Assessment of Nurses' Caring Behaviors from the Perspective of Covid-19 Patients

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Abstract

Caring behaviors are an important focus of nurses' physical and technical aspects of caring. By identifying and comprehending the nurses' caring behaviors from the perspective of the patients, as well as taking into account the elements influencing caring behaviors during the Covid-19 pandemic, we may plan to offer nursing care and caring behaviors based on the needs of the patients. In this cross-sectional study, purposive sampling was used to collect data from both the Demographic Questionnaire and the Nurses' Caring Behavior Questionnaire. The results showed that the respectful relationship field had an average score of 33.57, the professional knowledge and skill field at 15.35, and the overall mean score for the questionnaire was 43.92, with the mean score from the questionnaire being higher than the real mean score. It may be concluded that this component of nurses' behavior is seen favorably by patients in the Covid-19 ward. Additionally, the patients in the Covid-19 ward thought the mean score from the questionnaire on professional knowledge and skills was good because it was higher than the real mean score. The questionnaire's overall score was likewise greater than its mean overall score. Overall, it can be concluded that patients in the Covid-19 ward have a positive opinion of the nurses' level of caring behaviors. These results indicate that it is possible to achieve ideal caring and full patient satisfaction by planning and considering future outlook in order to educate and empower nurses in terms of correct caring behaviors, and to provide quality caretaking.

Keywords

caring behavior, Covid-19, nurse, patients perspective

Introduction

The nurse is the person who delivers knowledge-based care. Nursing is a series of actions made to help a specific person or group improve their living conditions or save their lives.[1] Caring is the essence and axis of nurses' performance, and it is considered a fundamental part of providing health services.[2] The nurses play a major role in the continuation of caring, and the enhancement and preservation of the help-seekers health at different levels of the healthcare system.[3] Understanding caring and caring actions is the core of nursing care theory. Nursing as a career is fundamentally about caring. This idea is a classic illustration of thought, feeling, and action that brings about physical and mental comfort.[4] Caring behaviors are an ethical guide in the field of nursing that leads to the support, promotion, and preservation of human virtues. The constructs making up caring behaviors are very extensive, and it is not possible to provide a single definition of them.[5] Nevertheless, any definition aiming at defining caring should include two key components. Overall, the caring provided by nurses includes two aspects, namely technical and emotional aspects.[6,7] The technical aspect emphasizes meeting patients' physical and treatment needs through some means like treatment methods, monitoring the physical environment, education, informing, and problem-solving, while the emotional caring includes awareness-raising behaviors in the field of psychosocial affairs like emotional support, empathy, being sensitive to needs and respect for patients' privacy.[6] Caring behaviors are a combination of targeted nursing performances and attitudes that relieve patients' suffering and meet their predicted

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needs.[8] Researchers in the field of nursing have defined caring quality as caring behaviors to measure it.[9] Caring behaviors are the main essence of nursing actions. Thus, detecting the factors affecting and predicting nurses' caring behaviors are of considerable importance in hospitals as service-oriented organizations.[10] The nurses' acts and demeanor that foster patients' physical, emotional, moral, social, and mental well-being as well as their sense of security and satisfaction while also expediting the healing process are examples of caring behaviors.[9] Nurses spend more time with patients, demonstrating behaviors to relax them and ensure patients' enjoyment. This should be tailored to their wants, needs, and wishes.[10] Any factor affecting nurses' working processes can have a great effect on their efficiency and performance quality.[11] Ehlers has maintained that taking good care of patients is contingent upon nurses and patients' understanding of the concept of caring, and also the cultural background and nature of the treatment center.[4] Despite the importance of caring and caring behaviors, there is many differences in prioritizing the caring behaviors that could affect caring.[4] Caring behavior is essential for providing welfare and peace to patients, with features like sensitivity, calmness, empathy, and openness to make judgments.[12] The results of studies indicate that nurses' caring behaviors contribute to patients' peace of mind which will naturally improve the performance of the organizations providing healthcare services.[12] Caring behavior is based on ethics and the patient's needs and expectations.[8] Nurses' caring behaviors vary in different conditions and it is influenced by different factors.[9] In this regard, the results of the study by L.ENNS in 2018 showed that the heavy workload, shortage of time, the limited number of nurses, lack of adequate management and proper support, lack of trust, and commitment to patients and families are some of the factors affecting nurses' caring behaviors.[13,14] Moreover, the results of the study by Taghavi et al (2019), Investigation of Patients' Satisfaction with Nurses' Caring and Services, showed that the level of patients' satisfaction increases along with the improvement in caring behaviors and quality of nurses' services, which recommended that the policymakers should address this issue more seriously.[15,16]

One of the new global challenges in managing infectious diseases is the fight against the novel virus known as Covid-19.[16] Patients and nurses must be aware of the mental and physical risks of PTSD, as it can cause distrust and confusion.[17] On the other hand, the results of studies have shown that nurses are also exposed to mental problems resulting from Covid-19 which affects their caregiving and caring behaviors.[18,19] The negative psychological experiences imposed by Covid-19 on nurses including fatigue, sadness, desperation resulting from overwork, anxiety, and worry about the involvement of their family members, are important points that could affect nurses' caring quality and in general their caring behavior.[19–21]

We can plan to provide nursing care and show caring behaviors to meet the needs of the patients, by comparing and reporting nurses' caring behaviors in different healthcare centers and preparing for high-quality nursing services.[21,22]

This study aim is assessment of nurses' caring behaviors from the perspective of Covid-19 patients in teaching hospitals of the ……University of Medical Sciences in 2020.

Method

Study Design

The present study is a cross-sectional descriptive study.

Study Setting

The present study was conducted at the…… University of Medical Sciences, where the study population consisted of Covid-19 patients hospitalized in teaching hospitals including Imam Hossein Hospital, Ayatollah Taleghani Hospital, Akhtar Hospital, Masih Daneshvari Hospital, Loghman Hakim Hospital, Shahid Modarres, Shohadaye Tajrish Hospital, and Labbafinejad.

Sampling

Data collection was done using the purposive sampling method. The researcher selected 300 patients who met the inclusion criteria and were willing to attend the study. The inclusion criteria included the following:

- Being hospitalized due to Covid 19
- Proficient in Farsi and literate
- Willingness to participate in the study
- About to be discharged from the hospital
- Absence of cognitive disorders and psychological problems

In the current study, the sample size was calculated by using the following formula.

$$n = \frac{z_{\frac{\alpha}{2}}^2 \sigma^2}{d^2}$$

Instruments for Data Collection

Researchers used a nurses' caring behavior questionnaire to assess the nursing care behaviors and a demographic questionnaire to measure age, gender, job, education, and hospitalization duration.

The practical definition of caring behavior of nurses is equal to the theoretical definition, and it is the answers that the participants will give to the questions of the 2017 Wolf Caring Behavior Questionnaire in a 6-point Likert scale from always (6) to never (1). This questionnaire was presented in 1998-99 by Atashzadeh Shourideh et al as a 16-item, single-factor instrument with two subscales. The subscales include the respectful communication of items

(1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12) and the knowledge and professional skills of nurses in items (11, 13, 15, 14, 16) is In this tool. the total score of the questionnaire is between 16 and 96. A higher score will indicate a better caring behavior.

Intercultural translation and validation of the nurses' caring behavior questionnaire were performed by Atashzadeh shoorideh et al in Iran in 2019–2020.[23]

To examine the questionnaire reliability in the current study, Cronbach's alpha was calculated as 0.91. Considering that the alpha index is 0.7 indicating good reliability, this questionnaire was evaluated as having good reliability. Furthermore, the intraclass correlation index in the

Table 1. Absolute and Relative Frequency of the Demographic Variables in Patients Hospitalized in Covid-19 Wards at Teaching Hospitals of Shahid Beheshti University of Medical Sciences in 2020.

Demographic variables	Frequency	Percentage
Age		
15-25 years	16	5.3
26-35 years	102	34
36-45 years	89	29.7
Above 45 years	93	31
Gender		
Woman	125	41.7
Man	175	58.3
Education		
High school diploma and lower	165	55
Academic	135	45
Marital status		
Single	91	30.3
Married	201	67
Divorced	8	2.7
Residency		
City	253	84.3
Village	47	15.7
Job		
Self-employed	79	26.3
Housemaker	58	19.3
Retiree	27	9
Clerk	75	25
Worker	40	13.3
Unemployed	21	7
History of hospitalization		
No	242	80.7
Yes	58	19.3
Length of stay		
Less than one week	42	14
One week	168	56
More than one week	90	30
Hospitalized in		
Taleghani Hospital	17	5.7
Imam Hossein Hospital	58	19.3
Masih Daneshvari Hospital	47	15.7
Moddarres Hospital	25	8.3
Loghman Hakim Hospital	34	11.3
Labbafinejad Hospital	30	10
Shohadaye Tajrish Hospital	43	14.3
Akhtar Hospital	46	15.3
Total	300	100

repeated-measure section was 0.88, and the significance level was calculated as $P = .000$. Therefore, the nurses' caring behaviors questionnaire had very good reliability.

The data were analyzed in accordance with the specific goals of the study using SPSS20. The descriptive statistics (frequency, percentage, mean, standard deviation) was used to determine the samples' characteristics, and the analytical tests (independent t-test, variance analysis) were used to examine the relationship between different components.

Data Collection

Data collection took about 4 months from June to September 2020. At first, the study goals and results were explained to patients and their families and obtained their informed consent before selecting them. The ratio was given to each one of the given hospitals according to the sample size and considering hospital capacity. The number of patients attending the study from the selected hospitals varied due to their willingness and consent, and they were replaced by another patient in case they did not complete the questionnaire. The samples completed the electronic Demographic Information Questionnaire and Nurses' Caring Behavior Questionnaire almost after about two months after receiving the necessary instructions for completing the questionnaires and the relevant link from the researcher.

In order to collect data, the researcher, after obtaining the necessary permits from the educational vice-chancellor of the faculty and coordinating with the vice-chancellor of education and the director of nursing of the university's teaching hospitals, in full compliance with health protocols and estimating the statistics of patients with Covid-19 being discharged from the hospitals. samples were collected among the patients with Covid-19 who were being discharged from the hospital and met the study entry criteria in an easy or accessible way. After fully introducing himself and obtaining the patients' consent, the researcher informed them about the purpose of the research and sought their cooperation to participate in the study. The research units were assured that the collected information will remain confidential with the researcher. Then Link researcher provided the questionnaires related to the demographic information and caring behaviors of the nurses, which he had designed electronically, after providing the necessary training and how to access and work with the questionnaires for completion. After about four months and with continuous follow-up, the questionnaires were completed and the data were analyzed according to the specific objectives of the study with SPSS 20 software. It should be mentioned that some of the teaching hospitals of the university did not have a ward for patients with Covid-19 at the time of sampling, such as 15 Khordad Hospital. Therefore, the number of hospitals that did not have a department for patients with Covid-19 was allocated to other hospitals. At the time of sampling, ……….. University of Medical Sciences had eight teaching hospitals that were eligible for the Covid-19 inpatient

department. Among the hospitals: Imam Hossein, Ayatollah Taleghani, Akhtar, Masih Deneshvari, Luqman Hakim, Shahid Modares, Shohada-Tajrish and Labafinejad hospitals, which are available to each of these hospitals according to the number of patients admitted and the cooperation of the hospital officials. Placing the phone number of the patients or their families, the researcher was assigned a quota to communicate the researcher with the patients and send the questionnaire.

Data Analysis Method

The obtained information was analyzed with SPSS software version 20 and according to the objectives of the research. Descriptive statistics (frequency, percentage, mean, standard deviation) were used to determine the characteristics of the samples, and analytical tests (independent t-test, analysis of variance) were used to check the relationship between different variables in the questionnaires.

Results

A summary of the results has been presented in the following table (Table 1).

According to the results presented in the above table, 34% of patients were in the 26-34 age group. Additionally, 31% and 29.7% of the patients were in the above 45 age group and 36-45 age group, respectively. The least frequency was observed in the 15-25 age group (5.3%).

58.3% of patients were male and 41.7% of patients were female. As for the education criterion, 55% of the patients held high school diplomas and lower degrees, and 45% held academic degrees. Concerning marital status, 67% of the participants were married, 30.3% were single, and 2.7% were divorced. The patients living in cities made up 84.3% of the total number of patients, and those living in villages accounted for 15.7%. In terms of employment status, 26.3% of patients were self-employed, 25% were clerks, 19.3% were housemakers, and 13.3% were workers. The retirees and unemployed were the least frequent participants with a frequency of nine and seven individuals in the sample respectively. In addition, 80.7% of the participants had no history of hospitalization for Covid-19, and 19.3% had a history of being hospitalized for Covid-19. As for the length of stay, 56% of patients were hospitalized for one week, 30% were hospitalized for more than one week, and 14% were hospitalized for less than one week. The greatest number of Covid-19 patients (19.3%) was in Imam Hossein Hospital, and the lowest number (5.6%) was in Taleghani Hospital (Table 2).

According to the above table, the mean scores of respectful relationship, professional knowledge and skill, and mean total score of questionnaire were 33.57, (minimum 11, maximum 41), 15.35 (minimum 5 and maximum 21), and 48.92, respectively.

Since the mean score of the questionnaire in the field of respectful relationship was 33 (minimum 11 and maximum 66), the mean score of the respectful relationship variable from patients' perspective with a mean score of 33.57 was higher than the mean score of the questionnaire which indicates that this aspect of nurses' performance enjoyed a relatively good status from Covid-19 patients' perspective. Furthermore, the mean score of the questionnaire in terms of professional knowledge and skill was 15 (minimum 5 and maximum 30) where the mean score of this variable according to patients hospitalized in the Covid-19 ward (15.35) was higher than the mean score indicating a relatively good status. The total score of the questionnaire was higher than the mean total score of the questionnaire (48) according to the above table (48.92). Overall, it could be stated that nurses' caring behaviors from the perspective of patients hospitalized in Covid-19 wards were good (Table 3).

Discussion and Conclusion

In the present study, nurses' caring behavior was assessed from the point of view of 300 patients hospitalized in the Covid-19 wards of the teaching hospitals of ………… University of Medical Sciences. In this study, most of the research samples were hospitalized in Imam Hossein Hospital (19.3%) with the age group of 26-35 years (34%). Most of the samples were male (58.3%) and their education level was below diploma (55%). Also, most of the patients were married (67%) and living in the city (84.3%). Most of the samples were self-employed (26.3%) and had no history of hospitalization (80.7%) and were hospitalized in the Covid-19 ward for at least 1 week (56%).

The review of the findings according to the objectives of the study, in terms of assessing the respectful relationship between nurses and patients, the results of the study show that the research samples have a relatively good view of nurses' care behaviors in the dimension of respectful communication, and the average obtained is higher than the average of the questionnaire in this dimension. In this regard, the results of the study by Mena Hassan Ebrahim et al[24] in 2021 in Egypt under the title of investigating the relationship between nurses' caring behavior and the satisfaction of patients with Covid-19 and Azizi et al[25] in 2018 under the title of investigating the correlation of nurses' caring behaviors and patients' satisfaction shows, the lowest score belongs to the field of respectful communication and there was no statistically significant relationship between nurses' caring behaviors and patients' satisfaction, so the results of this study are not consistent with the results of the present study, which may be due to the conditions of the study and the nature of the disease. Also, the results of Jannati et al's research[26] in 2016 titled patient satisfaction with nursing care in Behshahr public hospitals show that patients' satisfaction with nursing care is not at an optimal level.

In this regard, the results of the study by Joolaei et al[27] in 2017 entitled the evaluation of patient satisfaction with nursing care behaviors in Iran University of Medical Sciences Hospitals and the study by Nakhai et al[28] in 2021

Table 2. Descriptive Statistics of Different Fields of Nurses' Caring Behaviors Questionnaire from the Viewpoint of Patients with Covid-19 Hospitalized in Hospitals of Shahid Beheshti University of Medical Sciences in 2020.

Fields	Number	Mean	Standard deviation	Median	Minimum	Maximum
Respectful relationship	300	33.57	5.02	30	11	41
Knowledge and professional skill	300	15.35	2.03	14	5	21
Total score of questionnaire	300	48.92	6.37	44	16	62

entitled patient satisfaction with nursing care in hospitals Birjand University of Medical Sciences also shows that patients' satisfaction with nurses' caring behavior is average, and the results of these studies are in line with the results of the present study. The results of the study by Jagoda et al[29] in 2019, titled the evaluation of nursing services and patient satisfaction in Sri Lanka, indicate a higher than average level of patient satisfaction with nurses' caring behaviors, and the results of this study are also consistent with the results of the present study. Also, the results of the study by Akbulot et al[30] in 2017, entitled 'Determining the level of satisfaction of patients with the care behaviors of nurses provided in an oncology clinic in eastern Turkey, show that the satisfaction with the care behaviors of nurses is in the average level, and the results of this study are also with The results of the present study are consistent. In the research of Eyasu et al[31] in 2016 in Ethiopia, entitled the satisfaction of adult hospitalized patients with nursing care and related factors, it indicates the average satisfaction of patients with the caring behaviors of nurses, which is also consistent with the results of the present study.

In dimension of knowledge and professional skills of nurses from the perspective of patients, the results of the study show that the score of the amount of knowledge and professional skills obtained is average, which indicates a relatively is good level of knowledge and professional skills in nurses from the perspective of patients with covid-19. In this regard, in the study of Mena Hassan Ebrahim et al (6) in 2021 and Azizi et al[25] in 2018, the most points were given to the field of professional knowledge and skills, and these results are in line with the results of the present study. The results of Marta Maria Blanco et al's[32] research in Spain 2021 titled Patient's understanding of nurses' caring behavior in the Covid-19 crisis, the findings of this study indicate patients' satisfaction with nurses' caring behaviors. Also, the results of the study by Parizad et al[33] in 2020 under the title of satisfaction with nursing care and factors related to it in patients with covid-19 in Urmia also indicate the average satisfaction of patients (68.9%) with nursing care and knowledge and It is their professional skill.

In this regard, the results of the study by Farajzadeh et al[34] in 2021 entitled the satisfaction of patients with covid-19 from the services provided in Baqiyatollah Hospital in Tehran show the high satisfaction of hospitalized covid-19 patients with services and knowledge. It is the profession of nurses, which is consistent with the results of the present study. In this regard, the research of Mogadasian et al[35] in

2017 under the title of satisfaction with nursing care and factors related to it in cancer patients admitted to Shahid Ghazi Hospital in Tabriz also expressed the relatively high satisfaction of cancer patients with the knowledge of nurses regarding the care of patients with cancer, and these results are in line with the results of the present study. Also, the results of Alvisa Palese et al's study[36] in 2017 show that patients are moderately satisfied with nurses' caring behavior, and there is a positive correlation between nurses' caring behavior and patients' satisfaction, and the highest score was given to nurses' knowledge and professional skills, which is consistent with the results. In this regard, there were no studies whose results were not consistent with the results of the present study regarding the knowledge and professional skills of nurses from the patients' point of view.

Concerning caregiving, patients' consent is achieved when the patient's expectations and the care they receive are compatible, and the care is provided completely concerning patients' physical, mental, and social needs.[4] The results of the present study have shown that the patients attending the study viewed nurses' caring behaviors favorably. In this study, though nurses' caring behaviors in two aspects of professional knowledge and skill, and respectful relationships have been evaluated as medium and acceptable, there is a long gap to bridge to achieve the ideal caring behaviors and achieve complete patient satisfaction. Considering the results of the studies, it has been determined that there is an overall positive correlation between the mean total scores of nurses' caring behaviors, and Covid-19 patients' satisfaction.[6,37,38] These results indicate that it is possible to achieve ideal caring and full patient satisfaction by planning and considering future outlook in order to educate and empower nurses in terms of correct caring behaviors, and to provide quality caretaking. Furthermore, we can enhance patients' satisfaction and help to improve the patients' views on this issue by enhancing their understanding and knowledge of nurses' correct caring behaviors in respectful relationship aspects.

Some limitations of the present study are as follows:

- Time-consuming nature of explaining and teaching patients about electronic questionnaire completion created further problems due to the special conditions of patients, the risk of disease transmission, and the necessity of complying with the health protocols. The problem was eliminated to a large extent by taking some special measures and providing the necessary explanation through other messengers including WhatsApp messenger in

Table 3. Comparison of Mean Scores in Different Fields of Nurses' Caring Behaviors in Hospitals of Shahid Beheshti University of Medical Sciences in 2020.

Hospital	Fields	Respectful relationship	Professional knowledge and skill	Total score of questionnaire
Taleghani	Mean	34.82	15.53	50.35
	Standard deviation	2.94	1.46	3.63
Imam Hossein	Mean	28.07	13.77	41.84
	Standard deviation	5.06	2.28	6.61
Masih Daneshvari	Mean	29.27	15.15	44.42
	Standard deviation	5.37	2.26	6.48
Shahid Modarres	Mean	32.32	14.92	47.24
	Standard deviation	4.93	1.41	6
Loghman Hakim	Mean	33.70	15.05	48.75
	Standard deviation	4.41	2.06	5.70
Labbafinejad	Mean	30.40	15	45.40
	Standard deviation	3.69	1.78	4.65
Shohadaye Tajrish	Mean	28.48	14.86	43.34
	Standard deviation	4.85	1.62	5.91
Akhtar	Mean	28.56	14.19	42.75
	Standard deviation	4.20	2.05	5.58
	P-value	.001*	.004*	.001*

*There was a statistically significant difference between the p-values in teaching hospitals of the university and the Covid-19 patients' perspective. This is the case such that the mean score of respectful relationship was 34.82 and that of professional knowledge and skill was 15.53 in Taleghani Hospital and Imam Hossein Hospital as the maximum and minimum scores respectively. There was a statistically significant difference between the mean total scores of questionnaires in teaching hospitals (P-value $= .001 < .05$).

case of necessity, and the patients and their families were briefed on this issue.

- Noncooperation on the part of some teaching hospitals of the university with the researcher to collect data. To rationalize the noncooperation, they argued that the results of the research could be conveyed to the treatment deputy of the university and even to the relevant ministry by the researcher, thus having a negative effect on their evaluation of the hospital. However, the problem was resolved to some extent by discussing the problems and providing the study goals to the hospital authorities.

- Since the number of samples in different hospitals varied widely due to each hospital's particular conditions, the results of the data analysis presented in Table 1 are not reliable enough, and it is necessary to conduct further studies to compare the hospitals in terms of nurses' caring behaviors from patients' perspective.

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