

# The Relationship Between Nurses' Perceptions of Caring Behaviors based on Watson's Theory and of Professional Ethics: A Cross-Sectional Study

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## Research article

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# Abstract

**Background and purpose:** Caring is a central concept in nursing. It is essential that nurses adhere to ethics toward improving the quality of their performance as nurses. This study aims to explore the relationship between nurses' perceptions of caring behaviors and of nursing professional ethics.

**Methods:** 210 nurses from hospitals in Shiraz, Iran, participated in this cross-sectional study. The participants were selected via stratified random sampling. The data collection tool consisted of demographics, Watson's caring dimensions inventory, and Petty's work ethics scale. The collected data were analyzed in SPSS v. 25 using descriptive and analytical statistics.

**Results:** There was not a statistically significant relationship between the nurses' demographics on the one hand and their perceptions of caring behaviors or of nursing professional ethics on the other. The mean of the participants' perception of caring behaviors scores was  $142.49 \pm 10.71$  and the mean of their professional ethics scores was  $102.21 \pm 5.32$ . A significant positive correlation was found to exist between the two variables under study ( $P < 0.001$ ,  $r = 0.46$ ).

**Conclusion:** There is a positive correlation between nurses' perceptions of caring behaviors and of professional ethics. This finding can be used by nursing administrators and policy-makers to design interventions to improve the quality of nursing care.

## Background & Purpose

Over the past decades, the concept of caring has been the subject of many theories and much research(1). Caring is defined as guided measure taken to help, support, and empower individuals with obvious and predictable needs. Without caring, curing and healing cannot be realized(2). Patients who feel cared for experience higher levels of satisfaction, psychological adaptation, and adherence to regimen(3). As a central and uniform concept, caring distinguishes nursing from other healthcare-related professions(4). According to Leininger (1988), caring behaviors are characterized by soothing, sympathizing, showing compassion, and sharing(5).

In the last two decades of the 20th century, it was argued that caring was the essence of nursing(6). Leininger (1977) was the first person to present caring as the essence of nursing and a mental, theoretical, exploratory, and practical framework for it(7). After her, Watson (1985) described nursing as a combination of the art and science of caring(6). Benner and Wrubel (1989) refer to caring as the main form of being in the universe(8). Newman (1991) defines nursing as the study of caring in relation to mankind's experience of health(9). According to Smith (1994), nursing is the study of human health and being cured through care(6).

As the outcome of care, caring behaviors are affected by patients and their families, nurses, organizations, and societies(1). One's understanding of care has a direct impact on his/her work behaviors for different individuals have different perceptions, characteristics, needs, interactions, and perspectives on life(10). Since, compared to other members of healthcare teams, nurses spend the most time with patients, an understanding of their perception of caring behaviors is essential(11). Furthermore, an understanding of the factors involved in caring behaviors can help improve the quality of care. By obtaining a better comprehension of the physical aspects of caregiving behaviors, nurses can better identify patients' needs and establish a more effective relationship with patients(12). Hence the need for studying nurses' perception of caregiving behaviors.

On the other hand, care is the kernel of such professional values as compassion, kindness, and the ability to respond to others' pain, stress, anxiety, and needs(13), all of which are rooted in nurses' professional ethics. Professional ethics are closely related to holistic care, but, despite their obvious significance, have often been neglected in nursing science (14). Many studies report nurses' observance of professional ethics to be unsatisfactory(15). According to a study in Iran, when nurses fail to respect ethical values, negative consequences, including nurses' distancing themselves from patients and indifference to providing ethical care, follow(16). Professional ethics are vital to meeting the challenges which arise from constant changes in healthcare systems and societies(14). As professional values affect individuals' attitudes to their jobs and can be used to improve the quality of care, they deserve special attention for personal and organizational growth to happen(17). Thus, it is necessary that the topic of professional ethics of care in nursing be studied in depth.

Among the existing care theories, Watson's theory seeks to deepen our understanding of the universe, ethics, and human-centered aspects of care as well as our awareness of ourselves, others, and the system(18). The theory of human caring and relationship-centered care is a main plank in the ethics of care: the idea of a human caring for a human lie at the center of the responsibilities and roles of professional nurses and forms the ethical basis of the profession(5). Watson believes that education and the distribution system in healthcare must be according to human values and respect for others' welfare(5, 19). This belief system emphasizes the human components of caring and continuous interaction between the caregiver and care-receiver. The main concept of this theory is that humans are not to be treated as objects and that they cannot be considered in isolation from themselves, others, nature, and the larger workforce. She clearly rejects mechanical and reductionist perspectives on life in favor of the human science perspective(19,20). The present study aims to explore the relationship between nurses' perceptions of caring behaviors based on Watson's theory and of their professional ethics. A study of these two variables and the possible relationship between them can pave the way for planning interventions in the future toward improving nurses' perceptions of caring behaviors and the code of ethics for nurses, thereby improving the quality of care which will benefit patients and help the advancement of nursing.

## Material And Methods

The present study is a cross-sectional work conducted on 210 nurses practicing in hospitals affiliated with Shiraz University of Medical Science, located in Shiraz, the largest city in the south of Iran, in 2019. The participants were selected via stratified random sampling. Sample size was determined according to the results of similar studies (21) and the following sample size formula in which  $r = 0.192$  at a confidence level of 0.95 and the power of 0.8 in MedCalc. The result was 210 subjects.

Confidence interval for correlation coefficient  $\rightarrow \infty = \frac{1}{2} \ln \frac{1+r}{1-r}$

$$n = (Z_{1-\alpha/2} + Z_{1-\beta})^2 + 3$$

$$\omega^2$$

The inclusion criteria were being in practice as a clinical nurse, having at least a bachelor's degree in nursing, and being willing to participate in the study. The nurses who refused to provide an answer in interviews or completed their questionnaires imperfectly were excluded.

Data were collected using a demographics form, the caring dimensions inventory (CDI-35), and Petty's work ethic scale. The demographics form addressed age, gender, marital status, work experience, and academic degree. The scale for evaluation of nursing students' caring behaviors was developed by Watson et al. in 2001. It consists of 35 items on a 5-point Likert scale ("Completely agree" to "Completely disagree") with the score range of 35 to 175. The content validity of the scale has been verified by Watson et al. Its inter-rater reliability and internal consistency are 0.67 and 0.91 respectively. In the study of Zareh Hoshyari et al., the validity of the back-translated version of the questionnaire is verified by 10 nursing experts and its reliability is confirmed with a Cronbach's alpha of 0.91 (22, 23).

The nurses' perception of professional ethics was measured using Petty's standardized work ethic scale which has 4 dimensions: interest in work (6 items), perseverance at work (6 items), human relations at work (5 items), and participation in work (6 items). This questionnaire is scored on a 5-point Likert scale ("Completely disagree" to "Completely agree") with the score range of -23 to 115. Its content validity has been verified by a panel of experts and its construct validity has been tested and confirmed with confirmatory factor analysis. A total Cronbach's alpha of 0.96 indicates that the scale possesses satisfactory internal consistency—for each dimension, the Cronbach's alpha is 0.85, 0.79, 0.87, and 0.74 respectively (24–26).

The collected data were entered into SPSS v. 25 and analyzed using descriptive (mean and frequency distribution) and analytical (correlation coefficient and independent t-test) statistics at a significance level of 0.05.

## Results

210 nurses participated in the present study. The majority of the participants were female (156 people = 74.3%), married (129 people = 61.4%), and had a bachelor's degree (189 people = 90%). The average age

and work experience of the nurses were  $31.11 \pm 6.74$  and  $7.46 \pm 5.89$  years respectively. The values of Pearson's correlation coefficient for the quantitative variables and Spearman's correlation coefficient for the qualitative variables showed that there was not a significant correlation between the nurses' demographics on the one hand and their perceptions of caring behaviors or of professional ethics on the other (Table 1).

Table 1  
Correlation between the participants' demographic variables and perceptions of caring behaviors and professional ethics

<b>Variables</b>	<b>Perception of caring</b>	<b>Professional ethics</b>
*Age	r = 0.014 P = 0.842	r = 0.047 P = 0.501
*Work experience (years)	r = - 0.049 P = 0.480	r = - 0.02 P = 0.777
**Gender	r = 0.122 P = 0.078	r = - 0.055 P = 0.425
**Marital status	r = - 0.96 P = 0.165	r = - 0.043 P = 0.538
**Academic level	r = - 0.008 P = 0.912	r = - 0.003 P = 0.965
*Pearson correlation coefficient was used. Significance level was 0.01.		
**Spearman correlation coefficient was used. Significance level was 0.01.		

The results of the independent t-test showed that there was not a significant difference between the participants' perception of caring behaviors and professional ethics mean scores in terms of gender, marital status, and education (Table 2).

Table 2  
The participants' perceptions of caring behaviors and professional ethics mean scores according to their demographics

Demographics		Perception of caring	Professional ethics
Gender	Male	140.24 ± 10.31	102.61 ± 12.34
	Female	143.28 ± 10.76	102.07 ± 10.38
	p-value	0.072	0.757
Marital status	Single	143.70 ± 12.37	101.91 ± 13.01
	Married	141.73 ± 9.48	102.40 ± 9.37
	p-value	0.196	0.752
Education	Bachelor	142.49 ± 10.91	102.31 ± 10.60
	Master	142.52 ± 8.89	101.28 ± 13.48
	p-value	0.991	0.682
Independent t-test was used. Significance level was 0.05.			

Table 3 shows the means of the participants' perceptions of caring behaviors and professional ethics scores along with the dimensions of work ethics.

Table 3  
The means of the participants' perception of caring behaviors and perception of professional ethics

Variable	Mean	SD
Perceptions of caring	142.49	10.71
Professional ethics	102.21	5.32
Interest in Work	24.46	3.11
Perseverance at work	27.41	2.30
Human Relations at Work	23.00	3.03
Work participation	27.32	10.89

As the variables were quantitative in nature and considering the sample size, the relationship between perception of caring behaviors and perception of professional ethics was analyzed using the Pearson correlation coefficient test. The results showed that there is a statistically significant positive correlation between perception of caring behaviors on the one hand and perception of professional ethics and its dimensions on the other (Table 4).

Table 4

Correlation between the participants' perception of caring behaviors and their perception of professional ethics

	Professional ethics	Interest in work	Perseverance at work	Human relations at work	Work participation
Perception of caring	r = 0.46 P < 0.001	r = 0.218 P = 0.002	r = 0.436 P < 0.001	r = 0.458 P < 0.001	r = 0.471 P < 0.001
Pearson correlation coefficient was used. Significance level was 0.01.					

## Discussion

The results of the present study show that nurses' demographics, including age, gender, work experience, marital status, and education, do not correlate with their perceptions of caring behaviors and of professional ethics. Also, there was not a statistically significant difference between the participants' perceptions of caring behaviors and professional ethics mean scores according to gender, marital status, and education (Table 2). These findings are consistent with the results of many other studies. In a study in Iran, except for age, none of the demographic variables under study correlate with the medical staff's adherence to code of ethics (27). In another study in Iran, the results do not show a correlation between nursing students' age and academic semester on the one hand and awareness of professional ethics on the other (28). However, according to a review study in Finland, age, gender, and work experience correlate with nurses' respect for professional ethics (14).

With regard to the existence of a correlation between nurses' demographics and their perception of caring behaviors, a study on Indonesian nurses reports that the correlation between the subjects' age, gender, education, and clinical experience on the one hand and perception of caring behaviors on the other is not significant (29). Similarly, a study in Slovenia shows that the care factors in Watson's theory do not have a significant correlation with nurses' education (30). Yet, according to a study conducted in an Iranian city, marital status is a predictor of caring behaviors (31). These inconsistencies in research findings about the existence of a relationship between nurses' demographics on the one hand and their perceptions of professional ethics or of caring behaviors on the other underline the need for more research in this area.

The results of the present study show that nurses' perceptions of caring behaviors and professional ethics are relatively satisfactory. A study on nurses selected from 4 hospitals in an Iranian city reports the subjects' caring behaviors mean score to be very satisfactory (31). According to another study in Iran, from the perspective of patients hospitalized in oncology units, nurses' caring behaviors are very satisfactory (32). With regard to professional ethics, a study on 210 inpatients in Iran shows nurses' adherence to code of ethics for nurses to be satisfactory, which is consistent with the findings of the present study (33). However, a study in Gambia reports nurses' respect for ethical values to be inadequate and that nurses do not comply with code of ethics in that country (15). The majority of nurses rate their perception of caring behaviors or their caring behaviors and observance of professional ethics as

satisfactory; however, these variables need to be studied from the perspectives of other groups, including patients, colleagues, and other members of healthcare teams, for richer data to be obtained.

According to the results of the present study, there is a relatively significant positive correlation between nurses' perception of caring behaviors and their perception of professional ethics. A review of the available literature did not yield any studies which address the relationship between nurses' perceptions of caring behaviors and of professional ethics. Yet, the results of a study on intensive care unit nurses in Iran shows that, contrary to the findings of the present study, there is not a correlation between nurses' ethical sensitivity and caring behaviors (34).

Based on Watson's theory, caring is a core idea and ethical ideal in nursing which seeks to protect, support, and empower humans (35,36). In a review study, Woods states that the concepts "caring", "nursing", and "ethics of care" have always been inseparable and that nurses' professional practice is recognized by their ethical commitment (37). According to Lachman, when an individual decides to become a nurse, he/she is making an ethical commitment to care for patients. Caring can be regarded as exclusively an ethical act; consequently, caring can be seen as a duty. Also, caring can be regarded as a commitment to be present and a passion for becoming involved in patients' needs (38). Many studies make references to the relationship between caring and ethics. In some of them, ethics is introduced as the outcome of caring, and in others, caring is introduced as the outcome of ethics. The present study only focuses on the linear relationship between the two. In view of the significance of caring behaviors and professional ethics in the nursing profession, it is vital that these concepts be studied more deeply.

One of the limitations of the study is that the questionnaires were completed on a self-report basis, which could have created bias in the results. Therefore, the participants were assured that all information was confidential and that their responses would not have any impact on evaluation of their professional performance. They were reminded that the questionnaires had to be completed honestly and accurately.

## **Conclusion**

The results of the present study show that there is a relatively significant positive correlation between nurses' perception of caring behaviors and their perception of professional ethics. As the largest group of care-providers in healthcare teams, nurses can, by increasing their awareness of ethics and adherence to the code of professional ethics, provide holistic care to patients and their families. Accordingly, it is necessary that nursing administrators and policy-makers pay special attention to the concepts of caring behaviors and professional ethics and, by designing educational programs, encourage adherence to ethical principles in nursing schools to improve the quality of care. They should also design interventions to raise nurses' awareness of caring behaviors and professional ethics, thereby helping the advancement of the nursing profession. It is recommended that future studies explore other factors which may affect these variables.

## **Declarations**

# Declarations

## Ethics approval and consent to participate

Before completing the questionnaires, the nurses were informed about the objectives of the study, the voluntary nature of their participation, their anonymity, and confidentiality of their information. All the participants signed the written informed consent form. The study has been approved by the ethics committee at the research department of Shiraz University of Medical Sciences under the registration number IR.SUMS.REC.1398.1086. The researchers complied with the Helsinki Statement (2010) and COPE (2018).

## Consent for publication

Not applicable.

## Availability of data and materials

The datasets used and analysed during the current study are available from the corresponding author on reasonable request.

## Competing interests

The authors declare that they have no competing interests.

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## Authors' Contribution

All authors participated in designing the study, drafting the first manuscript, revising, and approving the final manuscript. Acquisition of data: NH, MT, Analysis and interpretation of data: all authors; critical revision of the manuscript for important intellectual content: CT; statistical analysis: NH, MT; Administrative, technical, and material support: CT; and Study supervision: CT.

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