60	100.0%

4.3-Anxiety assessment

Figure (1) showed that more than half (60%) of study group their reaction to hospital after admission was irritability, and (20.0%) of them their reaction was either lack of activity or with drawlsymptoms. There was no significant association between frequency of hospitalization and child reaction to hospital admission ($P= 0.461$) as shown in table (8).

Figure(1):Child reaction to hospital admission

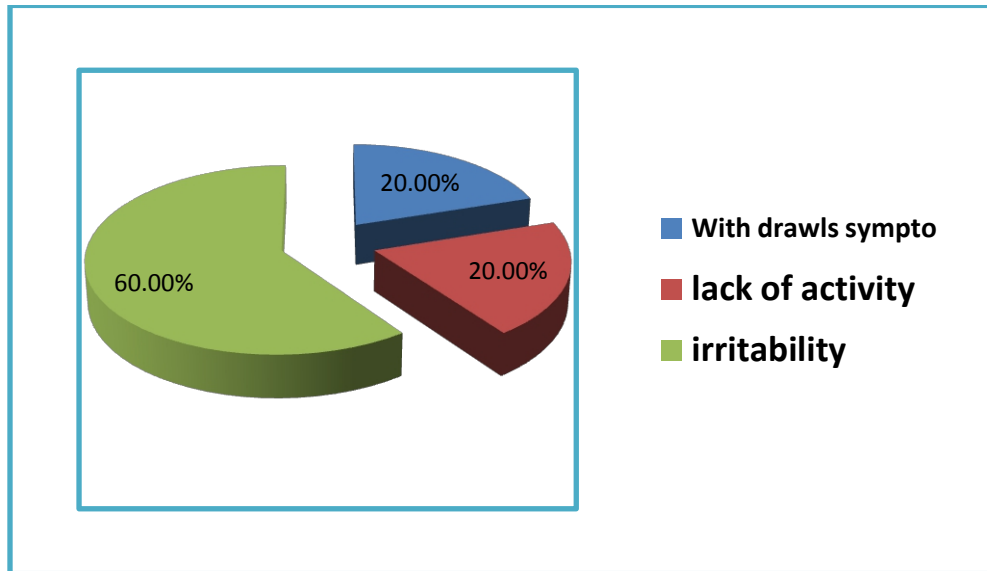


Table (8): Relation between frequency of hospitalization and child reaction to admission.

Child reaction to admission is	Frequency of hospitalization			Total	P .value
	First time	Sconed to third time	>Third time		
With draws symptom	2	6	4	12	0.461
lack of activity	2	7	3	12	
Irritability	8	11	17	36	
Total	12	24	24	60	

Table (9) showed that more than half (56.7%) of mothers feeling during hospitalization was fear, and about (20.0%) of them had no abnormal feeling. Mother's level of education doesn't affect their feeling during hospitalization as shown in table (10). Most of the mothers (80.0%) can assist the staff during some procedure like sampling as shown in table (11).

Table (9): Mothers feeling during hospitalization

Mothers feeling	Frequency	Percent
Fear	34	56.7%
Anxiety	6	10.0%
loss of control	8	13.3%
No abnormal feeling	12	20.0%
Total	60	100.0%

Table (10): Relation between the mothers feeling during hospitalization and their level of education

The mother feeling during hospitalization	Level of education of the mother				Total	P. value
	Primary school	secondary school	Graduate	post graduate		
Fear	15	11	8	0	34	0.233
Anxiety	4	1	0	1	6	
Loss of control	3	4	0	1	8	
No abnormal feeling	6	3	1	2	12	
Total	28	19	9	4	60	

Table (11): Mothers assistance of staff during some procedure

Can the Mothers assist the nurse	Frequency	Percent
Assisted	48	80.0%
Not assisted	12	20.0%
Total	60	100.0%

Table (12) showed that more than half (66.7%) of study group became distressed about the unfamiliar environment, and (28.3%) of them distressed about procedures. The child age was not related to the cause of distress (p value=0.05) as illustrated in table (13). Table (14) showed that (50%) of children fear the mutilation, and (45.0%) of them their common fear is from the dark.

Table (12): Causes of child distress

The child becomes distressed about	Frequency	Percent
The unfamiliar environment	40	66.7%
Procedures	17	28.3%
Noises and the sounds of other children crying normal feeling	3	5.0%
Total	60	100%

Table (13): Relation between children age and the reason that cause child distressed

Duration of hospitalization	The child becomes distressed about			Total	P. value
	The unfamiliar environment	Procedure	Noises and the sounds of other children crying		
3-4 years	14	9	0	23	0.05
	8	3	0	11	
4-5 years	9	0	2	11	
5-6years	9	5	1	15	
Total	40	17	3	60	

Table (14): The common fears of children

Common Fears of your child	Frequency	Percent
Fears of the dark	27	45.0%
Fear of the mutilation	30	50.0%
Fear from separation or abandonment	3	5.0%
Total	60	100.0%

Figure (2) showed that anxiety was observed in (75.0%) of children during hospitalization. There was no significant relation between the mothers feeling during hospitalization and the symptoms observed in children during hospitalization (P value=0.431) as shown in table (15).

Figure (2) :The sign and symptoms observed in children during hospitalization

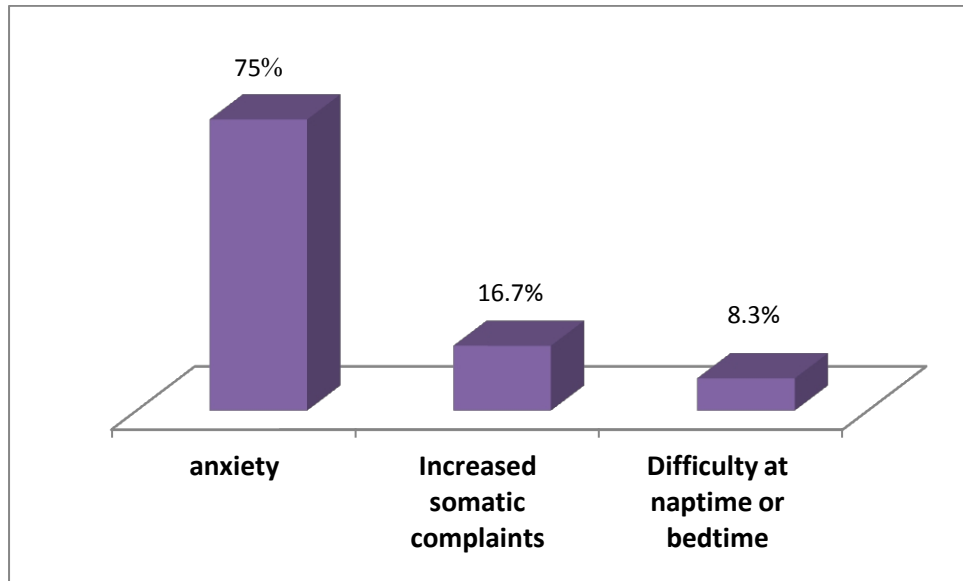


Table (15): Relation between the mothers feeling during hospitalization and the symptoms observed in children during hospitalization

The mothers feeling during hospitalization	symptoms observed in your children during hospitalization			Total	P. value
	Anxiety	Increased somatic complain	Difficulty at naptime or bedtime		
Fear	25	5	4	34	0.431
Anxiety	6	0	0	6	
Loss of control	7	1	0	8	
No abnormal feeling	7	4	1	12	
Total	45	10	5	60	

Figure (3) showed that more than half (66.7%) of the children cried when developed anxiety, and (26.7%) of them refused to eat or take medication.

Figure (4) showed that majority (90.0%) of the mothers think that the children stress can be minimized when the nurse prepare the child and family through pre hospital counseling.

Figure (3)The changes observed on anxious child

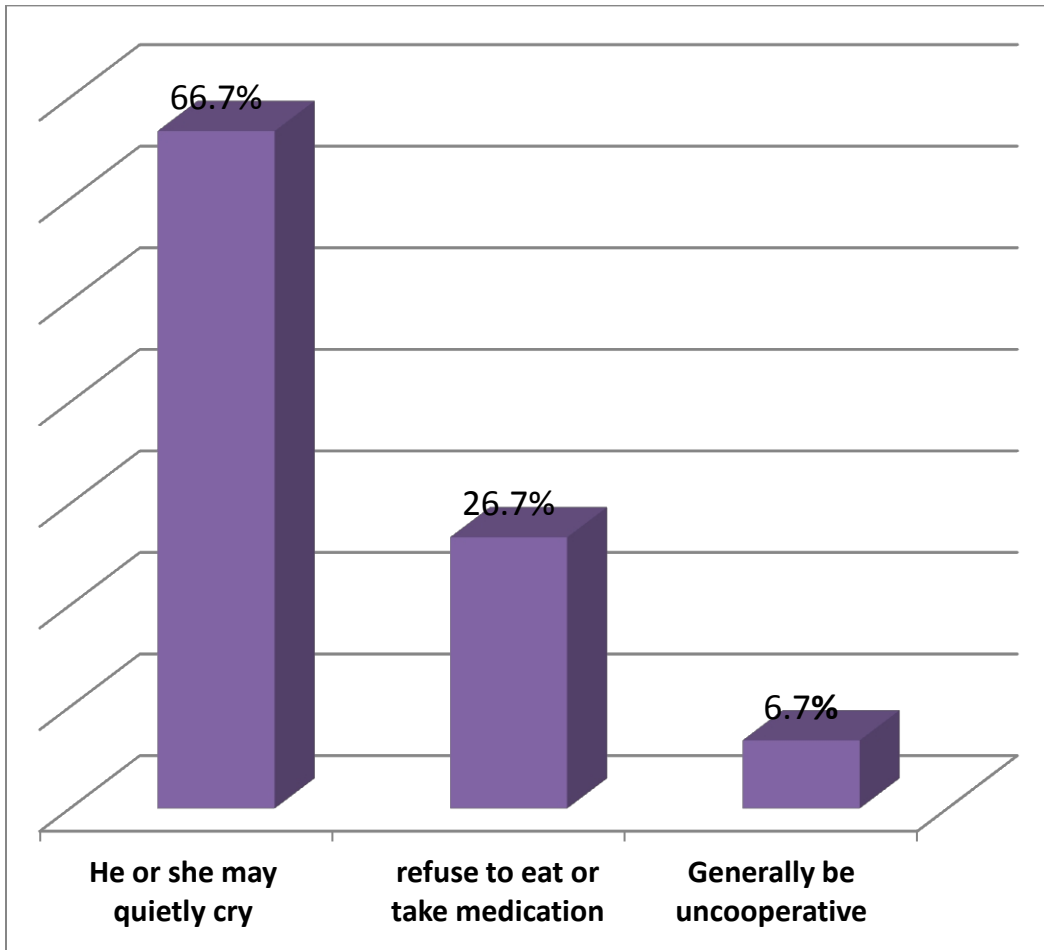


Figure (4) what do you think the nurse should do to minimize stress for children

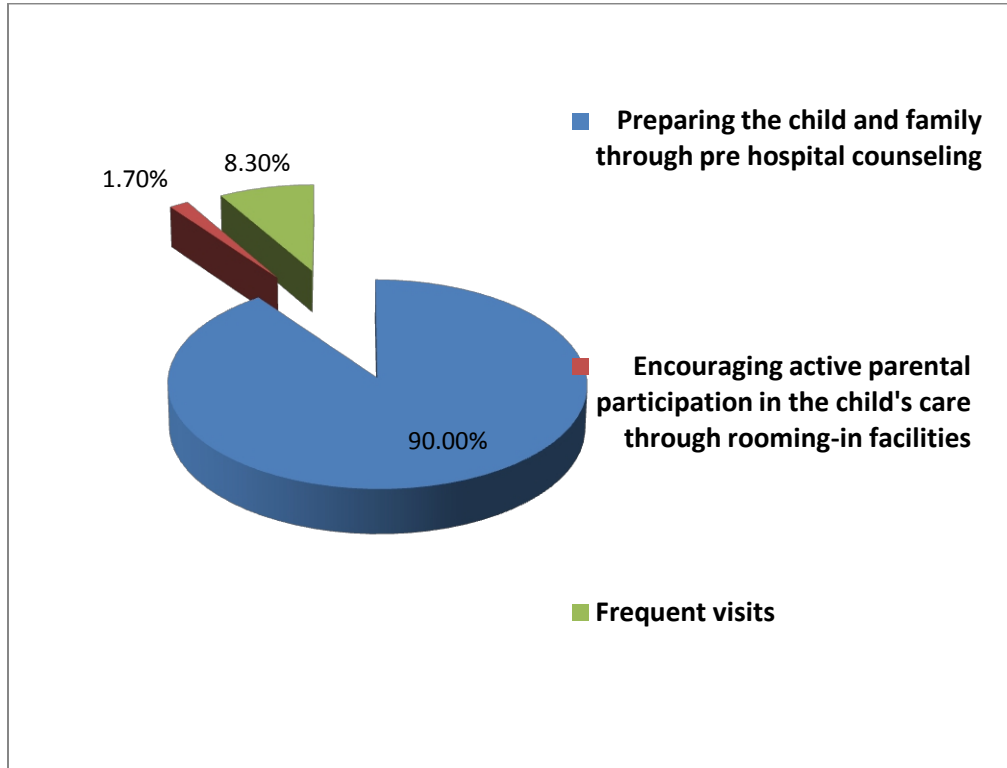


Table (16) showed distribution of studied group according to preschool anxiety scale, that more than half (63.3%) of children had anxiety. According to that table (17) demonstrated the following anxiety types physical injury fears (34.2%)obsessive compulsive disorder (5.2%)separation anxiety (23.7%) ,generalized anxiety(15.8%) and social anxiety (21.1%).

Table (16): Distribution of children According to preschool anxiety scale

Child	Frequency	Percent
Normal	22	36.7%
Anxious	38	63.3%
Total	60	100%

Table (17): Distribution of anxiety types

Anxiety type	Frequency	Percent
Physical injury Fears	13	34.2%
Obsessive compulsive disorder	2	5.2%
Separation anxiety	9	23.7%
Generalized anxiety	6	15.8%
Social anxiety	8	21.1%
Total	38	100%

Chapter Five



Discussion



Recommendation



Conclusion

5.1. Discussion:

This study was conducted at pediatric wards in Atbara hospitals to assess anxiety during hospitalization in preschool children. The study was done in the period which extended from August to November 2016, sixty children were included.

5.1. 1.Socio demographic character:

The study is clarifying about(46.7%) of mothers age was distributed between (20-30) years and near to half of them(46.7%) had primary education .Also the majority of the mothers (78.3%) were housewives ,this is not correlated with (McCubbin et al, 2002). When found that most parents that have children in a hospital have full-time jobs and need to keep working in order to support their family and can't always be there for their child ⁽¹⁶⁾, it gets difficult for parents to maintain home and provide support to both their hospitalized child and non-hospitalized children ⁽¹⁹⁾.

Also the study found more than half (60 %) of studied children were females, and most of them their age 3-4years old.

5.1. 2. Hospitalization and illnesses:

The study showed that two third (65 %) of causes for hospitalization were acute illnesses, while chronic illness only one third (35%). This in contrast to the result attained by Geist et al who stated that chronic disease affects an estimated(10 %-20%) of all children during childhood and adolescence Luckily, advances in medicine in recent years, have increased the likelihood of surviving childhood illness and decreased the mortality rate, and acute illnesses ⁽¹⁷⁾.

Pediatric diseases may be due to either external, internal causes. And neither external or internal causes refers to a miscellaneous collection of disease causes, such as diet, lifestyle, sex, trauma, poisoning, drowning, etc ⁽²⁴⁾.

In this study the acute illness which led to admission were (malaria (23%), Gastroenteritis (51.3%), Head injury (1.7%) and other which include (Bronchial pneumonia (20.5%) and Scorpion bite (2.6%) and Chronic illness include :(Asthma (90.5%), other (sickle cell anemia) (5.5%).It was found that the common reasons for hospital admission were not related to the child age (p value= 0.942).

Regarding duration of hospitalization , more than half (55 %) children had duration in the range (72 hours-1week), and (3.3%) of them had duration more than 2 weeks,(40 %) of the child were admitted for the second to third time and same percentage for more than 3 times. Disease and hospitalization can be the first crisis that a child encounters ⁽²³⁾. Short-term hospitalization is usually indicated to attend to pharmacological sequelae, to assess the psychosocial situation and to impress on the family the need to attend to underlying problems ⁽²⁵⁾. Two third (68.3%) of study group confinement in hospital for both diagnostic and therapeutic reasons.

5.1.3. Anxiety assessment:

Reaction to hospital admission was in more than half (60%) of study group was irritability and (20.0%) of them their reaction was either lack of activity or with drawl symptoms. the children reaction to hospital admission was not significantly affected by frequency of hospitalization (p value 0.461).

Caregivers of hospitalized children perceived high levels of stress and anxiety ⁽¹⁶⁾. More than half (56.7%) of the mothers feel during hospitalization was fear and about (13.3%) of them had loss of control, (10.0%) had anxiety, This is supported by selye H ,et al ,who showed that caregivers of children hospitalized for mild acute diseases perceived higher level of stress and anxiety compared to the control population, Parents,

brothers and sisters also experienced sensations of loss of control and confusion, and presented physical disturbances, such as digestive disturbances or pain, more frequently than other relatives. Probably emotional involvement is greater in the next of kin compared to other relatives taking care of children staying in hospital⁽¹⁸⁾. There was no relation between the mothers feeling during hospitalization and the level of education of the mothers (p value =0 .233).

The study showed that most of the mothers (80.0%) can assist the staff during some procedure like sampling.

In the other side the study clarified that around tow third (66.7%) of studied children became distressed about the unfamiliar environment, and (28.3%) about procedures this was supported by small et al, in (2009) Children under the age of seven tend to endure more “frequent and lasting emotional and behavioral difficulties as a result of childhood illness and hospitalization for the reason that specific stressors—separation from family and loved ones, introduction into an unfamiliar environment, constant forced communication with strangers, and medical procedures—have a more significant impact on younger children, Also a data collected in (2006,1998,1972)by McCaffrey et al) demonstrated a list of major stressors associated with childhood long-term hospitalization. This list includes, but is not limited to: procedures, needles, infections, loss of control, long hospital stays, relapses, fear of dying, other children dying, check-up results, separation from friends, lack of independence, hospital environment, lack of activities, and restriction of movement⁽¹⁶⁾. It is evident that hospitalization generated a range of fears and concerns for these children, The children’s fears about unfamiliar routines, procedures and health professionals indicates the importance of preparatory

procedures and preadmission programs for children⁽¹⁶⁾. The child age was not related to the cause of distress (p value=0.05).

The study explained that (50%) of child fear the mutilation, and (45.0%) of them their common fear is from the dark .In early childhood, between 3 and 5 years old, fears also appear in response to animals, darkness, the toilet, and imagined creatures and situations⁽²²⁾.

The greatest stressors to preschoolers are the fear of being alone, fear of the dark, fear of abandonment, fear of loss of self control related to the body and emotions, and fear of bodily injury or mutilation⁽¹⁷⁾.

Anxiety was observed (by mother) in (75.0%) of children during hospitalization. There was no significant relation between the mothers feeling during hospitalization the symptoms observed in your child during hospitalization (P value=0.431). Also the study clarified more than half (66.7%) of the children cried when developed anxiety, and (26.7%) of them refused to eat or take medication.

Regarding minimization of stresses for hospitalized children near all (90.0%) of mothers think that the stress can be minimized when the nurse prepare the child and family through pre hospital counseling. This was also supported by Burns-Nader who reported that medical teams could provide information through playroom and bedside activities or through pre-admission tours⁽¹³⁾. The medical field is utilizing family-centered care. This means we are caring for more than the illness, it helps us, as medical team members; we can care for the psychosocial needs of our patients and families. This is important because a positive psychosocial response is related to recovery and healing from illnesses⁽¹³⁾.

The study explains that (36.7%) of children had normal behaviors' and (63.3%) have anxiety. Types of anxiety were physical injury Fears (34.2%),

obsessive compulsive disorder (5.2%), separation anxiety (23.7%), generalized anxiety(15.8%) and social Anxiety (21.1%).

The exploratory factor analyses suggested that preschool anxiety symptoms loaded onto either four or five factors ⁽²⁰⁾,also Anxiety is often seen as part of the child's coping with developmental challenges at various stages in life ⁽²¹⁾.

5.2. Conclusion

Based on finding of the present study, it was conducted that:

Major causes for hospital admission were Asthma, Bronchial pneumonia, Malaria and Gastroenteritis . And majority was admitted for (72h-1week).

- Anxiety was found in (63.3%) of studied children.
- Types of anxiety: Physical injury fears (34.2%), obsessive compulsive Disorder (5.2%), separation anxiety (23.7%), generalized anxiety (15.8%) and social anxiety (21.1%).
- Anxiety symptoms: the child quietly cries, Refuse to eat or take medication and generally be uncooperative.
- Majority of mothers can assist during procedures like sampling.
- There was no relation between the mothers feeling during hospitalization and the level of education of the mothers
- Hospitalization remains a stressful experience for many children despite unrestricted parent participation and considerable improvements in hospital environments.
- Hospitalization has been demonstrated to be equally stressful for the parent as for the child.

5.3. Recommendation

Based on the result of study and conclusion the following recommendation should implement:

- Provide good preparation prior to admission to the child and parent to decreased stress during hospitalization by the medical staff in the emergency department.
- Encourage active participation of parent in the plan of child care , nurses should involve parents in the delivery of information so that they can help relieve children's anxieties
- Provide suitable environment in the hospital to the child to relive anxiety.
- Using of standard and newly tools to detect children anxiety symptom as early as possible to prevent latent complication of it.

Chapter Six



References



Appendix

6. References

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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6.1. Questionnaire about Assessment of anxiety during hospitalization in
preschool age children
In Atbara hospitals

1) Mother age

a) <20 years ()

b) 20 -30 years ()

c) 30- 40years ()

d)>40years ()

2) Child age

A) 3-4years ()

B) 4 -5 years ()

C) 5-6 years ()

3) Sex

a) Male ()

b) Female ()

4) Level of education of the mother

a) Primary school ()

b) Secondary school ()

c) Graduate ()

d) Post graduate ()

5) Occupation

a) House wife ()

b) Working mother ()

6) Causes of hospital admission

A) Acute illness ()

b) Chronic illness ()

7) The acute illness which led to admission:-

a) Malaria ()

b) Gastroenteritis ()

c) Head injury ()

d) Others ()

8) The chronic illness which led to admission:-

a) Asthma ()

b) Diabetes mellitus ()

c) Epilepsy ()

d) Other ()

9) Frequency of hospitalization

a) First time ()

b) Sconded to third time ()

c)>third time ()

10) Duration of hospitalization

a) Less than 48h ()

b) 72h-1week ()

c) 1weeks-2weeks ()

d) More than2weeks ()

11) The confinement of a child in a hospital for

- a) Diagnostic test ()
- b) Therapeutic treatment ()
- c) a and b ()

12) Child reaction to admission is

- a) With draws symptom ()
- b) Lack of activity ()
- c) Irritability ()

13) The mothers feeling during hospitalization

- a) Fear ()
- b) Anxiety ()
- c) Loss of control ()
- d) No abnormal feeling ()

14) Can the mothers assist the staff during some procedure like sampling?

- a) Assisted ()
- b) Not assisted ()

15) The child becomes distressed about.

- a) The unfamiliar environment ()
- b) Procedures ()
- c) Noises and the sounds of other children crying ()

16) The child when developed anxiety became

- a) He or she may quietly cry ()
- b) Refuse to eat or take medication ()
- c) Generally be uncooperative ()

17) The Common Fears of your child

- a) Fears of the dark ()
- b) Fear of the mutilation ()

c) Fear from separation or abandonment. ()

18) The symptoms observed in children during hospitalization

a) Separation anxiety ()

b) Increased somatic complaints (e.g., headaches ()

c) Difficulty at naptime or bedtime (e.g., avoiding sleep, waking up, or nightmares) ()

19) What do you think nurse should do to minimize stress for children?

a) Preparing the child and family through pre hospital counseling ()

b) Encouraging active parental participation in the child's care through rooming-in facilities ()

c) Frequent visits ()

6.2. Preschool anxiety scale. (Parent report

- 1) Has difficulty stopping him/herself from worrying
- 2) Worries that he/she will do something to look stupid in front of other people
- 3) Keeps checking that he/she has done things right (e.g., that he/she closed a door, turned off a tap)
- 4) Is tense, restless or irritable due to worrying
- 5) Is scared to ask an adult for help (e.g. a preschool or school teacher)
- 6) Is reluctant to go to sleep without you or to sleep away from home
- 7) Is scared of heights (high places)
- 8) Has trouble sleeping due to worrying...
- 9) Washes his/her hands over and over many times each day
- 10) Is afraid of crowded or closed-in places
- 11) Is afraid of meeting or talking to unfamiliar people
- 12) Worries that something bad will happen to his/her parents
- 13) Is scared of thunder storms
- 14) Spends a large part of each day worrying about various things
- 15) Is afraid of talking in front of the class (preschool group) e.g., show and tell
- 16) Worries that something bad might happen to him/her (e.g., getting lost or kidnapped), so he/she won't be able to see you again
- 17) Is nervous of going swimming
- 18) Has to have things in exactly the right order or position to stop bad things from happening
- 19) Worries that he/she will do something embarrassing in front of other people
- 20) Is afraid of insects and/or spiders

- 21) Has bad or silly thoughts or images that keep coming back over and over
- 22) Becomes distressed about your leaving him/her at preschool/school or with a babysitter
- 23)-Is afraid to go up to group of children and join their activities
- 24) Is frightened of dogs
- 25) Has nightmares about being apart from you
- 26) Is afraid of the dark...
- 27) Has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening
- 28) Asks for reassurance when it doesn't seem necessary