## Factors Influencing Caring Behaviors from Nursing Students'

### perspectives

#### Shaimaa Othman Mohamed, Teaching specialist

Critical Care and Emergency Nursing, Technical Nursing Police Institute, Ministry of Interior

#### **Eman El Sayed Taha, Professor**

Nursing Education, Faculty of Nursing, Alexandria University

#### Ghada El Sayed Abd El Halem, Assistant professor

Nursing Education, Faculty of Nursing, Alexandria University

#### Abstract

Background: Caring behaviors ensure the well-being of patients and maintain their motivational stability which makes them of great importance in nursing. However, nursing education is under great pressure to prepare students to work with vulnerable populations, so nursing educators need to be well-prepared during the educational process and need to refocus attention on caring behaviors and factors affecting them. **Objective:** Assessing caring behaviors and the factors influencing them from nursing students' perspectives. Settings: The study was conducted at the Technical Nursing Police Institute in Alexandria. Subjects: Comprised of nursing students enrolled in the fourth and fifth academic year during the second semester of 2019-2020. Tools: two tools were used. Tool one: "Caring Behavior Assessment Scale (CBAS) ". Tool two: "Factors Influencing Caring Behaviors from Nursing Students' perspectives ". **Results:** 66.0% of the nursing students thought that caring behaviors are highly important and 96.7% of them acknowledged the factors influencing caring behaviors. **Conclusion:** There is no doubt that caring behaviors are very important in the nursing profession since they are highly effective in maintaining patients' motivational balance throughout their recovery journey. However, there are numerous factors affecting them, whether positively or negatively. These factors can be hospital-related, personal, institutional, professional or patientrelated and some are more influential than others. **Recommendations**: A study about patients' satisfaction regarding nursing students' caring behaviors and a workshop to educate nursing students about caring behaviors should be conducted and the present study should be replicated from patients' perspective.

Keywords: Nursing students' perspective, caring behaviors

#### Introduction

Nursing education is under great pressure to prepare students to work with vulnerable populations that face unpredictable situations. So, nurse educators need to be well prepared during the educational process to be professionals and need to re-focus attention on caring behaviors in both the classroom, clinical environment by educating students on the foundational caring behaviors in nursing by role-modeling, mentoring students to foster caring and professional behaviors in practice (Li, et al., 2016).

According to Watson (2009) theory shows that caring as the disciplinary foundation for nursing and caring science as an advanced view of nursing and human sciences. The aim of a caring sciencecentered curriculum is to give nursing students an overall view of caring science, so that nursing students will be able to care individual's health as professional nurses .On the other hand, nursing students should be able to create an atmosphere that supports the patients' sense of well-being and conveys to patients a feeling of being cared for (Bergen, & Barber, 2019). Thus, the main goal of nursing education is to nurture nursing students with the knowledge and skills required to care for patient (Li, et al., 2016).

Caring has been described as the moral ideal of nursing and the heart of nursing. Moreover, caring is the major intellectual, theoretical, heuristic, and core to the practice of the nursing profession. Despite the lack of a universal definition for caring, it is known that in consist of two elements major of instrumental and expressive behaviors (Shalaby, Janbi, Mohammed,& Al-harthi, 2018). The instrumental caring behaviors consist of the technical and physical behaviors, and the expressive caring behaviors include the psychosocial and emotional behaviors (Nursalam, Wijaya, Bakar, & Efendi, 2015).

The caring behaviors include a wide variety of features and actions and these may be words, thoughts, feelings, looks, actions, movement, body language, touch, procedures and/or information. Caring behaviors is not so much to cure the patient as to maintain his motivational balance while nurse is undergoing the technical procedures necessary to get him well. It is not something that nurses do when they have a few extra is minutes but rather a consistent commitment to a holistic approach to patient care (Udomluck, et al. 2012). Therefore, who learn to integrate these nurses components into an intuitive whole and meet both the physical and psychological needs of their patients are the expert nurses who exemplify the goal, values, and beliefs of the profession. In order to achieve professional excellence in nursing; affective objectives should receive more attention educationally to help nursing students to receive not only training on many technical skills, but also on empathy or being sensitive to patient's feeling (Mostafa, 2014).

Also, the clinical training exposes students to real life situation related to patients care besides a nurse who may be a good role model for nursing caring behaviors or a nurse who disrupts these caring behaviors. Subsequently, nursing students may find themselves still effort with which caring behaviors to rank in their practice and how to apply these caring behaviors in the nursing practice (Labrague, et al., 2017 ; Kiblasan, 2020). In addition, the information nursing obtained from the students' perception of care and caring behaviors will help to enhance the knowledge and understanding of the phenomenon of caring in the educational settings. (Zamanzadeh, et al., 2014). On the other hand, knowing the factors that may affect nursing students caring behaviors are very important to inform nursing educators and nursing managers about the areas of improvement, these factors are; education, culture and achieving clinical experiences (Oluma, & Abadiga, 2020).

In Egypt, there is a few research done about the nursing caring behaviors and the factors affecting its. Taking it into consideration, and adding to it the importance of assessing nursing students' perspective about the importance of nursing caring behaviors, and how this caring affect component behavior is а critical of humanistic nursing care. Also, the enhancement of these caring behaviors in nursing students and using them in nursing practice will lead to the improvement in the quality of patients care. Hence in nursing education. а better understanding of undergraduate nursing students' perspective about the importance of nursing caring behaviors and the factors influencing its will be important to inform nursing educators about areas of improvement.

## Aims of the Study

This study aims to assess caring behaviors and the factors influencing them from nursing students' perspectives.

#### **Research** questions

- What are the caring behaviors from nursing students' perspectives?
- What are the factors influencing caring behaviors from nursing students' perspectives?

#### Materials and Method

#### Materials

**Design:** A descriptive exploratory research design was utilized for this study.

<u>Settings:</u> This study was conducted at the Technical Nursing Police Institute in Alexandria.

<u>Subjects:</u> The subjects of this study were comprised of nursing students enrolled in the fourth and fifth academic year of Technical Nursing Police Institute during the second semester of 2019-2020. The total number of students was 150 students, 75 from each of the two academic years.

*Tools:* In order to collect the necessary data for the study two tools were used:

#### Tool one: Caring Behavior Assessment Scale (CBAS):

This tool is a standardized scale which was developed by Cronin and Harrison in 1988. The CBAS has 63 items categorized under 7 domains of caring behaviors. The CBAS was slightly modified by Shalaby, Janbi, Mohammed and Al-harthi in 2018. It was translated into Arabic language by the researchers. This tool was used to assess caring behaviors from nursing students' perspectives.

Tool two: Factors Influencing CaringBehaviors from Nursing Students'perspectives Structured InterviewSchedule:

This tool was developed by the researchers based on the review of related literature Labrague, et al., 2017; Shalaby, et al., 2018) to explore the factors influencing caring behaviors from nursing students' perspectives. It consists of, approximately, 59items.

#### Method

Permission to conduct the study was obtained from the Research Ethics Committee at the Faculty of Nursing, Alexandria University, dean of the Faculty Nursing, Alexandria of University, and head of Police Technical Nursing Institute. Content validity for the tools was tested by 5 experts in the field of Nursing Education and Critical Care Nursing then the necessary modifications were accordingly made. The reliability of the tools was tested using Cronbach's Alpha. The Tool I and tool II were reliable and the coefficient values were (0. 939, 0. 940s) respectively. A pilot study was carried out on 10% of the sample size of nursing students to test the clarity, feasibility and applicability of the study tools. Those students were excluded from the study. Data was collected over a period of two months starting from the end of March, 2020 till the end of July, 2020. The researchers interviewed the study subjects to collect the necessary data and distributed the study tools at the clinical areas and classrooms after explaining the aim of the study. All the nursing students were given the same instructions by the researchers about how to fill the questionnaire. Each study subject needed about 15-20 minutes to complete the study tools.

### Ethical considerations:

Written informed consent was obtained from nursing students after giving an explanation about the aim of the study. Participants' confidentiality of the collected data was ensured. The researchers emphasized that participation in the study is entirely voluntary as well as withdrawal from the study at any time.

## Statistical Analysis

The collected data were coded and entered in special format to be suitable for computer feeding. Following data entry, checking and verification process were carried out in order to avoid any errors. Data were analyzed using the statistical package for social science SPSS (version 20). Statistical analysis tests, which included: Chi square, student T test and paired T test. Graphical presentation included: Bar graphs were done for data visualization.

## Results

Table 1 shows the distribution of the nursing students according to their demographic characteristics. It can be observed that 84.0 % of the nursing students were more than19 years-old. As regards to sex, it can be noticed that more than two thirds of nursing students were females. In regards to the academic year, there was equal percentile distribution of the nursing students for fourth and fifth level. According to average success rate in the past academic year, it was found that almost all nursing students (98.0%) achieved success rate equal or more than 80%. It was observed from this table that more than two thirds (74.0%) of the nursing students did not attend any previous courses about caring behaviors while almost all (96.7%) of nursing received previous hospital students training. Concerning duration of hospital training period, more than three quarters (80 %) of the student received a training period more than 12 months.

**Table 2** illustrates the distribution of caring behaviors levels according to nursing students' perspectives. The majority of the nursing students reported that human needs assistance, expression feelings, spiritual forces, humanism and supportive environment caring behaviors were highly important as represented by (82.0%, 79.3%,75.3%, 74.0%,69.3%) respectively.

Table 3 shows the distribution of factors influencing nursing students' caring behaviors from their perspectives. As regards to personal factors, it was observed that the majority of nursing students strongly agreed that the presence of professional conscience, interest and respect to nursing profession and sense of responsibility toward the patients were factors that affect nursing students caring behaviors as represented by (94.7%, 89.3%, 86.7%), respectively. In relation to professional factors, it was observed that more than two thirds of nursing students had strongly agreed that the presence of professional knowledge enough to demonstrate caring behaviors and the presence of new technical skills to apply caring behaviors were the most important factors as represented by (72.0%, 68.0%), respectively. As for institutional factors, the majority of nursing students strongly agreed that competency and qualification of nurse educators, presence of respectful relationships between students and educators and presence of enough clinical training settings were among the most vital factors that affect nursing students' caring behaviors as represented bv (80.0%, 79.3% 78.7%), respectively. Concerning hospital-related factors, more than two thirds of nursing students strongly agreed that presence of resources and comfortable learning environments and support from hospital administrators were factors that affect nursing students caring behaviors as represented by (80.7%, 76.0% 72.0%), respectively. Regarding Patients-related factors, it was observed that more than two thirds of nursing students agreed that the patients' level of consciousness and their interaction, patients' reaction /response affect communication with them in caring behaviors, and presence of cultural differences of the patient were factors that affect nursing students caring behaviors as

represented by (78.7%, 75.3% 74.7%) respectively.

Figure 1 demonstrates the distribution of factors influencing nursing students' caring behaviors total percentage score. The majority of the nursing students reported that hospital-related factors, personal factors, institutional factors and professional-related factors had high effect on caring behaviors as represented by (98.0%, 97.3%, 95.3%, 89.3%), respectively. Moreover, more than half of the nursing students (62.0%) emphasized that the patient-related factors highly affected caring behaviors, while more than one third of them (36.7%) reported that it had moderate effect.

**Table 4** shows the relation between caring behaviors dimensions and factors influencing them. It can be noticed that there is a high statistically significant relation between nursing students' caring behaviors levels and the professional-related factors as well as patients' related factors as represented by (0.002, 0.000), respectively. On the other hand, there is no statistically significant relation between nursing students' caring behaviors levels and personal, institutional and hospital- related factors as represented by (0.494, 0.186, 0.333), respectively.

Generally, there is no statistically significant relation between nursing students' caring behaviors levels and the total factors influencing them (0.212).

## Discussion

Caring behaviors are very important for nurses and patients and their families as they increase patient satisfaction for patients as well as nurses who meet both the physical and psychological needs of their patients (Khresheh, & Barclay, 2019). Nurse caring behaviors are the most essential part in health care services since they build up trustable and close relationships between the patients and care providers. They are very necessary in enhancing the human life and are considered as a basic key factor in the provision of healthcare facilities to the patients. Nurses' caring behaviors include showing respect for the patients, providing feelings of security, minimizing anxiety and maintaining positive and good communication (Abdullah, et al., 2017).

The main findings of the current study revealed that human needs assistance was the most important caring behavior, according to nursing students. This result may attributed to the technical aspect of nurses' tasks, since nursing students must be skillful in handling injections, drugs and infusions and must feel confident when performing their duties. These findings are consistent with Pajnkihar et al. (2017) who emphasized that the human needs assistance is a highly important caring behavior as perceived by nurses. As regards to expression of feelings, it was the second highest important subscale, as perceived by nursing students. This may be due to the awareness of students with the needs of patient for emotional and psychological support, because the critical nature of illnesses makes patients more susceptible to psychological distress and problems such as anxiety, depression and mood swings, which may lead to more deterioration of their health. These results are in line with Papastavrou, et al., (2011) who found that nurses perceive their psychological skills and expressive or affective caring behaviors as more important. On the other hand, Oluma, & Abadiga, (2020) found that nurses perceived concrete observable aspects of caring behaviors as more vital than expressive caring behavior.

Moreover, the spiritual forces dimension was found to be highly important to nursing students. These results may be because spirituality can help patients in the recovery process by facilitating their autonomy and assisting them to live and grow beyond the limitations imposed by their illnesses. This is consistent with Hellman, et al., (2015) Mamier, et al., (2018) who found that 80% of nurses asserted that they could attend to patients' spirituality during taking care of their physical needs. Elbahnasawy, et al., (2018) also found that nurses even perceived spiritual forces as the most important amongst caring behaviors. Regarding the humanism dimension, the majority of the nursing students emphasized that it is an caring behavior. Similarly, essential O'Connell and Landers (2008) conducted a study in which the nursing students had the same view on the dimension. One probable cause for the similarity is that caring originates in nurse's feelings of sensitivity and empathy and that critical care nurses are committed to providing individualized and holistic care to their patients. It was also found that more than two thirds of nursing students viewed the supportive environment dimension as a necessary caring behavior. students' Nursing awareness to the vulnerable nature of the critically ill patients and the importance of maintaining patients' safety and protection in highly sophisticated, hostile and stressful ICU environment may be a justification to these results. Consistently, the study of Shalaby, et al., (2018) revealed that this dimension is highly prioritized by nurses.

The teaching/learning dimension was found to be of moderate importance to more than two thirds of the nursing students. Educating patients about their conditions can help them cope better and be more at ease and comfortable, but this might not happen sometimes. The results of this study were in disagreement with the results reached by Omari, et al., (2013) who found that the only subscales perceived as strongly important was teaching/learning.

The helping/trusting dimension was also of moderate importance, according to more than two thirds of the students. Even though earning patients' trust can make their recovery smoother, relationships between nurses and patients are temporary and only for therapeutic purposes, so there is no need to build personal relations with patients. This makes the fact that this dimension is not of the top priorities more explainable. However, Crafford, (2014) found that the majority of nursing students considered helping/trusting to be strongly important.

In the present study, the students agreed that there are many factors influencing caring behaviors. It was observed that they thought the most influential factors were the hospitalrelated ones, followed by personal then institutional then professional and, lastly, patient-related factors.

Hospital-related factors were ranked as the most influencing factors: the majority of the nursing students strongly agreed that providing comfortable and safe learning environment were factors that affect nursing students caring behaviors. These results may be due to the fact that providing comfortable learning environments can improve their learning, increase their confidence and make them more eager and motivated to be part of the profession which can lead them to take better care of patients. This was in line with Parchebafieh, et al., (2020) who showed that spontaneous learning in nursing students was enhanced by providing safety and comfort to the clinical environment by instructors.

Personal factors were ranked as the second most influencing. Most of the nursing students strongly agreed that interest and respect to nursing profession is among the factors that affect nursing students' caring behaviors. The individuals' interest or respect for their jobs can heavily impact their performance, and, in nurses' case, it can affect their caring behaviors, improving the quality of care. This was supported with the study of Salimi, (2021) in which the nurses claimed that their interest and respect to their profession are major factors affecting their caring behaviors.

Institutional factors were ranked as the third most influencing factors; it was observed that more than two thirds of the nursing students had strongly agreed that the presence of respectful relationships between students and educators is a factor that can affect nursing students' caring behaviors. Respectful relationships between students and educators help students become caring individuals, making nursing education ideal to develop, enhance and promote students' caring behaviors, increase confidence and motivation in student nurses and help them learn to care for patients. These findings were supported by Labrague et al. (2015) who found that instructors' caring behaviors had a positive impact on students' caring behaviors.

Professional-related factors were ranked as the fourth most influencing factors. It was found that more than two thirds of the nursing students had agreed that empowerment to make decisions can heavily affect their caring behaviors. Similarly, Perry, et al., (2 018) stated that students often feel appreciated, respected and trusted with permission from their educators to make independent decisions. They feel more responsible with their skills and that improves their caring behaviors as they feel the need to meet their teachers' expectations.

Patient-related factors were ranked as the fifth most influencing factors, in which more than two thirds of nursing students had patients' agreed that the level of consciousness and their interactions, patients' reaction /response affect communication with them in caring behaviors were factors that affect nursing students caring behaviors. This result may be attributed to that the way nurses behave during the interaction matters a lot in gaining patients' (and families) participation in the care process. In the same way, the manners in which patients and family respond to this interaction affect nurses' behavior. This result was consistent with Kuntarti, et al., (2018) who found nursing students stated that although the patients did not directly teach about caring, the patients' responses after the nursing students gave care made up the feedback on the students' caring.

Relation between caring behaviors dimension and factors influencing it, it can be noticed that there is a statistically significant correlation between nursing students' caring levels and their professional, patients' related factors in favor of high effect. This finding due to professional, patients' related factors are engaged in could have an impact on work outcomes. This result was consistent with Shalaby, et al., (2018) who stated that there was a statistical significant positive relationship between nurses' perception behaviors caring and their work circumstances, workload, job satisfaction, background educational and patient characteristics. Also, there is no a statistically significant correlation between nursing students' caring levels, their institutional factors, personal and hospital related factors. This result contraindicated with, Oluma, & Abadiga, (2020) who asserted that was significant correlation between caring behaviors and factors influencing such as nurse's characteristics, job satisfaction, interdisciplinary, organizational factors, and Workload and intention to leave. On the other hand, Syahridhaa, et al., (2015) who found that there is a significant relationship between individual factors, psychological factors and organizational factors with six dimensions of caring behaviors.

### Conclusion

There is no doubt that caring behaviors are very important in the nursing profession since they are highly effective in maintaining patients' motivational balance throughout their recovery journey. However, there are numerous factors affecting them, whether positively or negatively. These factors can be hospital-related, personal, institutional, professional or patient-related and some are more influential than others.

### **Recommendations**

In line with the findings of the study, the following recommendations are made:

• Conduction of a study about patients' satisfaction regarding nursing students' caring behaviors.

• Replication of the study from the patients' perspective.

• Conduction of a workshop to educate nursing students about caring behaviors.

# Table (1): Distribution of the nursing students according to their demographic characteristics (n=150)

Students' characteristics	Total N=150				
	No.	%			
Age (years)					
• 18	24	16.0			
• 19	126	84.0			
Min- Max 18-19	Mean $\pm$ SD 18.84	1 ± 0.368			
Sex					
Male	49	32.7			
Female	101	67.3			
Academic year					
• 4 <sup>th</sup>	75	50.0			
• 5 <sup>th</sup>	75	50.0			
Average success rate in the past academic year					
• 70-79%	3	2.0			
• ≥80%	147	98.0			
Attending previous courses about caring behaviors					
• No	111	74.0			
• Yes	39	26.0			
Receiving previous hospital training					
• No	5	0.3			
• Yes	145	96.7			
Duration of hospital training (months) n=	= 145	•			
• 3-	18	12.4			
• 6-	7	4.8			
• 9-	4	2.8			
• ≥12	116	80			
Min- Max 3-14	Mean ± SD 10.56	± 3.103			

# Table (2): Distribution of caring behaviors levels according to nursing students' perspectives (n=150)

Items	Levels of Caring behaviors					
	I	ωw	Mod	lerate	High	
	No. %		No.	%	No.	%
- Humanism/Faith-Hope/ Sensitivity	0	0.0	39	26.0	111	74.0
- Helping/Trust	0	0.0	133	88.7	17	11.3
- Expression of Positive/ Negative Feelings	0	0.0	31	20.7	119	79.3
- Teaching/Learning	0	0.0	136	90.7	14	9.3
- Supportive/Protective/ Corrective Environment	0	0.0	46	30.7	104	69.3
- Human Needs Assistance	0	0.0	27	18.0	123	82.0
- Existential/Phenomenological/ Spiritual Forces	0	0.0	37	24.7	113	75.3
Levels of Total Caring Behaviors	0	0.0	51	34.0	99	66.0

ASNJ Vol.25 No.2, June 2023

## Table (3): Distribution of factors influencing nursing students' caring behaviors from their perspectives(n=150)

Items	Level of agreement							
1	SD D A SA						A	
	No.	%	No.	%	No.	%	No.	%
A. Personal factors:							134	
- Interest and respect to nursing profession.	1	0.7	1	0.7	14	9.3	134	89.3
- Sense of responsibility toward the patient.	0	0.0	1	0.7	19	12.7	130	86.7
- Physical fitness and mental health of nursing students.	0	0.0	1	0.7	29	19.3	120	80.0
- Presence of professional conscience.	0	0.0	1	0.7	7	4.7	142	94.7
- Self-confidence in performing nursing care.	0	0.0	0	0.0	22	14.7	128	85.3
- Respectful relationship with colleagues.	0	0.0	1	0.7	42	28.0	107	71.3
- Attitude of caring.	0	0.0	2	1.3	42	28.0	106	70.7
- Fear to make mistakes or harming the patients.	0	0.0	6	4.0	44	29.3	100	66.7
- Nursing students' respect themselves.	0	0.0	0	0.0	34	22.7	116	77.3
B. Professional related factors								
<ul> <li>Presence of enough professional knowledge to demonstrate caring behaviors.</li> </ul>	0	0.0	2	1.3	40	26.7	108	72.0
- Using creative thinking in solving patients' problems.	2	1.3	21	14.0	106	70.7	21	14.0
- An empowerment to take an independent decision in each phase of practice of caring behaviors.	0	0.0	14	9.3	113	75.3	23	15.3
- Therapeutic communication with patients.	0	0.0	2	1.3	111	74.0	37	24.7
- Professional communication with patients and relatives.	0	0.0	10	6.7	111	74.0	29	19.3
- Establish good relationship with nursing staff and health care providers.	0	0.0	4	2.7	105	70.0	41	27.3
C. Institutional factors:								
- Teach effectively of caring behaviors into the content of the curriculum.	1	0.7	4	2.7	103	68.7	42	28.0
- Time of clinical training.	0	0.0	7	4.7	41	27.3	102	68.0
- Integration between theory and clinical practice.	0	0.0	3	2.0	32	21.3	115	76.7
- Presence of standards and guidelines for nursing caring behaviors in nursing curricula.	3	2.0	0	0.0	103	68.7	44	29.3
- Nurse educators as a role model during clinical training.	0	0.0	8	5.3	39	26.0	103	68.7
- Nurse educators support nursing students' during stressful time in clinical area.	0	0.0	5	3.3	37	24.7	108	72.0
- Nurse educators provide an environment which free from anxiety and feeling of inadequacy.	2	1.3	5	3.3	41	27.3	102	68.0
- Competency and qualification of nurse educators.	1	0.7	2	1.3	27	18.0	120	80.0
- Students' participation in setting goals, schedules and criteria of evaluation.	1	0.7	3	2.0	107	71.3	39	26.0
- Presence of motivational strategies for students to provide high quality pt's care.	0	0.0	2	1.3	43	28.7	105	70.0
- Provide enough number of clinical settings for training.	0	0.0	1	0.7	31	20.7	118	78.7
<ul> <li>Nurse educators encourage nursing students to perform caring behaviors during clinical training.</li> </ul>	0	0.0	4	2.7	44	29.3	102	68.0
- Conduct clinical nursing conferences during clinical training about caring behaviors.	0	0.0	7	4.7	111	74.0	32	21.3
- Nurse educators provide enough time to discuss patient's care	0	0.0	6	4.0	100	66.7	44	29.3
ASNJ Vol.25 No.2, June 2023 45								

		1	1					
problems with nursing students.								
- Presence of respectful relationship between student and educator	0	0.0	1	0.7	30	20.0	119	79.3
D. Hospital related factors:								
- Administrator of hospital support nursing students learning.	1	0.7	0	0.0	41	27.3	108	72.0
- Presence of guidance from the nursing staff and medical staff to help	0	0.0	1	0.7	43	28.7	106	70.7
students acquire caring behaviors skills.								
- Coordinate between health institution and nurse educators.	1	0.7	0	0.0	115	76.7	34	22.7
- Cooperate between hospital personnel and nursing students.	3	2.0	7	4.7	104	69.3	36	24.0
- Provide comfortable and safe learning environment.	1	0.7	0	0.0	35	23.3	114	76.0
- Presence of resources as; equipment, supplies, advanced machines	0	0.0	2	1.3	24	18.0	121	80.7
and devices for patient care.								
- Presence of standards for caring behaviors.	0	0.0	2	1.3	105	70.0	43	28.7
E. Patients related factors:								
- The patients' level of consciousness and their interaction.	6	4.0	6	4.0	118	78.7	20	13.3
- Varieties of patients' diseases and problems.	2	1.3	14	9.3	111	74.0	23	15.3
- Treat the patients as paramount person in hospital.	0	0.0	13	8.7	105	70.0	32	21.3
- Patients' reaction /response affect communication with them in		2.7	6	4.0	113	75.3	27	18.0
caring behaviors.								
- Presence of language differences of the patient.	5	3.3	16	10.7	112	74.7	17	11.3
- Presence of cultural differences of the patient.	4	2.7	21	14.0	112	74.7	13	8.7

SD = Strongly disagree, D= Disagree, A= Agree, SA= Strongly agree

#### Figure (1): Distribution of factors influencing nursing students' caring behaviors levels:

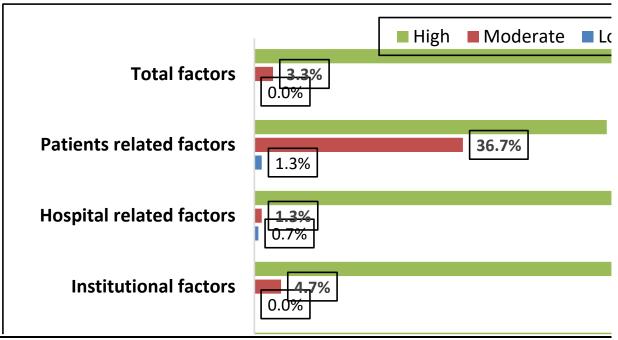


 Table (4): Relation between caring behaviors dimensions and factors influencing them

Items	Leve	els of Caring Behaviors			Levels of Caring Behaviors Total					Test of
	Mod	erate	Н	igh	N=150		Significance			
	N=	- 51	N	<b>= 99</b>						
	No.	%	No.	%	No.	%				
Personal factors										
Moderate effect	0	0.0	4	100.0	4	2.7	X <sup>2</sup> =0.469			
<ul> <li>High effect</li> </ul>	51	34.0	99	66.0	146	97.3	P=0.494			
Professional related factors										
Moderate effect	11	68.8	5	31.2	16	10.7	X <sup>2</sup> =9.638			
High effect	40	29.9	94	70.1	134	89.3	P=0.002*			
Institutional factors										
Moderate effect	4	57.1	3	42.9	7	4.7	$X^2 = 1.753$			
High effect	47	32.9	96	67.1	143	95.3	P=0.186			
Hospital related factors										
Low effect	1	100.0	0	0.0	1	0.7	$X^2 = 2.198$			
<ul> <li>Moderate effect</li> </ul>	1	50.0	1	50.0	2	1.3	P=0.333			
High effect	49	33.3	98	66.7	147	98.0				
Patients related factors										
Low effect	2	100.0	0	0.0	2	1.3	X <sup>2</sup> =16.294			
<ul> <li>Moderate effect</li> </ul>	28	50.9	27	49.1	55	36.7	P=0.000*			
High effect	21	22.6	72	77.4	93	62.0				
Total factors affecting caring	behavior	°S					•			
Moderate effect	3	60.0	2	40.0	5	3.3	$X^2 = 1.558$			
High effect	48	33.1	97	66.9	145	96.7	P= 0.212			

 $X^2$  Chi Square Test \* Statistically significant at p  $\leq 0.05$ 

## References

- Abdullah, S., Kousar, R., Azhar, M., Waqas, A., & Gilani, S. (2017). Nurses' and patients' perception regarding nurse caring behaviors and patients satisfaction in Sir Ganga Ram hospital. *International Annals of Medicine*, 1(5), 1-8.
- Bergen, J. S., & Barber, L. A. M. (2019). Student identification and demonstration of caring behaviors during simulated patient experiences. *International Journal for Human Caring*, 23(3), 221-233.
- Crafford, I. (2014). *Caring behaviours: the perceptions of first and fourth year nursing students* (Doctoral dissertation). Stellenbosch University.
- Elbahnasawy, H. T., Lawend, J., & Mohammed, E. (2016). Application of Watson caring theory for nurses in pediatric critical care unit. *IOSR Journal of nursing and health Science*, 5(4), 56-67.
- Hellman, A. N., Williams, W. E., Jr., &

Hurley, S. (2015). Meeting spiritual needs: a study using the spiritual care competence scale. *Journal of Christian Nursing*, 32, 236-241.

- Khresheh, R., & Barclay, L. (2019). Assessing the effectiveness of an educational workshop designed to improve caring behaviors of midwives at public hospitals in Jordan. *Nursing and Midwifery Studies*, 8(2), 70-77.
- Kiblasan, J. I. A. (2020). Caring behavior of health professionals: its implication to clinical practice. *Prof.(Dr) RK Sharma*, 20(4), 274.
- Kuntarti, K., Yetti, K., & Novieastari, E. (2018). The contributing individuals in developing caring behaviors of nursing students: the focus group finding. *International Journal for Human Caring*, 22(4), 169-178.
- Labrague, L. J., McEnroe-Petitte, D. M.,

Papathanasiou, I. V., Edet, O. B., & Arulappan, J. (2015). Impact of instructors' caring on students' perceptions of their own caring behaviors. *Journal of Nursing Scholarship*, 47(4), 338-346.

- Labrague, L. J., McEnroe-Petitte, D. M., Papathanasiou, I. V., Edet, O. B., Arulappan, J., & Tsaras, K. (2017). Nursing students' perceptions of their own caring behaviors: a multicountry study. *International journal of nursing knowledge*, 28(4), 225-232.
- Li, Y. S., Yu, W. P., Yang, B. H., & Liu, C. F. (2016). A comparison of the caring behaviors of nursing students and registered nurses: implications for nursing education. *Journal of clinical nursing*, 25(21-22), 3317-3325.
- Mamier, I., Taylor, E. & Wisnlow, B. (2018). Nurse spiritual care: prevalence and correlates. *Western Journal of Nursing Research*. doi: 10.1177/0193945918776328
- Mostafa, M. (2014). *Nurse educator's caring behaviors toward nursing students* (Unpublished Master Thesis). Faculty of Nursing Alexandria University.
- Nursalam, N., Wijaya, A., Bakar, A., & Efendi, F. (2015). Indonesian nursing students in caring behavior. *Nursing theories and nursing practice*, 3, 351-369.
- O'Connell, E., & Landers, M. (2008). The importance of critical care nurses' caring behaviors as perceived by nurses and relatives. *Intensive and Critical Care Nursing*, 24(6), 349-358.
- Oluma, A., & Abadiga, M. (2020). Caring behavior and associated factors among nurses working in Jimma University specialized hospital, Oromia, Southwest Ethiopia. *BMC nursing*, 19(1), 1-7.13.
- Omari, F. H., AbuAlRub, R., & Ayasreh, I. R. (2013). Perceptions of patients and nurses towards nurse caring behaviors in coronary care units in J ordan. *Journal of clinical nursing*, 22(21-22), 3183-3191.
- Pajnkihar, M., Štiglic, G., & Vrbnjak, D. (2017). The concept of Watson's carative factors in nursing and their (dis) harmony with patient satisfaction. *PeerJ*, 5, 2940.
- Papastavrou, E., Efstathiou, G., & Charalambous, A. (2011). Nurses' and patients' perceptions of caring behaviours: quantitative systematic review of comparative studies. *Journal of advanced nursing*, 67(6), 1191-1205.
- Parchebafieh, S., Memarian, R., & Vanaki, Z. (2020). Providing clinical safety and ASNJ Vol.25 No.2, June 2023

security for nursing students: spontaneous learning. *Electronic Journal of General Medicine*, 17(3).

- Perry, C., Henderson, A., & Grealish, L. (2018). The behaviors of nurses that increase student accountability for learning in clinical practice: an integrative review. *Nurse education today*, 65, 177-186.
- Salimi, S., & Tarbiat, S. (2021). Predictors and priority of caring behaviors in intensive care units. Nursing in Critical Care.
- Shalaby, S. A., Janbi, N. F., Mohammed, K. K., & Al-harthi, K. M. (2018). Assessing the caring behaviors of critical care nurses. *Journal of Nursing Education and Practice*, 8(10), 77-85.
- Syahridhaa, Sjattarb ,E.L., & Hadju,V. (2015). Factors related of nursing caring behavior in dealing patients of tuberculosis in Jeneponto. *International Journal of Sciences: Basic and Applied Research*, 24 (2), 21-32.
- Udomluck S, Tonmukayakul O, Tiansawad S, et al. (2012). Development of thai nurses' caring behavior scale. *Pacific Rim Int J Nurs Res*,14(1), 32-44.
- Watson J. (2009). Caring as the essence and science of nursing and health care. *O Mundo da Saude*, 33(2), 143-149.
- Zamanzadeh V, Valizadeh L, Azimzadeh R, Aminaie N& Yousefzadeh S (2014).First and fourth-year student's perceptions about importance of nursing care behaviors: socialization toward caring. *Journal of Caring Sciences*, 3(2), 93-101.