DETERMINATION OF QUALITY OF NURSING CARE IN HEMATOLOGICAL UNITS: A REVIEW

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Abstract

Background: Hematological diseases rates have raised recently, which has put more strain on medical staff especially nurses and could have an impact on the standard of nursing care provided. It has been confirmed that the global research which were conducted to measure the quality of nursing care for patients in Hematological diseases units is almost limited.

Purpose: To assess patients' satisfaction with the quality of nursing care in hematology units. To find out the relationship between demographic characteristics and patients' satisfaction level with the quality of nursing care.

Methods: A cross-sectional study that was conducted in Baghdad Teaching Hospital. Whereas the sample size was (79 patients), employing the convenient sampling. Sample collection began (December 1st to January 1st). The international tool PSNCQQ-Ar was used to collect the sample. It comprises of 21 items: measuring the quality of nursing care based on patient satisfaction with the nursing care.

Results: Patients were generally satisfied with the quality of nursing care in hematology units, in addition to there being no relationship between demographic characteristics and patients' satisfaction with the quality of nursing care, with the exception of 2 characteristics which were (Job, For most of your hospital stay, were you in a room), whereas a relationship was found linking them to patients' satisfaction with the quality of nursing care with a $P < 0.05$.

Conclusion: The researchers concluded that the quality levels of nursing care in hematology units are high and were not affected in light of these critical conditions.

Keywords: Quality of Nursing Care, Hematological Units.

Introduction:

Millions of people worldwide suffer from blood diseases, which include malignancies of the blood cells, anemia, sickle cell disease, rare genetic disorders, side effects of chemotherapy or blood transfusions, and HIV-related diseases [1]. Although it is very challenging to explain the epidemiological patterns of hematological malignancies consistently and uniformly, especially in Europe, the overall incidence of hematological malignancies appears to be increasing in Western countries [2]. Because of the great growth occurring in European countries, which included a large number of a diverse group of peoples with a much higher degree of heterogeneity in habits and lifestyle, this diversity led to an increase in the risks of diseases, as well as in cases of cancer and deaths, whether in general or in a specific location the number of blood diseases has increased in these areas [2]. Providing high-quality healthcare services is the most essential competitive advantage for health service providers in the current competitive environment, which affects the health care business in every discipline [3].

The branch of medicine that treats blood-related conditions such as anemia, coagulation disorders, and cancers such as myeloma, lymphoma, and leukemia Hematological malignancies are a collection of several disorders that originate from lymphatic and bone marrow cells.

The three main classifications are leukemia, lymphomas, and plasma cell neoplasms [2]. It means treating patients with advanced diseases appropriately and behaving in a specialized and professional manner. According to the patients perspectives an effective nursing care plan should include professionalism, competence, and good manners [4].

Despite the fact that various patient groups can identify similar traits of professionalism, competence, and care, when patients are aware that they run the danger of getting advanced disease [5]. High-quality nursing care requires a comprehensive knowledge of a wide range of diseases and how they affect the patient's ability to maintain balance throughout the course of the disease, because patients with impaired bone marrow function are more prone to problems [6]. In order to assess the quality of nursing care, one of the quantifiable factors is patient satisfaction [7]. According to the aforementioned facts, it was found that the studies conducted in Iraq on blood diseases, specifically regarding the quality of nursing care, are almost non-existent, and therefore, in this research, this quality will be measured through patient satisfaction.

Methods

Research design

The study used a across- sectional research design. A descriptive cross-sectional design was employed in the execution of this investigation. Finding the level of nursing care delivered was the aim of this design study in hematological units. In this cross-sectional study, the researchers used this design in light of the fact that they collect samples from the hematological disease unit at a single moment in time and examine variables without changing those factors [8]. This research design is consistent with the aforementioned study's main goals. The study carried out from November 1st, 2022 up to May 23, 2023.

Setting and Participant

This study was conducted on patients who were hospitalized in hematology units on the 7th floor of Baghdad Teaching Hospital. The target population consists of 100 patients admitted to hematology units, during the data collection phase. The minimum required sample size is 80. This was calculated using the following standard parameters. 5% error margin, 95% confidence level,50% response distribution, 100 the population size whereas the sample size was (79) participants., and the type of the sample was non-probability (convenience).

Measurement and Data Collection

Data was collected through a questionnaire by interviewing patients in hematological wards. The questionnaire form was distributed to them and they were asked to fill it out.

Data analysis

Both descriptive and inferential statistical data analysis was used including: frequencies, percentage, mean score, and Chi-square.

Ethical Considerations

At the University of Baghdad, College of Nursing, the Institutional Review Board (IRB) and the Ministry of Health agreed to conduct the study on patients hospitalized on the 7th floor of hematology at Baghdad Teaching Hospital, whereas the IRB reference number was 13898 on April 6th, 2023.

Limitations

There was a construction movement on the 7th floor, specifically in the men's halls, and

for this reason, the number of men was less than women during the sample collection. However, to prevent any bias from occurring during the sample collection, the researchers made a double effort to collect the sample from both genders, despite the obstacles. We cannot generalize the results of the study to all governorates of Iraq because the sample was collected from Baghdad Hospital only.

The Instrument

The Arabic version of the Patient Satisfaction with Nursing Care Quality Questionnaire is a 17-item self-reported questionnaire that operationalizes PSNC quality based on the patient during hospitalization. The two components (sometimes referred to as domains) that make up perceptions in the PSNCQQ-Ar are satisfaction with the care delivered and satisfaction with the services supplied. The PSNCQQ-Ar is based on the nursing care questionnaire's patient satisfaction survey. There are 21 items in a quality questionnaire that are comparable across different hospital types this indicates that the questionnaire is sufficiently readable and applicable [9]. Due to the dearth of Arab-specific methods to assess patient satisfaction with nursing care. The validity of an Arabic version of the Patient Satisfaction Questionnaire regarding the caliber of nursing care was also discovered to be a goal of this study [10].

Validity

The study of the six expert assessors' responses revealed that the index of content validity at the element level ranged from 83 to 1. At the scale level, the index of content validity was 94. It was able to gather proof of the building's accuracy. Two years with subjective values greater than one were identified by Ar's EFA (1.02 and 10.75 in terms of PSNCQQ dimensions, 69.3% of the variation were explained by a two-factor model. The pebble plot, which demonstrated that the declining trend stabilized after the second component, corroborated the binary model. The EFA's pattern matrix is available in Table 2. Elements 1 through 5 make up factor 2, which accounts for 22.9 percent of the variation, whereas elements 6 through 17 make up factor 1, which accounts for 46.4 percent of the variance. The one-factor model, according to the CFA results.

Reliability

Cronbach's alpha (PSNCQQ-Ar) is 0.96, indicating good quality and consistency across hospital units. That's exactly what happened. The Guttmann cleavage factor for parts 1 and 2 was 0.94, and the cleavage half factors were 0.91 and 0.95, respectively.

Scoring

The PSNCQQ is a 5-point Likert scale with 1 terrible and 5 excellent response, same like the original PSNCQQ. The item scores for each domain can be averaged and added together to get a single number for each patient. The PSNC quality report has the potential to include a composite score, which denotes overall quality. For comprehensive and useful findings, item scores might be reported. There are two categories of overall satisfaction with the level of care: poor/fair and excellent/very good. When evaluating the sensitivity of the PSNCQQ, it was discovered that the excellent/very good group scored higher than the fair poor group. For the high and low categories, H = 3.18, SD = 0.59, and L = 1.17, SD = 0.71), respectively [9]. (1) For acceptable, poor. Accordingly, the degree of satisfaction was classified, and a cut-off point of 12.5 was used to distinguish between patients who were content and dissatisfied with the quality of the nursing care they received while hospitalized in orthopedic wards. Similar to this, the mean score of 30 served as the dividing line between patients who were content and dissatisfied with the level of nursing care they received while hospitalized in orthopedic wards. The period of data collecting, which began on June 25 and ended on September 27 of 2019, lasted around three months.

RESULTS

Table 1. Distribution of the Study Sample (Patients) by their Demographic Characteristics.

Age/ years	F	%
18 – 27	30	38.0
28 – 37	15	19.0
38 – 47	5	6.3
48 - 57	6	7.6
58 and more	23	29.1
Total	79	100
Sex	**F**	**%**
Male	20	25.3
Female	59	74.7
Total	79	100
Marital status	**F**	**%**
Single	23	29.1
Married	43	54.4
Divorced	5	6.3
Widowed	8	10.2
Total	79	100
Education Level	**F**	**%**
Primary Degree	52	65.8
Secondary Degree	19	24.0
Diploma Degree	4	5.1
Bachelor`s degree	4	5.1
Total	79	100
Type of Job	**F**	**%**
Governmental Employee	2	2.5
Student	20	25.3
Housewife	57	72.2
Total	79	100
Including this most recent hospital stay, how many times were you (the patient) hospitalized In the past 2 years?	**F**	**%**

1 – 3 times	57	72.2
4 – 6 times	16	20.3
7 – 9 times	4	5.1
10 times and more	2	2.4
Total	79	100
How many days were you admitted to the hospital and how long did you stay there?	**F**	**%**
1 – 10 days	44	55.7
11 – 20 days	14	17.7
21 – 30 days	5	6.3
31 days and more	16	20.3
Total	79	100
For most of your hospital stay, were you in a room:	**F**	**%**
Alone	0	0.0
With another patient	7	8.9
With several patients	72	91.1
Total	79	100
Are there any relatives with you?	**F**	**%**
Yes	79	100.0
No	0	0.0
Total	79	100
filling out the questionnaire sheet by	**F**	**%**
The patient	14	17.7
Another person	65	82.3
Total	79	100

According to this table, the majority of the study samples (patients) were female (74.7%) and most of them were between the age's ranges of 18–27 years old (38.0%). When it came to their marital status, 54.4 % of the samples were married. Concerning patients' educational level, most of them (65.8 %) were graduated with primary degree. Approximately, more than half of the study sample was housewives and they were accounted for (72.2%). The majority of the patients (72.2%) were admitted 1 – 3 times to the hospital at the last two years. in addition, half of them (55.7%) were stayed for 1 – 10 days at the hospital. The largest portion of the samples (91.1%)

We're staying in hospital rooms with multiple patients, while the remaining samples (100.0%) were accompanying with family. The majority of study participants, or 82.3% of the sample as a whole, completed the questionnaire on their own.

Table 2. Patients' Contentment with Nursing Care's Quality

Items	excellent	Very good	good	Fair	Poor	Mean	Ass.
1-INFORMATION YOU WERE GIVEN: How clear and complete the nurses' explanations were about tests, treatments, and what to expect.	51	19	8	1	0	4.51	H
2- INSTRUCTIONS: How well nurses explained how to prepare for tests and operations.	54	16	7	2	0	4.54	H
3- EASE OF GETTING INFORMATION: Nurses' willingness to respond to your inquiries.	52	17	6	4	0	4.48	H
4-INFORMATION GIVEN BY NURSES: The quality of nurses' interactions with physicians, families, and patients.	43	30	6	0	0	4.46	H
5-INFORMING FAMILY OR FRIENDS: How well the nurses kept them informed about your condition and needs.	34	32	9	3	1	4.20	H
6-INVOLVING FAMILY OR FRIENDS IN YOUR CARE: How much they were allowed to help in your care.	41	29	5	4	0	4.35	H
7-CONCERN AND CARING BY NURSES: Courtesy and respect you were given; friendliness and kindness.	52	22	4	1	0	4.58	H
8-ATTENTION OF NURSES TO YOUR CONDITION: How often nurses checked on you and how well they kept track of how you were doing.	51	21	6	1	0	4.54	H
9-RECOGNITION OF YOUR OPINIONS: How much nurses ask you what you think is important and give you choices.	33	20	14	12	0	3.93	H
10-CONSIDERATION OF YOUR NEEDS: Willingness of the nurses to be flexible in meeting your needs.	49	23	4	3	0	4.49	H
11- THE DAILY ROUTINE OF THE NURSES: How well they adjusted their schedules to your needs.	59	15	5	0	0	4.68	H
12-HELPFULNESS: Ability of the nurses to make you comfortable and reassure you.	53	23	2	1	0	4.62	H
13-NURSING STAFF RESPONSE TO YOUR CALLS: How quick they were to help.	43	23	9	3	1	4.31	H
14-SKILL AND COMPETENCE OF NURSES: How well things were done, like giving medicine and handling IVs.	46	28	2	3	0	4.48	H
15-COORDINATION OF CARE: The teamwork between nurses and other hospital staff who took care of	45	24	8	2	0	4.41	H

you.							
16- RESTFUL ATMOSPHERE PROVIDED BY NURSES: Amount of peace and quiet.	53	18	7	1	0	4.55	H
17- PRIVACY: Provisions for your privacy by nurses.	61	13	3	2	0	4.68	H
18-Overall quality of care and services you received during your hospital stay	40	26	5	7	1	4.23	H
19- In general, would you say your health is:	8	35	23	11	2	3.45	H
20- Overall quality of nursing care you received during your hospital stay.	42	28	7	2	0	4.39	H
21- Based on the nursing care I received, I would recommend this hospital to my family and friends	64	10	3	1	1	4.7	H

H= 3.18 and more   L= 3.17 -1.17

Table 2. Demonstrated that patients' satisfaction with the level of nursing care received an excellent rating across the board.

Table 3. Relationship between Patients' Demographic Characteristics with Quality of Nursing Care

R	Quality of Nursing Care / Demographic Characteristics	Value of Challenges		
		$*X^2$	*S	**S.
1	Age	111.193	0.487	N. S
2	Sex	25.658	0.76	N. S
3	Marital Status	69.831	0.912	N. S
4	Education Level	99.122	0.753	N. S
5	job	116.267	0.004	S
6	How many hospital stays did you (the patient) have in the previous two years, counting this most recent one?	92.363	0.463	N. S
7	What is the duration (in days) of your hospital stay and admission?	66.797	0.632	N. S
8	You spent the most of your stay at the hospital in a room	64.553	0.002	S
9	The sheet (questionnaire) is filled by	30.268	0.565	N. S

* X2 = Chi-Square, **S. = significant.

Table 3. Demonstrated a significant correlation (P value less than 0.05) between patients' satisfaction with the quality of nursing care and their demographic characteristics (job, for most of

your hospital stay, were you in a room). However, no significant correlation was found between the demographic characteristics of the patients [Age, Gender, Marital Status, Education Level, Including this most recent hospital stay, how many times were you (the patient) hospitalized In the past 2 years?, What is the duration (in days) of your hospital stay and admission?, and the sheet (questionnaire) is filled by] and the patients' satisfaction with the quality of nursing care at P value higher than 0.05.

Discussion

What is the level of quality of nursing care in hematology units? This study answered this question, represents the standard of nursing care provided in Baghdad Teaching Hospital's hematology units was high and can be seen in Table 2 that mean level in all items was not less than 3.93 (researchers). One of the studies supporting the current results is a study conducted during the Corona period, which found that the level of patients' satisfaction with the quality of nursing care is high [11]. The level of satisfaction of 96 Covid-19 virus-infected patients with comprehensive nursing care is high, as evidenced by earlier studies carried out in the Saudi Arabian capital of Riyadh, but in different units, which corroborated the findings of the current study. All items had an average of at least 3.89. This is because of the work done by nurses who, throughout the pandemic, were responsible, informed, and organized [12]. Sixty-six percent of nurses working outside of critical care and fifty percent of nurses working in intensive care during the Covid-19 period felt anxious about their career in light of the pandemic, despite the fact that the results of one prior study contradicted the conclusions of the current study. They also mentioned experiencing increased moral pressure, which was a factor in the precipitous drop in nursing care quality that occurred throughout the epidemic[13]. Unfortunate the researchers did not find studies related to this field other than the studies mentioned above, even though they were conducted in different units and not in hematology units (researchers).The second objective of this study was: To find out the relationship between demographic characteristics and patients' satisfaction with the quality of nursing care where it was found that the majority of study participants are female, between the ages of 18 and 27, married, housewives, and have only completed elementary school. The majority of patients in hematology units had been admitted to the hospital between one and three times over the previous two years, and they had stayed between one and ten days in shared rooms with other patients while being accompanied by a companion. There was other research that yielded identical or almost identical results to the current study when they examined the relationship between the same factors. Some of these studies utilized the same tool, while others used different ones. They were conducted in a number of different illness units and countries throughout the world [11][14][15] [16]. The conclusions of the current study are contradicted by two other studies that the researchers found one of these studies was conducted by a university student to obtain a master's degree at Minnesota State University, Mankato [17]. The second study was conducted in public hospitals Windhoek, Namibia [18]. Based on the findings of this study, it is possible to generalize these results to all hematology units in Baghdad only because the study was conducted on patients admitted to the hematology hospital in Baghdad (Researchers).

Conclusion

Most of the participants in this study are female, their ages range between (18-27) years, married, housewives, with an education level that does not exceed the primary stage. Most of the patients in hematology units were the number of times they were admitted to the hospital during the past two years (1-3) times, and the number of days they stayed (1-10) days in shared rooms with other patients in the presence of their companions, where the form was filled out by other people. The average score for nursing care quality across all questionnaire items is a high level. Therefore, it can be inferred that the levels of nursing care in hematology units provided to patients are of high quality. The researchers also noted that there was no relationship between demographic characteristics and the quality of nursing care in hematology units, except for two of those characteristics (job, do you reside in the hospital room) where a relationship was observed relating them to patients' satisfaction with the quality of nursing care with a value of ($P < 0.05$).

Acknowledgments:

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