EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH
www.ejpmr.com

ASSESSMENT OF NURSES' KNOWLEDGE TOWARD HODGKIN DISEASE AT HEMATOLOGY CENTER IN BAGHDAD MEDICAL CITY

Athraa Ehsan Ahmed*[1] and Sattar Abdul Rasool Atiyha[2]

[1]MSc in Pediatric Nursing. Medical City / Children's Protection Hospital.
[2]MSc in Pediatric Nursing, Iraqi Ministry of Health, National Center for Training and Human Development.

*Corresponding Author: Athraa Ehsan Ahmed

MSc in Pediatric Nursing. Medical City / Children's Protection Hospital.

ABSTRACT

Background: The Solid tumours is one of the problem facing early childhood and the common types of solid tumours are Lymphomas and it is abnormal mass of tissue that usually does not contain cysts or liquid areas. **Objectives:** To assess nurses' knowledge toward Hodgkin Disease and to find out the relationship between socio-demographic characteristics such as (age, educational level and years of experience in Haematology Centre) and nurses' knowledge toward Hodgkin Disease. **Methodology:** A questionnaire study in which a purposive " non-probability" sample of (50) nurses who are working in Haematology Centre at Baghdad. A questionnaire is developed as a tool for data collection from 16 December 2018 to 31January 2019. A pilot study is carried out to test the reliability of the questionnaire for the period from 28November 2018 to 2 December 2018. The data is analysed through the application of the descriptive data analysis approach (frequency, percentage) and inferential data analysis approach (Chi- Square Tests) SPSS version (20). **Results:** The finding of the study reveals that the nurse's knowledge toward Hodgkin Disease was moderate, there was a relationship between nurse's knowledge and educational level, and there is no relationship between nurse's knowledge and (age, years of experience). **Recommendations**: To encouragement of nurses' participation in a various scientific activity such as attends scientific meeting; seminars; symposiums; conferences and programs to improve their knowledge and practices.

KEYWORD: Assessment, Hodgkin disease, Cancer, Nurse, Knowledge.

INTRODUCTION

Cancer is the term still conjures up deep fears of a silent killer that creeps up on us without warning. There are over 20 million people living with cancer in the world today.[1] The three most common cancer types in children are leukaemia, brain and lymphoma, Leukaemia is the most common childhood cancer.[2] Lymphoma is a general name for a group of cancers that affect the lymphatic system. The two major types of lymphoma are Hodgkin lymphoma (HL) and Non-hodgkin lymphoma (NHL). In the United States, about 72,240 new cases of NHL and 8,260 new cases of HL were expected to be diagnosed in 2017, about 20,140 deaths due to NHL were expected in 2017, as well as 1,070 deaths due to HL, with the survival rate of all but the most advanced cases of HL greater than that of other lymphomas.[3] Oncology nurses educate cancer patients by providing information on cancer treatments such as; chemotherapy and radiation.[4] In medical oncology they play an integral role in the administration of anti-cancer drugs and are responsible for safe drug handling; evaluation of laboratory tests; calculation of drug dosages on the basis of body surface area; insertion of intravenous lines or oncoming central venous devices; continuous and time intensive monitoring to address potential adverse reactions or drug interactions.[5] Nurses play a key role in preparing the patient for surgery. They ensure that patient expectations are realistic. They help to reduce anxiety and promote compliance with treatment post-operatively. They provide the patient with an understanding of expected surgical outcomes, such as changes in body image.[6] This has created the need for widening cancer knowledge to nurses working in other fields such as care of paediatric oncology ward.[6] From this point, our study aimed to assess the nurses' knowledge toward Hodgkin disease and also, to find out the relationship between socio-demographic characteristics such as (age, years of experience) and nurses' knowledge toward Hodgkin disease.

METHODOLOGY

Study Design: - A descriptive study was conducted nurses' knowledge toward Hodgkin disease at Haematology Centre in Medical City during the period (November, 2018 to May, 2019).

Administrative Arrangement: - An official permission was obtained from the Medical City / Haematology Centre appendix (B).

Setting of the study: - The study was conducted in haematology centre (**7th** floor in Baghdad Teaching Hospital and **3rd** floor in Children Welfare Teaching Hospital).

Sample of the study:- A sample of (**50**) out of (**60**) nurses who working in Haematology Centre in Baghdad.

Steps of the study
A- The Study Instrument:- To achieve the aim of the study, a questionnaire format was designed and constructed after reviewing related literature and previous studies by the researchers.
B- Part One: Nurses Demographic Characteristics
This part was concerned with the nurse's demographic characteristics like nurses (age, and years of experience in haematology centre).

C- Part two: Nurses Knowledge toward Hodgkin Disease
For this part the following steps were carried out constructing the questionnaire items through extensive review of literature and references and building the suitable questions. The format includes (14 items) questions related to the nurse's knowledge toward Hodgkin lymphoma each question was scored and divided into (I know, I don't know, not sure).

Validity of Questionnaire: The validity of the instrument was determined throughout exposure format to experts with different specialties related to the field of current study; they are 7 faculty members from High Healthy Vocations Institute with not less than 8 years of experiences) **.**The experts are kindly asked to review and report their opinions about the designed questionnaire format and its content for the purpose of addition and omission.

Pilot Study: - A pilot study that was carried out includes five nurses working in haematology centre during the period (28 November 2018 to 2 December 2018). The sample of pilot study was excluded from the original sample of study and it is used to detect the clarity the questionnaire items and estimation of time of data gathering and any obstacles may be faced by the sample members.

Reliability of the Questionnaire Format Items: The reliability of the study instrument (questionnaire format) items was determined through the use of (test and retest). The rate of correlation for the researcher to obtain information from nurses is (r =0.95). The reliability estimation is determined by using computation of the correlation coefficient.[7] The correlation coefficient estimate was computed for making decision of the reliability of the instrument in term of stability consistency, accuracy, and dependability in order to be used in other situations as well as at different times.

Statistical Data Analysis: - The data were analyzed through the application of statistical procedure and are using the package of SPSS version (20)**.**

RESULTS
Out of fifteen nurses, there is a highest percentage (62 %) of the study sample were in the age group of (20-29) years, concerning the nurse's educational level were secondary school (30%). Regarding the years of experience, the highest percentage 62% in general nurses group had (1 – 5) years of experiences in nurse field shows in **Table 1**. In **table 2** demonstrated the frequency and percentage for nurses' information and which indicates that there is moderate level knowledge toward Hodgkin's disease. Also, we show that there is no relationship between nurses' characteristics toward Hodgkin's disease with their age in **Table 3**. Therefore in **Table 4**, Shows that there is no relationship between nurses' characteristics toward Hodgkin's disease with their years of experience.

Table 1: Distribution of the Study Sample to their Demographic Characteristics.

Variable	Frequency(50)	Percentage
Age		
20-29	31	62
30-39	13	26
40-49	4	8
50-more	2	4
Educational Level		
Secondary school	15	**30**
Institute	18	**36**
College	13	**26**
Higher education	4	**8**
Years of Experience in Nursing		
1-5	31	**62**
6-10	13	**26**
11-15	3	**6**
16-more	3	**6**

Table 2: Distribution of Nurses Knowledge toward Hodgkin Disease (50 of studied samples).

No.	Items	I know		Not sure		I don't know		M.S
		F	%	F	%	F	%	
1	Hodgkin Disease is a cancer tumour affects the lymph nodes.	47	94	2	4	1	2	1.08
2	Started Hodgkin disease in one lymph node or more than two lymph nodes.	43	86	2	4	5	10	1.24
3	Sometimes Hodgkin disease develop in bone marrow or spleen.	28	56	5	10	17	34	1.78
4	Symptoms of H.D are painless swelling in lymph nodes ,night sweating ,weight loss.	46	92	1	2	3	6	1.14
5	Diagnosis tic test by blood test and biopsy.	45	90	2	4	3	6	1.16
6	The risk factors can cause H.D is Epstein-Barr virus.	11	22	9	18	30	60	2.38
7	Treatment of H.D is chemotherapy, Radiotherapy, and Immunotherapy.	42	84	3	6	5	10	1.26
8	One of chemotherapy treatment in H.D are Adriamycin, Vinblastine, Bleomycin and Decarbonize.	29	58	11	22	10	20	1.62
9	H.D contain of 4 stages.	31	62	8	16	11	22	1.60
10	Stage one involvement a single lymph node region.	34	68	5	10	11	22	1.54
11	Stage two involvements two or more the lymph nodes on the same side of diaphragm.	27	54	10	20	13	26	1.72
12	Stage three involvement lymph nodes on both sides of the diaphragm.	24	48	15	30	11	22	1.74
13	Stage four involvements of one or more extra lymphatic organs or tissues.	31	62	7	14	12	24	1.62
14	Complication of H.D is another type of cancer such as leukaemia.	42	84	5	10	3	6	1.22

Mean Score (MS) = **Low** Less than (1.33), **Moderate** = (1.33-1.67), **High**= More than (1.67)

Table 3: Relationship between Nurses Knowledge and their Age (50 of studied samples).

No.	Items	I know				Not sure				I don't know				X^2
		20-29	30-39	40-49	50-More	20-29	30-39	40-49	50-More	20-29	30-39	40-49	50-More	
1	Hodgkin Disease is a cancer tumour affects the lymph nodes.	28	13	4	2	2	0	0	0	1	0	0	0	0.92
2	Started Hodgkin disease in one lymph node or more than	26	11	4	2	1	1	0	0	4	1	0	0	0.94

	two lymph nodes.													
3	Sometimes Hodgkin disease develop in bone marrow or spleen.	15	9	2	2	4	1	0	0	12	3	2	0	0.67
4	Symptoms of H.D are painless swelling in lymph nodes, night sweating,weight loss.	28	12	4	2	1	0	0	0	2	1	0	0	0.98
5	Diagnostic test by blood test and biopsy.	28	11	4	2	2	0	0	0	1	2	0	0	0.68
6	The risk factors can cause H.D is Epstein-Barr virus.	8	1	2	0	6	2	0	1	17	10	2	1	0.42
7	Treatment of H.D are chemotherapy ,Radiotherapy	26	11	4	1	1	1	0	1	4	1	0	0	0.21
8	One of chemotherapy treatment in H.D are Adriamycin, vinblastine ,Bleomycin	14	10	4	1	7	3	0	1	10	0	0	0	0.10
9	Hodgkin Disease contain of 4 stages.	19	10	2	0	5	0	1	2	7	3	1	0	0.04
10	Stage one involvement a single lymph node region.	19	10	3	2	5	0	0	0	7	3	1	0	0.65
11	Stage two involvement two or more the lymph nodes on the same side of diaphragm.	16	10	1	0	9	0	0	1	6	3	3	1	0.04
12	Stage three invholvement lymph nodes on both sides of the	16	7	1	0	11	4	0	0	4	2	3	2	0.02

	diaphragm.											
13	**Stage four involvement of one or more extra lymphatic organs or tissues.**	21	7	2	1	5	2	0	0	5	4	2	1	0.66
14	**Complication of H.D is another type of cancer such as leukaemia.**	24	12	4	2	5	0	0	0	2	1	0	0	0.68

X^2: The P-value of Chi-Square when the ($\alpha = 0.05$)

Table 4: Relationship between Nurses Knowledge and their Years of Experience.

No	Items	I know				Not sure				I don't know				X^2
		Years of Experience												
		1-5	6-10	11-15	16-More	1-5	6-10	11-15	16-More	1-5	6-10	11-15	16-More	
1	**Hodgkin Disease is a cancer tumour affects the lymph nodes.**	29	12	3	3	1	1	0	0	1	0	0	0	0.96
2	**Started Hodgkin disease in one lymph node or more than two lymph nodes.**	27	10	3	3	1	1	0	0	3	2	0	0	0.92
3	**Sometimes Hodgkin disease develops in bone marrow or spleen.**	14	10	2	2	5	0	0	0	12	3	1	1	0.48
4	**Symptoms of H.D are painless swelling in lymph nodes ,night sweating ,weight loss.**	30	10	3	3	0	1	0	0	31	13	3	3	0.42
5	**Diagnosis tic test by blood test and biopsy.**	28	11	3	3	2	0	0	0	1	2	0	0	0.67
6	**The risk factors can cause H.D is Epstein-Barr virus.**	7	2	1	1	7	1	0	1	17	10	2	1	0.70
7	**Treatment of H.D are chemotherapy Radiotherapy**	27	10	3	2	1	1	0	1	3	2	0	0	0.46
8	**One of chemotherapy**	16	8	3	2	7	3	0	1	8	2	0	0	0.69

	treatment in H.D are Adriamycin, vinblastine ,Bleomycin and Decarbonize												
9	H.D contain of 4 stages.	17	10	3	1	6	0	0	2	8	3	0	0	0.09
10	Stage two involvements two or more the lymph nodes on the same side of diaphragm.	20	8	3	3	5	0	0	0	6	5	0	0	0.31
11	Stage three involvement lymph nodes on both sides of the diaphragm.	16	8	2	1	7	2	0	1	8	3	1	1	0.94
12	Stage three involvement lymph nodes on both sides of the diaphragm	16	5	2	1	10	5	0	0	5	3	1	2	0.39
13	Stage four involvements of one or more extra lymphatic organs or tissues.	20	6	3	2	4	3	0	0	7	4	0	1	0.67
14	Complication of H.D is another type of cancer such as leukaemia.	25	11	3	3	4	1	0	0	2	1	0	0	0.95

DISCUSSION
Part One: Nurses' Demographic Characteristics Distribution.
The sample of the study consisted of (50) nurses working in the Haematology Centre at the Child Welfare Teaching Hospital, and 7th floor in Baghdad Teaching Hospital at Medical City.

In Table (1) Show that (62 %) of study sample were the age group between(20 – 29) years while (30%) the educational level of nurses in Haematology Centre were graduated from Institute and (62 %) of nurses had years of experience between (1 – 5) years.

Part two: Nurses' Knowledge toward Hodgkin Disease
In Table (2):- shows that 6 out of 14 items were high score, 5 out of 14 items were low score and 3 out of 14 were moderate score. Table (2) demonstrated the total mean score (1.51) is for nurses' knowledge which indicates that there was moderate level knowledge toward Hodgkin Disease. The table revealed that nurses have high level of knowledge concerning items (1 , 3 , 6,
11 , 12 , 13), while revealed that nurses have moderate level of knowledge concerning items (8 , 9 , 10), and revealed that nurses have low level of knowledge concerning items (2 , 4 , 5 , 7 , 14).

Part Three: Relationship between Nurses Knowledge and their demographic characteristics
In Table (3):- shows that there is no relationship between nurses' characteristics toward Hodgkin's disease with their age.

Table (4):- Shows that there is no relationship between nurses' characteristics toward Hodgkin's disease with their Years of Experience.

CONCLUSIONS
According to the present study we concluded that the highest percentage of nurses still in the age group (20-29) years. Nurse's educational level was secondary school. Nurses were working (1 – 5) years of experience in nursing field. Total mean score for nurse's knowledge

toward Hodgkin Disease indicates that there is moderate (1.51).

RECOMMENDATIONS
Based on the results of study toward Hodgkin disease, researcher recommends to encouraged the nurses to attend the scientific meetings, programs, workshops, training courses and seminars concerning of Hodgkin Disease. Also, Mandatory involvement in service educational program for nurses assign to work inside Haematology Centre. In addition to ongoing evaluation for nurse's knowledge and improve their practices during any nursing intervention is based on scientific knowledge by head of department and joints it with their improvement annually.

REFERENCES
1. World Health Organization (WHO), National Cancer Control Programmers: 2nd ed. 2002.
2. National Registry of Childhood Tumors /Childhood Cancer Research Group,2006- 2008.
3. American Childhood Cancer Organization (ACCO). Childhood Cancer Statestics.2016.
4. Abouzied, M.: Evaluating the Impact of Continuing Nursing Education on Outcomes: Professional Nursing Practice and Patient Care, 2008.
5. Mick, J; Factors affecting the evolution of oncology nursing care: Clin J Oncol Nurs. 2008; 12(2): 307–13.
6. Kelly, D; Gould, D; White et al: Modernising cancer and palliative care education in the UK: Insights from one cancer network. Eur J Oncol Nurs: 2006; 5(10): 187-197.
7. Pinkerton CR,Michalski AJ,Veys PA, (eds) Clinical challenges in Paediatric Oncology. Oxford: ISIS Medical Media, 1999.