A SURVEY ON NURSING STUDENTS' VIEWPOINTS ON THE CLINICAL LEARNING ENVIRONMENT, SUPERVISION AND NURSE TEACHER

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Abstract:
Introduction: The success of nursing education programs depends on the efficiency and adequacy of clinical experiences. One of the most important factors known in this field is the atmosphere of learning environments. In this study, different aspects affecting clinical atmosphere have been evaluated from nursing students' point of view.
Methods: In this descriptive-sectional study, 340 third and fourth year nursing students in the emergency department, women's surgery, CCU, ICU, dermatology ward, burn care settings, pediatric, gastroenterology, surgery, internal medicine, were trained in clinical practice. The data gathering tool was a 34-item questionnaire on clinical learning, supervision and nursing teacher (CLES + T). Through this questionnaire, students began studying the clinical environment during September 2016 through April 2017. Descriptive statistical tests were used to compare the mean scores and SPSS16 software.
Results: The mean of 7 dimensions of learning environments varied in the evaluated sections. The highest mean (29.79) was related to the dimension "pedagogical atmosphere on the ward" and the lowest (8.85) was related to the factor "the relationship between student, mentor and nursing teacher".
Conclusion: According to the students, the learning atmosphere and other variables related to the clinical learning environment vary in different parts. It is necessary to improve the quality of the various departments.
Keywords: *Viewpoint of Nursing Students, Clinical Learning Environment*

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INTRODUCTION:

Nursing programs include theoretical training and practical (clinical) training [1]. Clinical training is the most important part of nursing and midwifery education and its essential component, which is recognized as the heart of professional education in terms of importance. Clinical education provides opportunities for nursing students to apply the knowledge, skills and concepts learned in the classroom in a clinical setting and in real-life care of the patient, and prepare themselves for activities in the clinical setting. Clinical education is done in a clinical setting, this environment is a rich learning resource. The clinical learning environment is defined as "an interactive network of forces within the clinical environment that affects students' learning outcomes" [2].

Research has shown that the clinical learning environment has a great impact on students that, the most important of these effects are: helping to develop students' attitudes and competencies, psycho-motor skills, knowledge, problem-solving skills, clinical competence, communication skills, and critical thinking skills of students [3].

Bachelor's nursing students spend a significant part of their education in clinical learning environments. But this alone does not guarantee the adequacy of education because many variables such as student, clinical teacher, departmental staff and factors in the clinical environment affect their learning outcomes [4]. Studies have shown that teachers and learning environments are two key determinants of performance [5-9].

Interpersonal relationships, learning atmosphere, attitudes, physical structure of the ward, hierarchical patterns are other influential factors in the clinical learning environment that are considered in organizational and educational theory. Suitable training space improves patient care feedback [10]. Studies show that the presence of positive atmosphere and good group spirit constitute the most important dimensions of a good clinical environment, if the personnel of the department work together and have motivation, students feel more supported and supervised [4, 11]. "Supervision" is the establishment of effective communication between knowledge and skills in nursing students [12].

Also, the characteristics of a good learning environment are a democratic management model in which the manager is aware of the physical and mental needs of staff and students [10]. "Collaborative Leadership Style", a hierarchical

structure and a better team spirit, creates an atmosphere in which nursing students feel support when confronted with "hesitation" [12]. One of the necessary preparations for a good clinical education is the possession of a competent teacher in the field of clinical education [13]. Nursing teacher guides students' clinical learning through a wide range of strategies, such as: providing collaboration between the university and ward staff, employee participation and departmental manager in planning, student participation in ward's activities, and assessment of their clinical competence improvement, therefore, the role of the nursing teacher is mainly to establish a relationship between the university and health care centers to facilitate learning from clinical experiences [2].

To ensure the usefulness and effectiveness of the clinical environment in learning, these factors must be identified and evaluated [4]. Quantitative and qualitative measurement of these clinical environments is important not only in describing and evaluating medical faculties, identifying the strengths and weaknesses of educational programs, identifying behaviors, and gaining access to the views of students, faculty and staff, but it is a significant indicator in predicting educational outcomes [14].

In spite of the importance of learning in the clinical environment, the results of many studies conducted in this area indicate that students have not been able to gain valuable experience in this environment. In the research conducted by Moatari and Ramezani (2007) and in the study of Sharif et al. (2010), the students did not give an acceptable score on their clinical environments and the data indicate that the clinical education environment was inappropriate from the student's point of view [4, 15, 16] and, despite the passing of years, this problem persists. The researchers suggest that the clinical learning environments need to be reviewed and evaluated in order to maximize the clinical learning outcomes of nursing students [4].

The CLES + T questionnaire is designed to assess students' perceptions of clinical learning environments. This assessment not only provides practical and useful information for nursing faculties and hospital managers, but enables nursing professors to make the necessary changes to ensure the quality of the student's clinical experiences [17]. The Interconnection between CLES + T dimensions shows strong relationships between clinical community, nursing teacher, supervisor and manager and supports the importance of learning social aspects [18]. Our main goal is to implement this tool

in clinical education, to identify possible barriers to the nursing teacher, and to facilitate effective learning and learning opportunities. This scale can be a useful tool for routine assessment of all aspects of the clinical learning environment [17].

METHODOLOGY:

In this descriptive cross-sectional study, 340 third and fourth year nursing students from September 2016 to April 2017 were employed in eight hospitals affiliated to eight medical universities in Tehran, Mashhad, Ahvaz, Yasuj, Abadan, Shushtar, Dezful and Masjed Soleyman. Our logic for choosing third and fourth year students was homogeneity, less dependency on teachers, and more autonomy of students, and, consequently, their better view of the learning environment [4].

This study was conducted in eleven different departments (Emergency, obstetric and gynecologic surgery wards, CCU, ICU, dermatology wards, burn care settings, Pediatric, Gastrointestinal, Endocrine, Surgical, Internal wards). The tool used in this study includes two parts. In the first part of the questionnaire, we evaluated the demographic data (age, gender, semester, district and city) and data related to the monitoring relationship (observer job title, supervisory activity, unplanned supervision) in the students. But the main part of the questionnaire was the (CLES + T) Clinical Learning Environment, Supervision and Nursing Teacher tool which was obtained by Saarikoski [19]. This tool includes concepts of clinical learning environment, supervision relation and role of nursing teacher in clinical practice. The CLES + T scale contains 34 questions in five dimensions: pedagogical atmosphere on the ward (9 questions), leadership style of the ward manager (4 questions), nursing care on the ward (4 questions), supervisory relationship (7 questions) and the role of nursing teacher (9 questions) assesses the clinical learning environment. The questionnaires were approved in terms of validity after translation in English. In addition, they were given to a number of nursing faculty members and 30 nursing students. Their corrective comments were included in the editing of the questionnaire. Meanwhile, to determine the reliability of the questionnaire, the Cronbach's alpha coefficient was used which r = 0.81-0.91 indicated the reliability of

the questionnaire. The total score for each item is 5 and they are scored using the 5-point Likert Scale from 1, (fully disagree), score 2 (disagree to some extent), score 3 (neither agree nor disagree), score 4 (agree to some extent) to score 5 (fully agree).

To collect data during a half-year of study, the mentors in each ward were asked to ask all third-year and fourth-year students to assess the part they were learning if they wanted to. 340 questionnaires were given to the students and all the questionnaires were completed and analyzed. The mean of the given values is calculated for a set of questions that measures a particular concept, and was considered as the mean of that concept. In order to comply with ethical principles, the research permit was issued from the Jundishapur University of Medical Sciences Ethics Committee.

Data were then analyzed by SPSS16 statistical software. In this study descriptive statistics were used to compare the mean of dimensions.

RESULTS:

The subjects were 340 nursing students in clinical environment. The response rate was 100%. 206 (60.6%) students were in the fourth year and 134 subjects (39.4%) were third year students. 245 subjects were girls (72.1%) and 95 (27.9%) were boys. Their age ranged from 19 to 42 years old with an average of 22.99 years. The number of students who worked in various clinical wards includes: Emergency 19.4%, Pediatric 19.4%, Surgery 16.8%, Internal 16.5%, CCU 10.9%, GI 7.6%, ICU 4.1%, obstetric and gynecologic surgery 2.1%, dermatology 1.5%, burn care 1.5% and endocrinology was 0.3% (Table 1).

Supervision of students was performed in 46.2% of ward nurses and in other cases, this supervision was carried out by the nurse teacher, the nurse responsible for the ward or staff. 135 (39.7%) students said they had never had an unplanned supervision and 80 students (23.5%) received one or two unplanned supervision traineeships (Table 2).

The average given by students to the variables related to this research in different sections has been presented in Table 3. The average given to different learning environments was varied from 8.85 to 29.79.

Table 1: Demographic characteristics and supervision conditions of nursing students (*n* =340)

Characteristic	N	Percent
Age in years	X=22/99	range=19-42
Female	245	72/1
Male	95	27/9
Total	340	100
Study year		
Third	134	39/41
Fourth	206	60/6
Supervisor title		
Nurse	157	46/2
Specialist nurse	108	31/8
Ward manager	67	19/7
Assistant ward manager	8	2/4
Spontaneous supervision		
Never	135	39/7
1 – 2 times	80	23/5
< weekly	54	15/9
Weekly	21	6/2
> weekly	50	14/7

Table 2: Clinical placements (by clinical speciality).

Ward type	N	%
Emergency department	66	19/4
Pediatric wards	66	19/4
Surgical wards	57	16/8
Internal medicine wards	56	16/5
CCU	37	10/9
Gastroenterology wards	26	7/6
ICU	14	4/1
Obstetric and gynecologic surgery wards	7	2/1
Dermatology wards	5	1/5
Burn care settings	5	1/5
Endocrinology wards	1	0/3

Table 3: Statistics for factors 1–7 of the Farsi version of the CLES+T (n = 340).

Dimensions	Mean (SD)
Factor 1. Pedagogical atmosphere on the ward	29/79 (7/06)
Factor 2. The content of supervisory relationship	27/89 (6/44)
Factor 3. Nursing care on the ward	13/16 (3/50)
Factor 4. Leadership style of the ward manager	12/92 (3/38)
Factor 5. Nurse teacher as enabling the integration of theory and practice	10/99 (2/47)
Factor 6. Cooperation between placement staff and nurse teacher	10/56 (2/71)
Factor 7. Relationship among student, mentor and nurse teacher	8/85 (3/32)

DISCUSSION:

The purpose of this study is to study the learning environment in clinical learning environments from the viewpoint of third and fourth year nursing students in medical universities of Iran. The results of the study showed that the students did not give an acceptable score on the atmosphere of their clinical environments [4].

Finnish and Swedish students perceived the role of nursing teacher as a unique and homogeneous role which is included in the Iranian sample in 3 subscales, entitled "Theory-Practice Link," "Collaboration with Ward Staff," and "Communication with Mentor and Student" and these dimensions can be displayed in a different way by the nursing teacher. It can be said because the nursing teacher is a faculty member and is not busy in clinic, it may not be accepted by the supervisor and the mentor and also given that nursing professors play many roles in the clinic and based on the results of studies conducted in Iran, nursing teacher characteristics have been widely reported, therefore, based on questionnaire questions in this dimension and the results of statistical tests, three dimensions were presented in Iran. The overall mean of "role of nursing teacher" was 30.41 and the factor "theory-practice link" with the highest mean ($X = 10.99$) was recognized as the main subscale, perhaps because the units are held under the supervision of nursing professors in the clinic and the units that work in the theory are also the responsibility of the same teacher, so the knowledge-action link is well done by the nursing teacher. In this dimension, the lowest score was attributed to the subscale of "the relationship between student, mentor and nursing teacher", the reason for this may be that we do not have a defined role under the name of Mentor in our clinic. A person is referred to as faculty and clinic interface, and according to the results of the questionnaire, he has a low presence and student access is difficult. In a review study (2016), four main factors affecting clinical nursing education in Iran: teacher characteristics, individual characteristics of learners, clinical environment characteristics (educational atmosphere) and educational program were introduced [13]. Therefore, CLES + T dimensions are largely capable of covering and evaluating these factors.

In the present study, "pedagogical atmosphere on the ward" was recognized as the most important factor in the clinical learning environment (with a mean of 29.79). Studies have shown that positive atmosphere and good spirit are the most important dimension of a good clinical environment [2, 18, 20]. If the personnel of the ward work together and have motivation, students are supported and at the same time more under the supervision [4].

In the study of Barjan (2013), nursing students identified "safety" as a major prerequisite for successful educational relationships, this occurs when learning problem solving or questioning is done in a fair space. This study considers education atmosphere as an important topic because students' perceptions of clinical environments are effective in their individual behavior and attitudes and raises their competence [12].

In Iran, due to the shortage of nursing personnel, the presence of a nursing student on the ward is considered as a strength point and it seems to be an auxiliary force for ward personnel. Nursing internships are under direct supervision of the ward manager, so a good atmosphere is ruling. Because the students in the 7th and 8th semester do clinical work, the staffs of the ward are well aware of them and lead to creating a good educational environment in the ward.

The second identified factor was the "supervisory relationship" (mean 27.89), while in many studies, supervision by nursing teachers or staff played a major role in student clinical learning [10, 12, 19, 21-24]. The improvement of clinical competence is significantly determined by the supervision of a specialist, therefore, supervisory relationships ensure continuity of learning. Improving clinical competence is significantly determined by the supervision of a specialist, therefore, supervisory relationships guarantee continuity of learning [12].

"Nursing care in ward" was the third dimension of our study (mean 13.16). In the study of Henrickson (2012), high quality patient care and good learning conditions were evidently related together for students [10].

Our next factor was our "leadership style of the ward manager" (mean: 12.92). Kilcullen (2007) introduced the managerial model of the ward manager as the most important element [25]. The characteristics of a good educational environment are a democratic management model in which the manager is aware of the physical and mental needs of staff and students [4]. The department director can create a positive cultural situation and attitude toward students and their learning needs [25]. The role of nursing teacher in theory and practice link with a mean score of 10.99, collaboration with ward staff was 10.56, and the "relationship between student, mentor and nursing teacher" with an average of 8.85 were other

dimensions. The dimension of nursing teacher of CLES + T's is used to evaluate the "educational and social role" of nursing teachers in clinical students' performance [21]. Despite the fact that the nursing teacher is involved in guiding students' learning of clinical experiences and the matching of theory and practice, if not understood as part of the ward staff, it will not play a direct role in nursing care practice [2]. In a study by Bigdley et al. (2014), students were not satisfied with the relationship between students and clinical teachers [26]. Therefore, examining the different dimensions of the role of nursing teacher by CLES + T can be important in identifying defects and correcting them.

Based on the findings of Moatari (2009), educational planning should focus on the differences in clinical education environments [4]. Because proper planning and professional performance of teachers play the most important role in reducing the gap between theoretical and clinical education (as the most deterrent factor in clinical learning) [13]. Therefore, the high level of CLES + T's ability to identify the differences between educational systems and different supervisory models is helpful in solving this problem.

CONCLUSION:

Nursing clinical education system in Iran is not the same and is different from the different aspects: the type of planning, the content of the programs, the student and patient culture, the social and religious factors, and the policies governing medical education. Since the Persian version of CLES + T shows both international coherence and critical cultural characteristics in understanding students from the clinical learning environment, it can therefore be useful in identifying differences in educational systems in international research. Using the CLES + T questionnaire, we identified "ward atmosphere" and "supervisory relationships" as two important determinants of the proper clinical learning environment. These results are consistent with the findings from previous studies.

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