



Assessment of Nursing Management for children with Leukemia

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Objective of study : Assess of Nursing Management of children with Leukemia. And To find -out the association between nurses demographic data and Assessment of Nursing Management for children with Leukemia

Methodology: descriptive study was conducted at Al-Haboubi Hospital. (non-probability sample) Subjectively study sample 30) male and female nurses from (19 May 2024 to 16 July 2024). Using the questionnaire to collect data, it is designed to collect data Nurses adjacent to the pathological infection. has been analyzed data using descriptive and inferential data.

Results: showed that most nurse were between the ages of 20 and 29,. Regarding gender the most was male, the highest. Regarding the level of education were a certificate from an institute .The results of the study showed that the level of nurses' level and relationships of a patient While (%33) is unacceptable .The study sample was acceptable. There was a highly significant link between the number of years of experience and the management of leukemia patients, with a (P ≤ 0.001).

Conclusions :The study showed that most nurses were between the ages of (20 – 29).The most sample were male .While ;the level of education with a certificate from an institute ,Regarding the correlation coefficient between socio demographic factors and nurses' level about management for leukemia patients, there was a highly significant link between the number of years of experience and the education level also; indicating that there is a significant association between these factors and the information provided by the nurses. There is no significant correlation between age, gender, and nurses' information regarding treating leukemia patients.

Recommend ion : Providing the teaching hospitals affiliated with the Ministry of Health with a guidebook prepared by the Ministry of Health Researchers to increase knowledge of proximal leukemia patients' measures. Encourage nurses to pike Nursing care for leukemia patients through manuals, electronic programs and communications and stickers.

Key word : Management , children , Leukemia.



Background : leukemia defines is production of abnormal leukocytes . Either as a primary or secondary process. According on the rapidity of proliferation ; they can be classified as acute or chronic status .Also and myeloid or lymphoid based on the cell of origin. types of leukemia are (AML) acute myeloid leukemia and (CML) chronic myeloid leukemia , involving the myeloid lineage; acute lymphoblastic leukemia (ALL), and chronic lymphocytic leukemia (CLL) involving the lymphoid chain. there are less common variants for example (mature B-cell),(T-cell leukemia)and(NK cell-related leukemia) , arise from mature white blood cells with the advent of next-generation sequencing (NGS) and the identification of various biomarkers.(Arber DA ..orazi et.al.2016)1

knowledge nurse about managing pain for children with leukemic has been suggested one causes nurses do not manage pain effectively however; pediatric nurses' pain management practices continue to fall short of the ideal with children often experiencing moderate to severe uncomfortable pain. . Nurses should be knowledgeable about the basic path physiology of cancer pain especially this leukemia and treatment regarding side effect. The nurse often serves as the coordinator of care, playing a major role in cancer pain management and caring toward patients with leukemia (Twycross, A,2010)3

Methodology:

Design of the study: the study descriptive design which was (19May 2024 to 16 July 2024) appropriately structured from to assess nurses' level concerning nursing management for children with leukemia in Al – Habbobi Teaching Hospital .

Setting of the Study: the present study has been carried out in Al – Habbobi Teaching Hospital sample size were (30) sample.

Study sample: A non- probability (purposive) study sample of (30) nurses' working in Al – Habbobi Teaching Hospital and Al Nasiriyah Teaching Hospital .

Inclusion Criteria :The sample is selected according to the following criteria: Males and females nurses aged 18 to 50 and Nurses who works in blood disease department

Exclusion criteria: Nurses who refuse consent.

Data collection: The data that was collected through self-management was the questionnaire using the Arabic version of the questionnaire for all individuals included in the study sample. The data collection process was conducted from (20 May 2024) to (10 June 2024) with permission from hospitals. On average, each interview took about (10-15) minutes to complete the questionnaire.

Study instrument :The questionnaire format (Appendix B1), about the nurses' knowledge designed and developed by the researchers to assess the nurses' knowledge concerning nursing management for patients with leukemia .The questionnaire which is composed of two parts

Part 1:Socio- Demographic Data

The questionnaire format (Appendix B1), about the nurses' level designed and developed by the researchers to assess the nurses' level knowledge related nursing management for children with leukemia .

Part 2 :Assessment of Nurses` level related Nursing Management for children with Leukemia

This part consisted of 18 items related nurses' level related nursing management for children with leukemia. All items were rated as two for (Yes) and one for (No.).

The Results:**Table (4-1): Distribution of Study Sample According to Socio Demographic Characteristics (N= 30)**

Socio demographic	Scale	NO.	%
Age	≤ 20	1	3.3
	20_29	20	66.7
	30_39	6	20.0
	40 &above	3	10.0
Gender	Male	19	63.3
	Female	11	36.7
level of education	nursing preparatory	4	13.3
	Institute	17	56.7
	College	8	26.7
	high certificates	1	3.3
Years of experience	1_5	19	63.3
	6_10	4	13.3
	11-15	5	16.7
	16-20	2	6.7



Participate to refresher course in management for patients with leukemia	Yes	5	16.7
	No	25	83.3

NO.=frequency

%= percent

The demographics table (1) showed that most people (88.7%) were between the ages of 20 and 29, with that age group showing up 20 times, which is a lot. Regarding gender, the male rate was 63.3%, the highest. Regarding the level of education, 56.7% of the sample consisted of people with a certificate from an institute. As for the number of years of experience, most of them had between 1 and 5 years. About 83.3% of the participants did not take any training courses on how to care for leukemia patients.

Table (4-2): Distribution of Study Sample According to Nursing Management for Children with Leukemia (N=30)

No	Knowledge	Scale			
		Yes		No	
		Frequency	Percent	Frequency	Percent
1	The nurse monitors the vital signs of the leukemia patient	30	100.0	00	00
2	Nursing interventions related to the risk of infection and bleeding for leukemia patient	15	50.0	15	50.0
3	The nurse monitors the fluid balance in the leukemia patient's body and also monitors urine, its color and quantity	10	33.3	20	66.7
4	The nurse evaluates the red spots that appearing on the skin of a leukemia patient	15	50.0	15	50.0
5	The nurse observes any enlargement in the organs of the leukemia patient, such as the lymph nodes	10	33.3	20	66.7
6	The nurse cleans open wounds on a leukemia patient's body with an antibacterial solution	25	83.3	5	16.7
7	The nurse evaluates the condition	3	10.0	27	90.0

	of the leukemia patient's mouth to ensure that it is clean and free of wounds				
8	Instructing the leukemia patient to eat soft foods in order to avoid any wounds in the gums	21	70.0	9	30.0
9	The nurse encourages the leukemia patient to eat appropriate foods rich in protein and fiber, and to provide the necessary nursing care in case of constipation	13	43.3	17	56.7
10	The nurse coordinates the periods of procedures and tests in order to give continuous periods of rest to leukemia patients	3	10.0	27	90.0
11	The nurse notices any pain that a leukemia patient is complaining of	24	80.0	6	20.0
12	The nurse helps the leukemia patient to take a comfortable position when sitting or lying down while Supporting the joints and limbs with pillows	8	26.7	22	73.3
13	The nurse explains to the leukemia patient non-drug methods that provide him with relief	6	20.0	24	80.0
14	The nurse encourages the leukemia patient to do techniques that reduce stress and fatigue, such as relaxation exercises and deep breathing	7	23.3	23	76.7
15	The nurse checks the condition of the cannula before administering the treatment to the leukemia patient	28	93.3	2	6.7
16	The nurse gives the treatment doses in the specified amount and at the specified time to the leukemia patient	29	96.7	1	3.3
17	The nurse will watch for any signs that leukemia patient appears as a result of giving treatment, such as nausea and fever	25	83.3	5	16.7
18	The nurse avoids giving aspirin to a leukemia patient because it causes gastric bleeding and reduces platelet count.	12	40.0	18	60.0

NO.=frequency

%= percent



Table (2) showed the sample distribution based on nurses' level and management of leukemia patients. The participant's responses to the questions had the following form: (the first, sixth, eighth, eleventh, fifteenth, sixteenth, and seventeenth). Yes was the most popular response to these questions. The participant's responses to the questions (third, fifth, seventh, ninth, tenth, twelfth, thirteenth, fourteenth, and eighteenth) were all negative, with the most common being no. While the questions were being asked (the second and fourth), the participants gave 50% yes and 50% no answers.

Table (4-3): Correlations Coefficient Between Socio Demographic and Nurse's level About Management for Children with Leukemia (N=30)

Socio demographic	Nurse's knowledge	
	χ^2	P-Value
Age	30.956	0.017
Gender	18.476	0.006
level of education	36.702	0.003
years of experience	25.672	0.001
participate to refresher course in management for patients with leukemia	17.678	0.004

χ^2 =Chi-square S= significant ($P \leq 0.05$)

Regarding the correlation coefficient between socio demographic factors and nurses' level about management for leukemia patients, there was a highly significant link between the number of years of experience and the management of leukemia patients, with a ($P \leq 0.001$). When it came to the education level of staff and their involvement in training courses for the management of leukemia patients, the value of P for these two variables was ($P \leq 0.003$) and ($P \leq 0.004$), respectively, indicating that there is a significant association between these factors and the information provided by the nurses. There is no significant correlation between age, gender, and nurses' information regarding treating leukemia patients.

Discussion of the study :



5.1. Discussion of the socio- demographic characteristics related to nurses (N = 30)

showed that most nurses (66.7%) were between the ages of(20-29) .This study agree with (Vardiman JW 2010 mar 19) " indication that the participants were young adults⁽²⁾.Regarding gender, the male rate was 63.3 the highest. This study agree with (Asadullal.et al. 2013) " show that the current study presents the demographic characteristics that revealed that most of them were male.⁽⁴⁾

Regarding the level of education, 56.7% of the sample consisted of people with a certificate from an institute. This study agree with(GEETHA C.: 2015)" " indication that the most of study sample were institute.⁽⁵⁾ The number of years of experience, most of them had between 1 and 5 years. About 83.3% of the participants did not take any training courses on how to care for leukemia patients. This study agree with(Sarani et al .2015)" Knowledge, attitude and practice of nurses about standard precautions for hospital-acquired infection in teaching hospitals " show that the result (47.5%) were single,(70 %) have (1-5) years of experience and their employment in the leukemic wards.⁽⁶⁾

5.2.Discussion of the nurses' knowledge concerning nursing management for patients with leukemia.

showed the sample distribution based on nurses' knowledge and management of leukemia patients. The participant's responses to the questions had the following form: (the first, sixth, eighth, eleventh, fifteenth, sixteenth, and seventeenth). Yes was the most popular response to these questions. The participant's responses to the questions (third, fifth, seventh, ninth, tenth, twelfth, thirteenth, fourteenth, and eighteenth) were all negative, with the most common being no. While the questions were being asked (the second and fourth), the participants gave 50% yes and 50% no answers. This study agree with (Landman-Parker, J ,2017). "SPRED1 disorder and predisposition to leukemia in children". Show that of nurses had poor knowledge about management for client with leukemia .In addition, the majority of patients were unsatisfied for quality of nursing care pre program⁽⁷⁾.

5.3 .Discussion the association between socio-demographic characteristics and level of knowledge.

Regarding the correlation coefficient between socio demographic factors and nurses' knowledge about management for leukemia patients, there was a highly significant link between the number of years of experience and the management of leukemia patients, with a (P ≤ 0.001). When it came to the education level of staff and their involvement in training courses for the management of leukemia patients, the value of P for these two variables was (P ≤ 0.003) and (P ≤ 0.004), respectively, indicating that there is a significant association between these factors and the information provided by the nurses. There is no significant correlation between age, gender, and nurses' information regarding treating leukemia patients. This study agree with(Al –Mansory ,2015) reported that years of experience had significant relations with nurses' knowledge.⁽⁸⁾



Conclusions :

showed that most nurses were between the ages of (20-29).Regarding gender, the male rate was 63.3%, the highest. While ,the level of education with a certificate from an institute ,As for the number of years of experience, most of them had between 1 and 5 years.showed the sample distribution based on nurses' knowledge and management of leukemia patients. The participant's responses to the questions had the following form: (the first, sixth, eighth, eleventh, fifteenth, sixteenth, and seventeenth). Yes was the most popular response to these questions.

The participant's responses to the questions (third, fifth, seventh, ninth, tenth, twelfth, thirteenth, fourteenth, and eighteenth) were all negative, with the most common being no. While the questions were being asked (the second and fourth), the participants gave 50% yes and 50% no answers.Regarding the correlation coefficient between socio demographic factors and nurses' knowledge about management for leukemia patients, there was a highly significant link between the number of years of experience and the education level also; indicating that there is a significant association between these factors and the information provided by the nurses. There is no significant correlation between age, gender, and nurses' information regarding treating leukemia patients.

Recommendations :

Provide Teaching Hospitals affiliated to the Ministry of Health with instructional pamphlet that prepared by the researcher to increase the knowledge related to nursing management for patient with leukemia.Intensification of medical and nursing lecture related to nursing management for patient with leukemia to nursing personnel through continuous education unit.Focus on nursing role to take the responsibility on explaining and teaching about nursing management for patient with leukemia.Encourage the nurses about nursing management for patient with leukemia by pamphlet, programs, internet, TVs and posters.



References:

- 1-Arber DA ..orazi.. hasserjian R .. borowitz MJ ..2016" pediatric care for leukemia " *nursing care of pediatric journal* , vol(6) .No(78).
- 2-Vardiman JW .2010 , Semin diagn pathol .2003, Siegel RL .Jemal A ..2017," how are management for children with cancer (leukemia)" *pediatrics journal* ,Vol7 .No(3).
- 3- Twycross, A.2010" Focus Managing Pain in children: an observational study, NT Research" *pediatrics journal*, 7;(3), P.P.164-178.
- 4- Asadullal, M.; Karthik, G.; Dharmappa, B.2013: "Study on knowledge, attitude and practice regarding biomedical waste management among nursing staff in private hospitals in Udupi City, Karnataka, India", *International journal of Geology, Earth and environment science*, Vol.3;(1),, PP:118-123.
- 5-GEETHA C.2015: Knowledge on leukemia, the stress and coping strategies of mothers with leukemic children undergoing treatment in a selected cancer institute. *International Journal of Recent Scientific Research*, 6 (5): 4192-6.
- 6_Sarani H, Balouchi A, Masinaeinezhad N, Ebrahimitabas E (2015) Knowledge, attitude and practice of nurses about standard precautions for hospital-acquired infection in teaching hospitals affiliated to Zabol University of Medical Sciences (2015). *Glob J Health Sci* 8: 193-198.
- 7-Landman-Parker, J (2017). "SPRED1 disorder and predisposition to leukemia in children". *Blood*. 114 (5): 1131. doi:10.1182/blood-2009-04- 218503. PMID 19643996
- 8- Al -Mansory 9-- GEETHA C.2015: Knowledge on leukemia, the stress and coping strategies of mothers with leukemic children undergoing treatment in a selected cancer institute. *International Journal of Recent Scientific Research*, 6 (5): 4192-6.