

Daily Living Activities of School Age Children with Acute Lymphocytic Leukemia at Welfare Pediatric Teaching Hospital

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Abstract

Objective(s): The study aims to assess daily living activities domain of school age children with acute lymphocytic.

Methods: A descriptive study, conducted in Baghdad City from 13 of February to 20 of May 2016. A purposive sample of 50 children with acute lymphocytic leukemia at welfare pediatric teaching hospital and child central pediatric hospital. The study instrument was consists of three parts, the first was demographic data demographic characteristics of the child, the second part is related to the symptoms and clinical signs and complications phenomenon on the child, and the third part related to the daily activities for school age children.. Data was analyzed using (SPSS) version 25. The data analysis for this study included descriptive and inferential statistical analysis.

Results: The results of our study showed that (50%) within age groups (6-7)years , (60%) were males, (66%) of them were continuing school attendance, (56%) within class level (1-2) , the highest percentage (58%) of the study sample are not miss school. there is significant association between participants DLA and their demographic characteristics such as age, gender, school situation and education level, at p-value of (0.007, 0.004, 0.013, and 0.001) respectively, (96%) of them complain from yellowing and pale skin ,(70%) complain from anemia, vast majority of them have moderate daily activities. that there is significant association between participants' DAL and their Symptoms and Clinical Signs and Complications of the Child with Acute Lymphocytic Leukemia of, breathing difficulties , Yellowing and pale skin, bleeding and bruising and Anemia, at p-value of (0.003, 0.002, 0.001, and 0.005) respectively

Keywords: Children, Acute Lymphocytic Leukemia, Welfare Pediatric Teaching Hospital

Introduction

Leukemia is one of the most prevalent kinds of cancer in children, includes more than one third of all cases of cancer in the childhood¹². According to the International Society of Pediatric Oncology (2015), approximately 25000 cancer cases are diagnosed each year with estimates that suggest 90000 annual deaths due to cancer. Cancer is the third-leading cause of death after congenital heart disease⁵. Acute lymphoblastic leukemia (ALL) is an aggressive neoplastic characterized by the uncontrolled proliferation of lymphocytes, and represents the most common childhood cancer. , several efforts have been made for the best treatment approach, such as combination of chemotherapy and radiotherapy

¹³ Diagnosis, hospitalization, and cancer treatment can cause distress for the child and family that lead to physical, psychological, and social problems. means living with disruptions to daily roles and routines due to the long protocols of chemotherapy usually last 2.5-3.5 years. Life, These problem involve motor skills and balance; social functioning especially in relating to their friends, and in their ability to learn⁷. The main role of the nurse is to provide the children with adequate information about the planned procedure. The physical care of children with leukemia is usually complicated and risk of functional limitations and participation restrictions. General areas of nursing care include the assessment, management and prevention of infections, pain, side effects of chemotherapy and nutritional

problems ⁹. ALL refers to life threatening diseases among school age children can cause many physical health problems, which may affect their life process. is extremely stressful, and variety of school functioning. In addition to physical health problems, may also affect the psychosocial aspects.

Materials and Method

Design of the Study

Descriptive study was carried out in order to achieve the stated objectives.

Objectives of the study:

The study aims at: 1. Assess daily living activities domain of school age children with acute lymphocytic leukemia 2- find out relationships between daily living activities domain of school age children with ALL and their demographic characteristics such as (age , gender , school performance).

.Setting of the Study

The study was conducted in Baghdad city ; oncology ward at Welfare Pediatric Teaching Hospital

Sample of Study The

Non-probability (purposive) sample of (50) school age children with ages of (6-12) year old are selected and their diagnosis with acute lymphocytic leukemia, as well as hospitalized for management

Study Instrument The

An assessment tool has been adopted and developed

by researcher design for purpose at the study: Part One Demographic Characteristics of the Child. The demographic characteristics of the child such as (age , gender , grade , Residency , Scholastic Case , child in the family order).Part Two Symptoms and Clinical Signs and Complications Phenomenon on the Patient the symptoms and clinical signs and complications phenomenon on the child such as (Skin problems , hair loss , anemia , breathing difficulties, Yellowing and pale skin , bleeding and bruising , abdominal pain , joints and bones pain, anorexia, inflammatory frequent ,severe insomnia lethargy)

Rating and Scoring

The items have been rated and scored according to the following two points of likert scales are used for rating the items of activities as yes = 2 , no = 1 , for all items

Data Collection.

The collection of data has been performed out of the utilization of questionnaire, and by means of direct interview with child . Data were collected from 13 of February 2016 to 20 of April 2016

Statistical Analysis

The statistical data analysis using (SPSS-ver.20) in order to analyze and evaluate the data of the study. A descriptive statistical data analysis used in the study : which include frequencies, percentages; and Inferential statistical data analysis : used the Chi-square test.

Results of the Study

Table (1) : Daily Activities for School Age Children who Suffer from Acute Lymphatic Leukemia

Items	Yes		No		MS	Level
	F	%	F	%		
1. dressing activities						
1.1Find it difficult to wear your clothes on and off	11	22	39	78	1,22	MO.A
1.2You need to help others in the wear and take off your clothes	14	28	36	72	0,88	M.A

Cont... Table (1) : Daily Activities for School Age Children who Suffer from Acute Lymphatic Leukemia

1.3Find it difficult to arrange and suspend your clothes	17	34	33	66	1,34	MO.A
2. activity and movement	10	20	40	80	1,2	MO.A
2.1Find it difficult to walk on foot						
2.2Find it difficult to run	23	46	27	44	1,46	MO.A
2.3Find it difficult to lift heavy things	39	78	11	22	1,78	S.A
3. school activity	23	46	27	44	1,46	MO.A
3.1Find it difficult to perform the duties of school						
3.2Find it difficult to understand the subjects	25	50	25	50	1,5	MO.A
3.3Few scientific your level that you get low marks	28	56	22	44	1,56	S.A
4. toys and hobbies	38	76	12	24	1,76	S.A
4.1Find it difficult to play with toys that require a great effort						
4.2Find it difficult to play with other children	15	30	35	70	1,3	MO.A
4.3Find it difficult to practice hobbies	11	22	39	78	1,22	MO.A
5. Personal hygiene, Appearance	21	42	29	58	1,42	MO.A
5.1Find it difficult to shower and clean your body						
5.2Find it difficult to wear the clothes	15	30	35	70	1,4	MO.A
5.3Find it difficult to use the toilet	12	24	38	76	1,24	MO.A
6. nutrition	7	14	43	86	1,14	MO.A
6.1Difficulty in eating and drinking alone						
6.2You need to help others in eating and drinking	7	14	43	86	1,14	MO.A
6.3Find it difficult to wash your hands after every meal	6	12	44	88	1,12	MO.A
7. social activity	14	28	36	72	1,28	MO.A
7.1Like isolation and staying on your own						
7.2You see people pity you because you are sick	18	36	32	64	1,36	MO.A
7.3Complaining about the lack of friends	11	22	39	78	1,22	MO.A
8. sleep	13	26	37	74	1,26	MO.A
8.1Find it difficult to sleep						
8.2Used drugs for the purpose of sleeping	1	2	49	98	1,52	S.A
8.3Wake up several times during sleep	13	26	37	74	1,26	MO.A

No. : Number , F. : Frequencies , % Percentage , MS : mean of score , M.A) mild affected : (0.5-1) , (Mo.A) moderate affected :(1-1.5),)

(S.A)sever affected :(1.5-2) .

Table (1) summarizes the children responding to the items level that are done by using mean of score (MS) .in regard to the items of dressing activities subdomain there is a moderate affected in all items except item number (1.2 “ You need to help others in the wear and take off your clothes) mild affected mean of score for this item is (0.88), also in regard to the items of activity and movement subdomain there is a moderate affected in all items except item number (2.3 ‘ Find it difficult to lift heavy things)severe affected mean of score for this item is(1,78) , also in regard to the items of school activity subdomain the study children’ responses shows moderate affected in all items except item number (3.3’’ Few scientific your level that you get low marks)severe

affected mean of score for this item is (1,56) , at the toys and hobbies domain and their subdomain affected at moderate level except item number(4.1.’ Find it difficult to play with toys that require a great effort) severe affected mean of score for this item is(1,76) , in responses to the Personal hygiene, Appearance subdomain there is moderate affected in all items , in regard to the items of nutrition subdomain there is a moderate affected in all items , also in regard to the items of social activity subdomain there is a moderate affected in all items , in responses to the sleep subdomain there is moderate affected in all items except item number(8.2 ‘ Used drugs for the purpose of sleeping) severe affected mean of score for this item is(1,52).

Table (2): Symptoms and Clinical Signs and Complications of the Child with Acute Lymphocytic Leukemia and association with ADL(n=50)

No.	Variables	n(%).	χ^2	P
2.1	Skin problems			
	Yes	15(30)	$X^2=22.764$	P=0.066
	No	35(70)		
2.2	breathing difficulties			
	Yes	38(76)	$X^2=33.764$	P=0.003
	No	12(24)		
2.3	Yellowing and pale skin			
	Yes	48(96)	$X^2=44.764$	P=0.002
	No	2(4)		
2.4	hair loss			
	Yes	30(60)	$X^2=11.764$	P=0.065
	No	20(40)		
2.5	bleeding and bruising			
	Yes	42(84)	$X^2=44.764$	P=0.001
	No	8(16)		
2.6	Anemia			
	Yes	31(62)	$X^2=18.764$	P=0.005
	No	19(38)		
2.7	abdominal pain			
	Yes	22(44)	$x^2=15.404$	P=0.080
	No	28(56)		
2.8	joints and bones pain			

Cont... Table (2): Symptoms and Clinical Signs and Complications of the Child with Acute Lymphocytic Leukemia and association with ADL(n=50)

	Yes	33(66)	X ² =26.764	P=0.075
	No	17(34)		
2.9	Anorexia			
	Yes	27(54)	X ² =33.764	P=0.055
	No	23(46)		
2.10	inflammatory frequent			
	Yes	21(42)	X ² =13.764	P=0.095
	No	29(58)		
2.11	severe insomnia lethargy			
	Yes	26(52)	X ² =25.764	P=0.0515
	No	24(48)		

No. Number, % : percentage

Table (2) symptoms and clinical signs and complications phenomenon on the child , (70%) of the study sample are not complain about skin problems , (76%) of the study sample are complain from breathing difficulties , (96%) of the study sample are complain from yellowing and pale skin , (60%) of the study sample are complain from hair loss , (84%) of the study sample are complain from bleeding and bruising , (62%) of the study sample are complain about anemia ,(56%) of the study sample are not complain about abdominal pain , (66%) of the study sample are complain from joints and bones pain , (54%) of the study sample are complain from anorexia , (58%) of the study sample are not complain from inflammatory frequent , (52%) of the study sample are complain from severe insomnia lethargy.

Discussion of the Results

Symptoms and Clinical Signs and Complications Phenomenon on the Patient

Table (3) symptoms and clinical signs and complications phenomenon on the child , (70%) of the study sample are not complain about skin problems , (76%) of the study sample are complain from breathing difficulties , (96%) of the study sample are complain from yellowing and pale skin , (60%) of the study sample are complain from hair loss , (84%) of the study sample

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Daily Activities for School Age Children who Suffer from Leukemia

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Conclusions

According to the findings of the present study, the researcher concluded the following Acute lymphocytic leukemia mostly occurs in males more than in females . Most of the study sample are at age group(6-7) .The study confirms that ALL mostly common occurs among patients in urban residential area more than in rural. The vast majority of the ALL the children is continuing their school condition within educational level (Grade) (1-2). The vast majority of children complain about symptoms and clinical signs and complications of ALL .The vast majority of the ALL the children have moderate affected on daily activities..

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the University of Baghdad and all experiments were carried out in accordance with approved guidelines.

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