

ID Design Press, Skopje, Republic of Macedonia  
 Open Access Macedonian Journal of Medical Sciences. 2019 Mar 30; 7(6):1047-1052.  
<https://doi.org/10.3889/oamjms.2019.204>  
 eISSN: 1857-9655  
**Public Health**



# The Importance and Extent of Providing Compassionate Nursing Care from The Viewpoint of Patients Hospitalized in Educational Hospitals in Kermanshah - Iran 2017

Asghar Dalvandi<sup>1</sup>, Aliakbar Vaisi-Raygani<sup>1\*</sup>, Kian Nourozi<sup>1</sup>, Abbas Ebadi<sup>2</sup>, Mahdi Rahgozar<sup>3</sup>

<sup>1</sup>Department of Nursing, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran; <sup>2</sup>Behavioral Sciences Research Center, Life Style Institute, Faculty of Nursing, Baqiyatallah University of Medical Sciences, Teheran, Iran; <sup>3</sup>Department of Biostatistics and Computer, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

## Abstract

**Citation:** Dalvandi A, Vaisi-Raygani A, Nourozi K, Ebadi A, Rahgozar M. The Importance and Extent of Providing Compassionate Nursing Care from The Viewpoint of Patients Hospitalized in Educational Hospitals in Kermanshah - Iran 2017. Open Access Maced J Med Sci. 2019 Mar 30; 7(6):1047-1052. <https://doi.org/10.3889/oamjms.2019.204>

**Keywords:** Nursing; Care; Compassionate Care

**\*Correspondence:** Aliakbar Vaisi-Raygani, PhD Candidate in Nursing Education, Department of Nursing, University of Social Welfare and Rehabilitation Sciences, Tehran, IR Iran. E-mail: [Visi\\_akbar@yahoo.com](mailto:Visi_akbar@yahoo.com)

**Received:** 30-Dec-2018; **Revised:** 23-Feb-2019; **Accepted:** 03-Mar-2019; **Online first:** 28-Mar-2019

**Copyright:** © 2019 Asghar Dalvandi, Aliakbar Vaisi-Raygani, Kian Nourozi, Abbas Ebadi, Mahdi Rahgozar. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0)

**Funding:** The study was funded by University of Social Welfare and Rehabilitation

**Competing Interests:** The authors have declared that no competing interests exist

**AIM:** This study is an attempt to determine the importance and extent of providing compassionate nursing care from the hospitalised patients' viewpoint in educational hospitals in Kermanshah-Iran 2017

**METHODS:** The study was carried out as a descriptive, analytical work in the hospitals affiliated to Kermanshah University of Medical Sciences on 300 patients in 2017. The patients were selected through convenient sampling, and Burnell Compassionate Care Scale was filled by the participants. The collected data was analysed in SPSS (v.20) using descriptive and inferential statistics.

**RESULTS:** The results showed that the mean and standard deviation score of importance and extent of compassionate care were  $3.27 \pm 0.526$  and  $2.80 \pm 0.647$  respectively. There was a significant difference between these two scores ( $p < 0.001$ ). About all the factors in compassionate nursing care, there was a significant difference between the importance and extent of compassionate nursing care. The mean score of the importance of compassionate nursing care from female patients' viewpoint was higher than that of men ( $p = 0.032$ ). The observers with college educations perceived the extent of compassionate nursing care less than the other groups of participants ( $p = 0.008$ ).

**CONCLUSIONS:** There was a significant difference between the importance and extent of compassionate nursing care from the patients' point of view. This highlights negligence by the nurses of this critical aspect of care. It is recommended, therefore, to add compassionate nursing care to nursing programs and commission more research works on other groups of health care personnel.

## Introduction

Compassion is a virtue and a necessary trait of nursing and being a nurse [1]. It is a feeling evoked by witnessing others pain that leads to taking measures to help them [2]. Compassion is the human and moral part of care, and according to many nursing literatures, compassion is the philosophical foundation and centrepiece of the nursing profession. Being compassionately responsive to the care needs of patients is one of the professional standards of nursing [3], [4], [5].

Compassion may have a direct effect on the

quality of cares provided to patients so that they normally evaluate the quality of services based on the compassion demonstrated by the nurse [6], [7]. Providing compassionate nursing care can lead to higher satisfaction in patients, safer cares, saving time and cost, a sense of satisfaction and effectiveness in the personnel, higher confidence, and coping skills in them [8], [9]. However, modern nursing is mostly based on quantitative evidence and technical skills, and there is a little attention toward morality and compassion [10]. Thereby, attributes and behaviours that might be construed by patients as compassion in nurses and medical staff are not recognised, so that there are several different definitions of compassionate nursing care [11]. Papadopoulos

defined recognising the patient's need and demonstration of attention an understanding of patients' needs as the signs of compassion [12]. Van der Cingel argued that compassionate nursing care is featured with paying attention, listening, dealing with patient's problems, cooperating and accompanying the patient, helping, being available, and understanding [13]. Compassionate nursing care from the patient's point of view is featured with being considerate and accurate in dealing with patient's problems, being committed to realise and work to sooth the patient's pain while keeping a respectful relationship with the patient [14].

Compassionate nursing care is the main element in providing quality health services to patients [15], and it maybe is the best and most valuable gift that a nurse can give the patient in health systems [4], [16]. That is why nurses have always tried and been interested in meeting the patient's need through demonstrating altruism and despite all limitations and hurdles. Recent reports and studies have demonstrated, however, that the patients do not have a pleasant experience with nurses' behaviours at clinical settings. McCabe showed that the hospitalised patients complained about the lack of a proper connection and experiencing an inconsiderate, uncompassionate, and unfriendly relationship with nurses; so that according to the patients, these have led to a degradation of the quality of nursing cares [17]. All these are reported while compassion and mercy are the foundations of nursing and along with professional knowledge and clinical skills, nurses must be committed to providing humane care with compassion to the care receivers [18].

According to Dewar et al., the key point in providing compassionate nursing care is to recognise the needs and expectations of patients with cares [10]. Since compassionate nursing care is a subjective, complicated, multidimensional, and cultural based concept affected by values and social-political structure of the society [19], [20], the agreement between expectations of patients and nurse's interpretation of these expectations is a central element in providing quality and proper cares [21].

Therefore, surveying the patients' expectations and viewpoints about health cares – as receivers of cares – to determine the specifications and behaviours that resemble compassion of the nurse in providing cares is an opportunity to improve quality of nursing cares and profession.

The present paper is an attempt to determine the importance and extent of compassionate nursing care from hospitalised patients' point of view of patients hospitalised in educational hospitals in Kermanshah-Iran in 2017.

## Methods

This study was done as a descriptive-analytical method in 2017. The study population consisted of the patients hospitalised in educational hospitals affiliated with Kermanshah University of Medical Sciences. Sample group included 300 patients in internal and surgery wards who were selected through convenient sampling method from three hospitals. Inclusion criteria were being at least three days in the hospital, the age of 18-65 years old, expression of consent to participate, ability to communicate orally, and stable physical status (no pain). The patients who failed to fill out the questionnaire or not interested were excluded.

For data gathering, after taking the permission from research deputy of University of Social Welfare and Rehabilitation Tehran and Kermanshah University of medical sciences, a demographics information checklist including questions about gender, marital status, education level, ward, hospitalization term, and occasions of hospitalizations in one year and Burnell Compassionate Care Scale was completed by interview and self-administering in a paper and open manner. The latter tool was first introduced by Burnell (2011) to assess compassionate nursing care in patients with cancer. Afterwards, the reliability and validity of the tool were confirmed for patients at internal, and surgery wards and the statements were decreased to 20 statements. Four factors are covered in the tool including meaningful connection (eight statements with Cronbach's Alpha 0.867), patients' expectation (five statements with Cronbach's Alpha 0.801), caring attributes (four statements with Cronbach's Alpha 0.774), and capable practitioner (three statements with Cronbach's Alpha 0.781) and also to test interdependence among the subscales of the CCAT©, the average rating of the importance for each component was computed, and then a correlation matrix was calculated for the subscale scores. All scales were significantly correlated with each other ( $p < .001$ ), indicating consistency in the movement of one subscale in comparison to other subscales [16].

Each statement is designed based on Likert's four-point scale for important of compassionate care ("not important" to "very important"). The statements about the extent of services are scored from 1 = never to 4 = most of the time. To obtain the score for each factor, the total score of the related statements is divided by the number of statements, and the higher the score, the more compassionate are the cares. The patients expressed their opinions in two fields of importance and extent or providing compassionate cares.

Before initiating data gathering process, required permissions were secured, and the researcher visited the patients and briefed them about the title and objectives of the study and secured an

informed consent was signed by candidate participants. Then the questionnaires were administered, and the participants were asked to score the 20 statement of the scale from two points of view; i) importance of each statement in provision of compassionate cares (1 = not important,..., 4 = very important); ii) the extent of providing such services by nurses (1 = never,..., 4= most of the time). For the disabled or illiterate patients, the researcher read the statements and fills out the scale for them.

Data analyses were done in SPSS (v.20) using descriptive statistics (mean, SD, frequency, and frequency percentage) and inferential statistics (Mann Whitney U, Kruskal Wallis, and Spearman correlation analysis) (P = 0.05).

## Results

Of the 300 individuals participated in the study, 191 (63.7%) were male and 226 (75.3%) married. About 56% had an educational level less than a diploma, and 51% hospitalised in the internal units (Table 1). Mean, and standard deviation (SD) of age, duration of hospitalisation, and a number of hospitalisations were  $43.94 \pm 13.76$  years,  $10.23 \pm 12.49$  days, and  $3.67 \pm 3.82$ , respectively.

**Table 1: Demographic characteristics of the samples**

Variables	Frequency	Frequency per cent
Gender	Male	63.7
	Female	36.3
Marital status	Married	75.3
	Single	24.7
Unit of hospitalisation	Internal	51.0
	Surgical	49.0
Educational level	Under diploma	56.3
	Diploma	28.7
	Academic	15.0

The mean of Importance of compassionate and providing it was  $3.27 \pm 0.526$  and  $2.80 \pm 0.647$ , respectively, in which Wilcoxon test showed a significant difference between them ( $Z = -10.22$ ,  $P < 0.001$ ). This difference was also different about all compassionate care factors (Table 2).

**Table 2: Relationship between the importance of compassionate care and its providing in the viewpoint of patients**

Variables	Mean	Mean rank	Statistical test
Whole score of the questioner	Importance	163.52	$Z = 10.25$
	Providing	76.03	$*P < 0.001$
Meaningful connection	Importance	144.92	$Z = 9.27$
	Providing	76.65	$*P < 0.001$
Patient expectation	Importance	142.73	$Z = 9.55$
	Providing	73.74	$*P < 0.001$
Caring attributes	Importance	149.71	$Z = 8.98$
	Providing	87.47	$*P < 0.001$
Capable practitioner	Importance	132.83	$Z = 9.28$
	Providing	70.31	$*P < 0.001$

In viewpoints of female compassionate care was more important than male ( $Z = 2.149$ ,  $P = 0.032$ ), but they have a no different idea about providing

compassionate care by nurses ( $Z = 0.171$ ,  $P = 0.864$ ). Also the compassionate care was not related to a marital status, unit of hospitalisation. The people academic education level took more compassionate care than diploma and lower level ( $K2 = 9,727$ ,  $P = 0.008$ ) (Table 3).

**Table 3: Importance of compassionate care based on the demographic characteristics**

Variables	Mean	Mean rank	Statistical test
Gender	Male	142.37	$Z = 2.149$
	Female	164.74	$*P = 0.032$
Marital status	Married	154.40	$Z = 1.361$
	Single	138.59	$P = 0.173$
Unit of hospitalization	Internal	147.35	$Z = 0.643$
	Surgical	153.78	$P = 0.520$
Educational level	Under diploma	145.25	$F = 2.66$
	Diploma	163.40	$P = 0.263$
	Academic	145.59	

However, there was no correlation between age, duration of hospitalisation and number of hospitalisation with important and providing compassionate care (Table 4).

**Table 4: Providing compassionate care based on the demographic characteristics**

Variables	Mean	Mean rank	Statistical test
Gender	Male	151.15	$Z = 0.171$
	Female	149.37	$P = 0.864$
Marital status	Married	152.40	$Z = 0.663$
	Single	144.70	$P = 0.508$
Unit of hospitalization	Internal	148.28	$Z = 0.453$
	Surgical	152.81	$P = 0.651$
Educational level	Under diploma	159.91	$F = 9.72$
	Diploma	150.83	$P = 0.008$
	Academic	114.54	

There was no correlation between providing and importance of compassionate care with quantitative demographic variables (Table 5 and Table 6).

**Table 5: correlation between the importance of compassionate care and its factors with the variables of age, duration of hospitalisation and number of hospitalisations**

Variables	Age	Duration of hospitalisation	Number of hospitalisations
Importance of compassionate care	$R = 0.055$	$R = 0.022$	$R = 0.029$
	$P = 0.344$	$P = 0.706$	$P = 0.720$
Meaningful connection	$R = 0.074$	$R = 0.056$	$R = -0.022$
	$P = 0.201$	$P = 0.332$	$P = 0.779$
Patient expectation	$R = 0.020$	$R = 0.030$	$R = -0.086$
	$P = 0.726$	$P = 0.602$	$P = 0.267$
Caring attributes	$R = 0.012$	$R = 0.026$	$R = 0.054$
	$P = 0.841$	$P = 0.651$	$P = 0.485$
Capable practitioner	$R = 0.062$	$R = 0.066$	$R = -0.010$
	$P = 0.288$	$P = 0.254$	$P = 0.899$

**Table 6: Correlation between providing compassionate care and its factors with the variables of age, duration of hospitalisation and number of hospitalisations**

Variables	Age	Duration of hospitalisation	Number of hospitalisations
Providing of compassionate care	$R = -0.019$	$R = 0.080$	$R = 0.042$
	$P = 0.746$	$P = 0.169$	$P = 0.590$
Meaningful connection	$R = -0.018$	$R = 0.073$	$R = 0.045$
	$P = 0.760$	$P = 0.205$	$P = 0.566$
Patient expectation	$R = 0.022$	$R = 0.102$	$R = 0.052$
	$P = 0.706$	$P = 0.079$	$P = 0.506$
Caring attributes	$R = -0.064$	$R = 0.020$	$R = 0.057$
	$P = 0.267$	$P = 0.726$	$P = 0.461$
Capable practitioner	$R = 0.002$	$R = 0.039$	$R = -0.022$
	$P = 0.971$	$P = 0.501$	$P = 0.773$

## Discussion

The result showed compassionate nursing care from the viewpoint of patients hospitalised in educational hospitals in Kermanshah-Iran in 2017 was important ( $3.27 \pm 0.526$ ), and also the extent of providing compassionate nursing care was  $2.80 \pm 0.647$ .

The results showed that there was a significant difference between what was important for the patients' in terms of compassionate nursing care and what was provided to them. There was a significant difference between the mean score of importance and extent of providing compassionate nursing care in general and from the four subscales point of view – i.e. meaningful connection, patients' expectation, caring attributes, and capable practitioner. These findings indicate that the extent of providing compassionate nursing care was less than what was expected and desired by the patients. In other words, there was a difference between the expectations of the patients and actual compassionate nursing care provided to them. This is consistent with Modic (2016), Sinclair et al., (2016), Lown (2017) and Joolaei (2014) [22], [23], [24], [25].

The literature review showed that the nurses do not have comprehensive knowledge about their patients and their wants. In most of the cases, the patients' needs are not surveyed and fulfilled thoroughly [24], [26], [27]. Hajime had et al. reported a significant difference between nurses and patients in terms of their attitudes about nursing personnel's caring behaviours [28]. It is essential therefore for the nurses to pay attention to those aspects of care that are more important for patients. Lown (2010) reported that 50% of hospitalised patients in the USA stated that compassion is a missing part in care services [8]. An agreement between patients' expectations and nurses' interpretation of these expectations is the key point in providing proper cares.

In light of these, nurses need to see things (e.g. issues, concerns, disabilities) from the patient's eyes to make a nursing care program based on care priorities identified by patients and deal with concerns and disabilities of patients [20], [24], [29].

From the participants' point of view capable practitioner was the most important aspect and obtained the highest score of provision. Meaningful connection and caring attributes were the least and second least important and provided aspects respectively in terms of providing compassionate nursing care. These findings are consistent with Khademian, Hajinejad, and Wolf who reported that the patients found technical caring behaviours more important than emotional caring behaviours [28], [30], [31]. Palese et al. studied the importance of caring behaviours of nurses from the viewpoint of patients in internal and surgery wards in six European countries

and concluded that "knowledge and skill" were of the highest importance (most important caring behaviour) and "positive connection" was of the least importance [31]. Meanwhile many studies such as Meyer and Thing et al. showed that the attention to psychosocial aspects of care, especially the proper communication with patients, is more than the technical aspects of care, which leads to the satisfaction of patients [19], [32].

In the present study, the high importance and extent of provision of technical and physical aspects of cares by nurses from the patients' point of view might be explained by the fact that these aspects are more tangible and observable. In other words, these behaviours are more objective and easier to perceive by the patients. Additionally, the larger extent of providing these aspects might be due to stricter supervision of providing them comparing with the other humanistic aspects. Moreover, these aspects might be more important from the nurses and nurses' skills point of view [25], [33], [34].

Studies have shown that although nurses find compassionate nursing care a key part of their professional tasks, failure of the managers to emphasise on that part and omitting it in nursing performance evaluation have had a negative effect on this aspect of nurses' performance [25], [35]. As a result, compassion has become such an unimportant and trivial matter in the nursing profession that whether or not to observe it is a personal choice of nurses and a moral aspect [18]. The ability to combine tangible science (quantitative) with morality and spirituality in nursing care has become a serious challenge in the nursing profession [5].

The findings also showed that women put more emphasis on compassionate nursing care than men, while there was no difference between the patients based on a ward of hospitalisation and marital status. This finding is consistent with Brunel and Eagen (2013) who argued the importance of compassionate nursing care was higher for women compared with men [16]. This difference between men and women may be explained by the fact that women have the different emotional background and life experience from men so that women have different perception and attitude about compassionate nursing care and find it more important.

The extent of providing compassionate nursing care was significantly different based on education level so that the participants with a college degree experienced a lower level of compassionate nursing care. That is, the higher the education level, the higher the patient's expectation for quality cares, so that educated patients expect a larger opportunity to participate in the treatment process rather than being a mere patient. On the other hand, people with higher education level tend to have better social communication skills and access to information so that they have keener eyes for shortages and

imperfections of the system. As a result, this group of patients are harder to satisfy. This finding is consistent with Péfoyo (2013), Joulali (2014) and Kazemeini (2011) who mentioned that patients with higher education degree Perceived nursing care as lower quality [24], [36], [37].

In this study, a significant difference was found between the importance of compassionate caring from the patients' point of view and the extent of providing such services to patients. This hints the failure of nurses to pay adequate attention to this aspect of cares. Nurses need to see the patient's caring needs and expectations from the patient's point of view and pay more attention to the aspects that are more important for the patients. Through this, they can better help the patients with their concerns and disabilities. Paying more attention to compassionate nursing care in nursing textbooks is recommended, and the nurses should receive in-service educations in this regard. There is a need for further qualitative and quantitative research works on compassionate care in the personnel of different fields of health cares, patients in intensive wards, and family members of patients.

## Ethics Approval and Consent to Participate

The study is confirmed by the research ethics committee of the University of Social Welfare and Rehabilitation

## Consent for Publication

All the authors and the University of Social Welfare and Rehabilitation consented to publish the study in your journal

## Availability of Data and Material

Data available by contacting the corresponding author

## Authors' Contributions

AD, AS, AVR, KN, AE and MR made the

conceptual work and the designing of study, AVR and participated in data collection, and data analysed by AVR, AD and MR. The final report and article were written, read and approved by all the authors

## Acknowledgement

This paper is part of a PhD dissertation in nursing approved by University of Social Welfare and Rehabilitation Sciences, and its Research Ethics Committee, the authors wish to thank the officials of nursing and midwifery school or University of Social Welfare and Rehabilitation Sciences and Kermanshah University of Medical Sciences for supporting the research plan and the patients who took part in the study for their contribution.

## References

- Papadopoulos I, Ali S. Measuring compassion in nurses and other healthcare professionals: An integrative review. *Nurse education in practice*. 2015. PMID:26302648
- DeSteno D. Compassion and altruism: how our minds determine who is worthy of help. *Current opinion in behavioral sciences*. 2015; 3:80-3. <https://doi.org/10.1016/j.cobeha.2015.02.002>
- Brown SJ. Evidence-based nursing: The research-practice connection: Jones & Bartlett Publishers; 2013.
- Papadopoulos I, Shea S, Taylor G, Pezzella A, Foley L. Developing tools to promote culturally competent compassion, courage, and intercultural communication in healthcare. *Journal of Compassionate Health Care*. 2016; 3(1):1. <https://doi.org/10.1186/s40639-016-0019-6>
- Young AA. Exploring the concept of compassion in nursing: A qualitative study: PhD Thesis. Precott Valley, Arizona, Marc; 2015.
- Archer KR, Castillo RC, Wegener ST, Abraham CM, Obrensky WT. Pain and satisfaction in hospitalized trauma patients: the importance of self-efficacy and psychological distress. *Journal of Trauma and Acute Care Surgery*. 2012; 72(4):1068-77. <https://doi.org/10.1097/TA.0b013e3182452df5> PMID:22491629
- Papastavrou E, Andreou P, Tsangari H, Merkouris A. Linking patient satisfaction with nursing care: the case of care rationing-a correlational study. *BMC nursing*. 2014; 13(1):26. <https://doi.org/10.1186/1472-6955-13-26> PMID:25285040 PMID:PMC4184047
- Lown BA, Rosen J, Marttila J. An agenda for improving compassionate care: a survey shows about half of patients say such care is missing. *Health Affairs*. 2011; 30(9):1772-8. <https://doi.org/10.1377/hlthaff.2011.0539> PMID:21900669
- Youngson R. Compassion in Healthcare: the missing dimension of healthcare reform. *Caregiver stress and staff support in illness, dying, and bereavement*. 2011:49-61.
- Dewar B, Cook F. Developing compassion through a relationship centred appreciative leadership programme. *Nurse education today*. 2014; 34(9):1258-64. <https://doi.org/10.1016/j.nedt.2013.12.012> PMID:24461906
- Burnell L. Compassionate care: the patient perspective San Diego: University of San Diego, 2011.

12. Papadopoulos I, Taylor G, Ali S, Aagard M, Akman O, Alpers L-M, et al. Exploring Nurses' Meaning and Experiences of Compassion An International Online Survey Involving 15 Countries. *Journal of Transcultural Nursing*. 2015;1043659615624740.
13. van der Cingel CJM. Compassion in care: A qualitative study of older people with a chronic disease and nurses. *Nursing Ethics*. 2011;0969733011403556. <https://doi.org/10.1177/0969733011403556>
14. Perry B, Berry L. Conveying compassion through attention to the essential ordinary. *Nursing Older People (through 2013)*. 2009; 21(6):14. <https://doi.org/10.7748/nop2009.07.21.6.14.c7137> PMID:19650538
15. Meyer RM, Li A, Klaristenfeld J, Gold JI. Pediatric novice nurses: examining compassion fatigue as a mediator between stress exposure and compassion satisfaction, burnout, and job satisfaction. *Journal of pediatric nursing*. 2015; 30(1):174-83. <https://doi.org/10.1016/j.pedn.2013.12.008> PMID:24444742
16. Burnell L, Agan DL. Compassionate care: Can it be defined and measured? The development of the Compassionate Care Assessment Tool. *Int J Soc Res Methodol*. 2013; 6(2):180-7.
17. McCabe C. Nurse-patient communication: an exploration of patients' experiences. *Journal of clinical nursing*. 2004; 13(1):41-9. <https://doi.org/10.1111/j.1365-2702.2004.00817.x> PMID:14687292
18. Schantz ML, editor *Compassion: a concept analysis*. Nursing forum; 2007: Wiley Online Library, 2007. PMID:PMC1766347
19. Mayer DK. Oncology nurses' versus cancer patients' perceptions of nurse caring behaviors: a replication study. *Caring in Nursing Classics: An Essential Resource*. 2012; 299.
20. Zamanzadeh V, Valizadeh L, Rahmani A, van der Cingel M, Ghafourifard M. Factors facilitating nurses to deliver compassionate care: a qualitative study. *Scandinavian journal of caring sciences*. 2018; 32(1):92-7. <https://doi.org/10.1111/scs.12434> PMID:28156018
21. Granger BB, Moser D, Germino B, Harrell J, Ekman I. Caring for patients with chronic heart failure: The trajectory model. *European Journal of Cardiovascular Nursing*. 2006; 5(3):222-7. <https://doi.org/10.1016/j.ejcnurse.2006.02.001> PMID:16616643
22. Modic MB, Siedlecki SL, Griffin MTQ, Fitzpatrick JJ. Caring Behaviors: Perceptions of Acute-Care Nurses and Hospitalized Patients With Diabetes. *International Journal for Human Caring*. 2016; 20(3):160-4. <https://doi.org/10.20467/1091-5710.20.3.160>
23. Sinclair S, Russell LB, Hack TF, Kondejewski J, Sawatzky R. Measuring compassion in healthcare: a comprehensive and critical review. *The Patient-Patient-Centered Outcomes Research*. 2017; 10(4):389-405. <https://doi.org/10.1007/s40271-016-0209-5> PMID:27866323
24. Joolae S, Rasti F, Ghiyasvandian S, Haghani H. Patients' perceptions of caring behaviors in oncology settings. 2014.
25. Lown BA, Dunne H, Muncer SJ, Chadwick R. How important is compassionate healthcare to you? A comparison of the perceptions of people in the United States and Ireland. *Journal of Research in Nursing*. 2017; 22(1-2):60-9. <https://doi.org/10.1177/1744987116679692>
26. Henderson A, Jones J. Developing and maintaining compassionate care in nursing. *Nursing Standard (2014+)*. 2017; 32(4):60. <https://doi.org/10.7748/ns.2017.e10895> PMID:29094531
27. Blomberg K, Griffiths P, Wengström Y, May C, Bridges J. Interventions for compassionate nursing care: A systematic review. *International journal of nursing studies*. 2016; 62:137-55. <https://doi.org/10.1016/j.ijnurstu.2016.07.009> PMID:27494429
28. Hajinezhad ME, Azodi P, Rafii F, Ramezani N, Tarighat M. Perspectives of patients and nurses on caring behaviors of nurses. *Journal of hayat*. 2012; 17(4):36-45.
29. van der Cingel M. Compassion: The missing link in quality of care. *Nurse education today*. 2014; 34(9):1253-7. <https://doi.org/10.1016/j.nedt.2014.04.003> PMID:24856582
30. Khademian Z VF. Nursing students' perceptions of the importance of caring behaviors. *J Adv Nurs*. 2007; 61(4):456-62. <https://doi.org/10.1111/j.1365-2648.2007.04509.x> PMID:18234042
31. Palese A, Tomietto M, Suhonen R, Efsthathiou G, Tsangari H, Merkouris A, et al. Surgical patient satisfaction as an outcome of nurses' caring behaviors: a descriptive and correlational study in six European countries. *Journal of Nursing Scholarship*. 2011; 43(4):341-50. <https://doi.org/10.1111/j.1547-5069.2011.01413.x> PMID:21981580
32. Teng C-I, Hsu K-H, Chien R-C, Chang H-Y. Influence of personality on care quality of hospital nurses. *Journal of nursing care quality*. 2007; 22(4):358-64. <https://doi.org/10.1097/01.NCQ.0000290418.35016.0c> PMID:17873734
33. Jones J, Winch S, Strube P, Mitchell M, Henderson A. Delivering compassionate care in intensive care units: nurses' perceptions of enablers and barriers. *Journal of advanced nursing*. 2016; 72(12):3137-46. <https://doi.org/10.1111/jan.13064> PMID:27398943
34. BurrIDGE LH, Winch S, Kay M, Henderson A. Building compassion literacy: Enabling care in primary health care nursing. *Collegian*. 2017; 24(1):85-91. <https://doi.org/10.1016/j.colegn.2015.09.004> PMID:29218966
35. Peyrovi H, Bahadori A, Ashghali-Farahani M, Haghani H. Comparison of in-patients' satisfaction with different domains of nursing care. *Quarterly Journal of Nursing Management*. 2013; 2(1):59-66.
36. Péfoyo AJK, Wodchis WP. Organizational performance impacting patient satisfaction in Ontario hospitals: a multilevel analysis. *BMC research notes*. 2013; 6(1):509. <https://doi.org/10.1186/1756-0500-6-509> PMID:24304888 PMID:PMC3867627
37. Kazemeini S, Mohammadi F, Owlia F. Evaluation of satisfaction rate of patients admitted to Yazd Shaheed Sadoughi burn hospital in first nine months of the year 2011. *TB*. 2013; 11(4):91-102.