

**Research Article**

**Process of care behaviors of first to fourth year nursing  
students based on Watson Human Care theory**

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**ABSTRACT**

**Background and Aim:** Post-graduate nurses take on vital responsibilities and play an important role in achieving the goals of the health system. Although they agree that care is a central concept of nursing, attention to this concept is very small and even diminishing. The purpose of this study was compare study of the change process in perception of care behaviors of first to fourth year nursing students based on Watson's care model.

**Methods:** In this descriptive epidemiological study, the level of perception of care behaviors of all nursing students from the first to fourth year, was analyzed using the CDI-35 tool.

**Results:** The highest levels of understanding of care behaviors have beentechnical-professional, intimacy and supportive dimensions. There was a significant relationship with the academic year and the technical-vocational, intimacy and supportive areas respectively( $p < 0.005$ ).

**Conclusion:** The care behaviors that the student presents in the care setting should be strengthened and developed, which depends on the identification of the instructors in creating an appropriate learning environment. In order to achieve this, a fundamental change in thought and practice of nursing education In order to be valued, it will be in the very concept of care.

**KEYWORDS:** Care Behavior, Nursing Students, Human Care Theory

**INTRODUCTION**

Care is a complex and completely mental concept, but there is an agreement on this issue that it forms the essence of the nursing work (1). It is estimated that more than half of the health services represents the care, and the remainder represents treatment, and more emphasis needs to be placed on care (2).

Currently, there are cited theories about nursing care that Watson's human care theory is one of the most important and most complete. This nursing theorist has expanded the concept of care with considering all its scientific, human

and empirical dimensions, and is currently considered in many nursing schools in the world and is the basis of many studies on nursing care experiences and patients in different areas. Research based on this theory suggests that behaviors and what is said to be care for people have different meanings, but there are common principles that should be considered in nursing students' acquaintance with the concept of care (3-5). This theory emphasizes care as a nursing focus, and sees it as a moral ideal in nursing that tries to protect and sustain the high human being

in the patient. The goal of nursing is helping people achieve a higher degree of harmony between mind, body and soul. This nursing goal is achieved through human-to-human care processes and interactions (6).

Nurses are the largest care provider group and play an important role in achieving the goals of the health system (7). Although they agree that care is the central concept of nursing, but attention to this concept is very low and even decreasing. . For Watson, the role of human care is threatened by increased medical technology and organizational bureaucratic management structures (8).

Nurses are responsible for critical care after the end of the course (9), and since the most basic part of nursing education is clinical education (10), so the most ideal place for student education and learning, is clinical environment (11) which provides a good opportunity for professional student authentication. Therefore, only having knowledge of professional nursing care is not enough (12). In nursing students' internship, by developing analysis and critical thinking skills, competence and mastery, communication, and increased self-esteem, they can shape professional abilities(13) to prepare themselves to enter the work environment by gaining professional capabilities; (14) enhancing the level of such interactions is effective in achieving better qualitative results of care behaviors and contributes to the improvement of the quality of nursing care (15). Turkish nursing students thought in a qualitative study that care was a technical competence and a professional relationship, and respect, compassion, communication with the patient, comfort, interest and attention were the main subjects (16)

Considering that the familiarity of nursing students with the noble and valuable concept of human care is an important mission of nursing educators (6), the students' weaknesses and strengths can be assessed by examining the perception of care behaviors from the students' point of view during the process of patient care in a clinical setting and can develop their clinical skills by strengthening their strengths and removing their weaknesses (17). Since

knowing nurses' perceptions of care behaviors is an essential step in correcting inappropriate behaviors and improving the quality of nursing cares, they should pay attention to the importance of nurses' function and their clinical competence and so the role they play in protecting human lives should be considered. To creating positive changes and enhancement of care process during studying, the role of education on their care behavior should also be examined (18). The purpose of this study was to compare the change process in perception of care behaviors of first to fourth year nursing students based on Watson's care model.

## METHOD

This study is a descriptive epidemiologic type. The research population was all nursing students of Abadan Faculty of Medical Sciences. The criteria for entry into the study was to pass at least one internship unit in the public sectors (medical-surgical) and satisfaction to participate in the research. The implementation of this study was conducted during a semester and the sampling was conducted in a census. Having obtained the necessary permissions from the deputy of the faculty of education, the importance of implementing this study and applying its results to improving the quality of nursing care and advancing clinical competencies for the research units was comprehensively explained and oral and written consent letter was taken from all the participating units. Data collection in this study was done by completing a questionnaire to assess the student's understanding after the internship period. Data gathering tools in this study included 2 instruments: A) Nursing students' demographic information questionnaire including age, sex, education term, marital status and permanent residence

B) The final edited version (CDI-35) was to measure the understanding of student care behaviors. This tool was re-edited by Watson et al after making the initial CDI-25 tool (2001 and 1999). And has 35 items of nursing practices that measure participants' perceptions of their care activities with 5-point Likert scale and measure the perception of care providers in a wide range

of nursing experts, nursing and non-nursing students ( Watson 1999 and 2003) and is usable in different clinical and specialized environments (Watson 2003). The tool has 35 items in 5 categories that include;

- Professional / technical field (14 items) that shows the professional and technical view of nursing.
- Intimacy field (10 items) that shows the closeness and intimacy of nurse with the patient.
- (Psychological) support field (2 items) shows the spiritual issues of the patient.
- Nursing inappropriate area (5 items): aspects of care that are not expected from a balanced nurse in this area.

- Unnecessary nursing area (Necessary) (4 items): Nursing activities that are not priority and initially not necessary.

Responses from contributors in the 5-point Likert scale from totally agree (score 5), I'm relatively agreement (score 4), neither agree nor disagree (score 3), relatively disagree (score 2), to totally disagree (score 1). Negative items direction (inappropriate items include items of 16, 24, 26, 27, 29), will be reversed in the statistical coding analysis. Content validity and scientific validity of the tool have already been confirmed by Watson et al. (1997) and Lee et al. (1998). Reliability among tool respondents 0.67 and tool internal correlation have been 0.91. Cronbach's alpha was calculated to be 0.91 in the study of HoshyariKhah and colleagues (17).

**RESULTS:**

Demographic information includes: age, sex, marital status, housing, and work area, the results are presented in Table 1. The mean age of the participants in the study is 21.67 ± 2.0296.

**Table 1:** Descriptive statistics of demographic variables

|                |          | Frequency | Frequency% |
|----------------|----------|-----------|------------|
| sex            | Female   | 89        | 65         |
|                | Man      | 48        | 35         |
| Marital status | Single   | 120       | 87.6       |
|                | Married  | 17        | 12.4       |
| Residence      | city     | 128       | 93.4       |
|                | Village  | 9         | 6/6        |
| Section        | Interior | 51        | 37.2       |
|                | Surgery  | 66        | 48.2       |
|                | Children | 4         | 2.9        |
|                | ER       | 16        | 11.7       |

Also, comparing the dimensions of care behavior (technical / professional care, intimacy care, supportive care, unnecessary care and inadequate care) from the first, second, third, and fourth year students' viewpoints are presented in Table 2. Due to the sample distribution being normal or not, the appropriate test (ANOVA or Kruskal-Wallis) are used.

**Table 2:** Comparison of care behavior areas from the first to the fourth years students' point of view

| Variable classification level   | Mean        | standard deviation | statistics | freedom degree | significance |       |
|---------------------------------|-------------|--------------------|------------|----------------|--------------|-------|
| Technical / professional care * | First year  | 62.6667            | 6.07591    | 4.333          | 3            | 0.006 |
|                                 | Second year | 59.6750            | 6.78757    |                |              |       |
|                                 | Third Year  | 59.8889            | 4.59375    |                |              |       |
|                                 | Fourth year | 57.0833            | 7.42727    |                |              |       |

|                    |             |         |         |        |   |       |
|--------------------|-------------|---------|---------|--------|---|-------|
| Intimacy care      | First year  | 46.5758 | 8.06625 |        |   |       |
|                    | Second year | 44.5500 | 7.28873 | 16.939 | 3 | 0.001 |
|                    | Third year  | 43.4400 | 4.04228 |        |   |       |
|                    | Fourth year | 40.9444 | 5.00254 |        |   |       |
| Supportive care    |             |         |         |        |   |       |
|                    | First year  | 8.4242  | 1.45839 |        |   |       |
|                    | Second year | 7.8500  | 1.52836 | 13.725 | 3 | 0.003 |
|                    | Third year  | 7.3704  | 1.30526 |        |   |       |
|                    | Fourth year | 6.9459  | 2.02685 |        |   |       |
| Unnecessary care   |             |         |         |        |   |       |
|                    | First year  | 14.4545 | 2.87327 |        |   |       |
|                    | Second year | 14.2250 | 3.36260 | 1.525  | 3 | 0.676 |
|                    | Third year  | 13.6667 | 3.16228 |        |   |       |
|                    | Fourth year | 14.5946 | 6.84941 |        |   |       |
| Inappropriate care |             |         |         |        |   |       |
|                    | First year  | 13.5152 | 3.64967 |        |   |       |
|                    | Second year | 13.7000 | 3.68086 | 1.428  | 3 | 0.699 |
|                    | Third year  | 14.3704 | 3.09028 |        |   |       |
|                    | Fourth year | 14.2703 | 4.58651 |        |   |       |

## DISCUSSION AND CONCLUSION

Considering the importance of caring behaviors in the quality of cares and its consequences, as well as considering the role of training caring behaviors in educational planning in the theoretical and clinical courses of nursing in Iran and its role in achieving this Important issue, this study aimed to investigate the process of changing and describing the level of caring behavior of nursing students for care.

The results of the analysis of the areas of care behavior showed that the highest levels of perception of caring behaviors in the first to fourth year students were technical-professional, intimacy and supportive dimension, respectively. Khouri, Sachitra and Lakshmi and HoshyariKhah were also agree upon promoting professional technical dimension of care behaviors after education (17, 19, 20). The study of Lak Dizji et al also showed that behaviors related to the technical-professional field were more prioritized by students (14). It seems that the reason for this finding is more concern for students regarding the physical problems of

patients. It can also be rooted in nursing education, too much importance for physical care by the instructors and hospital department staff during and after education has a great impact on the performance of students at the patient's bedside. On the other hand, the students themselves seek to meet the needs of the patients and they are satisfied with helping patients and improving the outcomes of patient care and have a greater sense of independence as a contributor. Of course, Watson believes that, given the pyramid of human needs, achieving primary needs should be considered before the needs of higher classes. In addition to the above mentioned studies in the field of priority of professional technical field, Rafiee and Julae also emphasized the support field after professional- technical and intimacy fields (22,21).

According to the findings of the research, there is a significant relationship with the academic year and the technical-professional, intimacy and supportive areas in order of priority ( $p < 0.005$ ). As n all three areas, first-year students

have a higher average, and this trend has declined by the fourth year. There are some studies that show a significant relationship between caring behaviors and the academic year (23.5) but also Nik Farid and colleagues have violated this difference (6). Given the fact that caring behaviors include different parts of nursing knowledge of theory and practice, as well as changing students' attitudes over a 4-year period, the existence of this difference seems logical. In the study of Rafiee et al, which examines the care behaviors of first year students, it has been shown that inexperienced students are more concerned with interpersonal and emotional aspects of care while this problem has been less experienced in nursing students. (16). Of course, it is more likely that the main reason for changing the perception of students about the importance of caring behaviors is changing that change their perspective on the true concept of nursing profession and the perception of nursing students of care behaviors based on culture and type of education and teaching method in other societies is different (24). In the author's and his colleagues' research, knowledge and willingness to learn if nursing students are the main factors in their perception of the importance of care behaviors (18). From Beck's point of view, time, interaction, and communication were the most valuable variables for students to learn care experiences (25). Therefore, it can be concluded that nursing students had paid more attention into the physical aspects of care more than emotional dimension, which indicates that students should pay much attention to other needs when caring for patients, as in the Brunton & Beaman) study, focuses on some of the emotional aspects of care such as taking in to consideration the patient as a human being, respecting the patient, being sensitive to patient statue, being honest with patient, talking and listening to the patient, and protecting the patient's privacy ( 26). Leninger suggests that if they expect nursing graduates to show care behavior in their clinical work, they must feel that they are being taken care during the training process (27) and given that the purpose of the training clinical nursing programs is the training nurses who develop the

arts and nursing science. It is necessary for planners to ensure that graduates use operational models that have integrated care behaviors in it. The care behaviors that are displayed by the student in a care setting should be strengthened and developed, that this issue depends on the diagnosis of the instructors in creating an appropriate learning environment, and the expected outcomes of care for the patient will depend on the training-learning process in care. Had (28). And in order to achieve this, a fundamental change in the thought and practice of nursing education will be needed in order to value the high concept of care (29).

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