

Nursing Students Assessment to the Clinical Learning Environment and Mentoring in Medical-Surgical Wards: Quantitative Research

Irma Nool*, Lily Parm, Mare Tupits, Ivi Prits, Merilin Kuhi, Valentina Raudsepp, Angela Eensalu-Lind and Liina Männiksaar

Tallinn Health Care College, Chair of Nursing, Estonia

*Corresponding author: Irma Nool, Tallinn Health Care College, Chair of Nursing, Estonia

ARTICLE INFO

Received: 📅 December 20, 2023

Published: 📅 January 08, 2024

Citation: Irma Nool, Lily Parm, Mare Tupits, Ivi Prits, Merilin Kuhi, Valentina Raudsepp, Angela Eensalu-Lind and Liina Männiksaar. Nursing Students Assessment to the Clinical Learning Environment and Mentoring in Medical-Surgical Wards: Quantitative Research. Biomed J Sci & Tech Res 54(3)-2024. BJSTR. MS.ID.008550.

ABSTRACT

Background: Clinical practice is one of the most anxious components of nursing education because they have two roles to play: the learner and the worker. Student satisfaction is a complex and multifactorial issue. Research on the topic has shown positive links between student satisfaction and the quality of nursing care, the ward's pedagogical atmosphere, leadership style, sense of belonging, peer support and level of motivation. On the other hand, student supervision and the relationship between student and supervisor have been considered to be the most significant components of the effectiveness of the clinical practice environment in terms of nursing student learning and professional development. Studies have shown that current mentoring systems are not effective and that cooperation between hospitals and nursing schools needs to be increased. The objective of the research was to describe nursing students' assessment of the clinical learning environment and supervision in medical-surgical wards.

Methods: 110 students participated in the study. For data collection, the Clinical Learning Environment, Supervision and Nurse Teacher (CLES+T) evaluation scale was used. IBM SPSS Statistics 26.0 was used for data analysis. Descriptive statistics and the Mann-Whitney U test were used to compare the students' assessments according to the wards. Permission to conduct the research has been received from the Ethics Committee of the National Institute for Health Development (permit no. 695, 25.03.2021).

Results: 66 (60%) of the students were very satisfied with their practical training environment. 78 (70.9%) of the students had a mentor as the nurse, but 16 (14.5%) were nurse managers. 69 (62.7%) students had an individual mentor, and the cooperation went smoothly. Satisfaction with the mentoring rated the highest (4.4 ± 0.82), and cooperation between the nursing teacher and ward team rated the lowest (3.6 ± 0.79). There were no statistical differences in medical and surgical wards in the overall satisfaction with mentoring, but there was a statistically significant difference in students' assessments in two separate statements: students who completed practical training in the medical ward rated contact with the ward team ($p = 0.041$) and cooperation between the nursing teacher and the hospital team ($p = 0.033$) higher.

Conclusions: The results of the research showed high satisfaction with the supervision in the practical training. The results of the research show the need to improve the cooperation between the school and practical placement institution.

Keywords: Mentoring; Medical-Surgical Wards; Nursing Students; Clinical Learning Environment

Introduction

Clinical practice is an important part of nursing education [1], where there is coherence between theory and practice and the nursing student's professional development takes place through critical thinking in assessing health status and making clinical decisions [2,3]. It is important that by combining theory and practice, the nurse acquires the skills and attitudes necessary for the work of a nurse [4]. Dunn and Hansford [5] have described clinical learning through various factors which greatly affect learning in clinical learning environment (CLE), such as the ward manager commitment, staff-student relationship, relationship with the patients, student satisfaction, rituals, and hierarchy. Saarikoski [6] points out in his doctoral thesis that the ward's nursing support is of fundamental importance in CLE. The most important is a supportive learning environment [3,5,7]. To improve the learning environment, cooperation between lecturers and mentors should be enhanced and teachers' supervision skills should be improved, also the number of supervisors should be increased. Student dropout is strongly related to a lack of support from clinical practice mentors and staff. Lecturers and mentors play a major role in guiding and protecting students, and optimal cooperation between these two parties is extremely important to keep nursing students in their studies, thus ensuring more unified and clear teaching [8].

Research by Asberg [9] confirmed that there is a relationship between CLE and satisfaction with supervision. The more the students were satisfied with the practice base ward, the better the ward was perceived as a learning environment and the higher the satisfaction with supervision. Clinical practice is a good opportunity for a nursing student as a real work environment, where self-assertion can be practised, which is favoured by a safe learning environment, giving the student a sufficient sense of security [10]. Student satisfaction in CLE is related to mentor motivation, clinical experience, and student-centeredness [11]. In 2013, a study of CLE and supervision was conducted in Estonia, where the evaluation of nursing students of Estonian health care colleges was investigated. The problems were the relationship between the school supervisor and the student, the atmosphere of the practice base, understanding of nursing documentation, and personal supervision when the practice base mentor had more than one mentee. The survey revealed that satisfaction with the guidance of the internship mentor was relatively high, the rating varied from 4.04 to 4.43 on a 5-point Likert scale, where the average rating was 4.31. When evaluating the ward's atmosphere, the averages varied from 3.51 to 4.20, with the average value being 3.88. The positive atmosphere prevailing in the ward was rated the highest with an average score of 4.20, and feeling comfortable at ward meetings was rated the lowest with an average score of 3.51. Half of the students had an individual mentor with whom the cooperation went smoothly [12]. Compared to the study by Asberg (9), the proportion of individual mentors in practice has increased by 10%. Despite several deficiencies,

students are generally satisfied with clinical practice. In CLE, the learning experience is positively influenced by trust, mutual respect, and a good relationship between mentor and student [3,13]. On the contrary, the unclear role of students in the learning environment, the incompatibility of theory and practice, and negative emotions affect the learning experience [3]. Anxiety, stress; lack of teaching, supervision, organisational support and resources; inadequate clinical supervision and role acceptance were also experienced in CLE [14]. Nursing students' problems in learning are related to poor organisational culture and insufficient resources, which cause inconsistencies in the student-nurse relationship and ultimately lower the quality of education [1]. The students who participated in Mbakaya's [15] study expected that in the clinical environment, most of the time, they would be accompanied by a mentor who would support them in performing the tasks. Students reported not being able to achieve their goals due to a lack of mentors in the clinical setting.

Clinical education is crucial in integrating nursing education and practice. Nursing teachers and practising nurses should create an environment conducive to clinical learning [14]. The lack of variation in different teaching methods and the monotony of teaching has a demotivating effect on nursing students and affects their success in acquiring clinical skills [16]. Based on the specific nursing interventions of the medical or surgical ward during clinical practice, students may be at risk of burnout and risk factors for occupational diseases such as headache, anxiety, back pain, and exhaustion. In addition to the above, accidents at work are often caused by a very fast pace of work and a lack of mentor supervision [17]. Successful mentoring is ensured by the professional competence of the mentor, supportive CLE and clear guidance [18]. The mentor has an essential role in supporting the student - motivating, solving potential problems and guiding clinical interventions. Quality mentoring requires a balance between caring for patients and mentoring students. [19]. The mentor can make CLE appropriate for the student by encouraging nurses on the ward to participate in the nursing students' learning process [3]. Competent mentors need to have good professional knowledge, as this depends on the quality of learning and the student's satisfaction with the guidance, which contributes to the integration of theory and practice [20], it is also important to develop the individual resilience of mentors to prevent burnout. To enhance the learning environment, cooperation between school staff and clinical staff should be improved. The training skills of teachers should also be promoted, the number of instructors should be increased, and students should be supported in a CLE. [21]. Although there has been much research on student satisfaction with practice supervision and the clinical learning environment, few studies have been conducted among students completing practical training in medical-surgical ward [22]. There are no relevant studies in Estonia. The objective of the research was to describe nursing students' assessment of the clinical learning environment and supervision in medical-surgical wards.

Materials and Methods

Participants

The sample was formed by students of the I-IV year of Tallinn Health Care College, who completed an internship in the surgical and medical ward in the spring semester of the 2020/2021 academic year. The survey was attended by 21 study groups who did internships in different wards, of which 110 students completed internships in the surgical and medical wards, which comprise the sample of this research.

Materials and Methods

This research uses a quantitative research method.

Data Collection: The questionnaire used in this study was developed by Saarikoski et al. (2008). Saarikoski has been permitted to use this questionnaire. The questionnaire consists of background data and the CLES+T tool, which consists of 37 questions about three researched areas:

1. Clinical learning environment: pedagogical atmosphere (9 statements), the leadership style of the ward manager (4 statements), and nursing care in the ward (4 statements);
2. Supervisory relationship (11 statements) and
3. The role of the nursing teacher: the role of the nursing teacher as an enabler of the integration of theory and practice (3 statements), cooperation between placement staff and nurse teacher (3 statement) and relationships between student, mentor and nursing teacher (3 statements). The questionnaire consists of statements to which the students answered whether they agree or disagree with the statement on a five-point Likert scale: 1= fully disagree, 2 = disagree to some extent, 3 = neither agree nor disagree, 4 = agree to some extent, 5 = fully agree. In the past, only the CLES tool has been used in Estonia. The tool has been further developed by the tool's authors, and part T has been added, which assesses satisfaction with the supervision of the nurse-teacher. Part T was used for the first time in Estonia. The survey was conducted by the www.connect.ee survey centre. The CLES+T is used in several countries [22]. The survey was conducted on May 10 - June 18, 2021.

Data Analysis: Data were analysed using the statistical program SPSS (Statistical Packages for the Social Sciences) 26.0. Descriptive statistics were used for data analysis. Frequency tables (numerical and percentage indicators of respondents) were used to describe background data. Arithmetic mean was used to analyse CLES+T statements, where the minimum, maximum and standard deviation is indicated. Spearman's correlation analysis was used to find relationships between different dimensions of the CLES+T, and the Mann-Whitney U test was used to find differences between surgical and medical wards. Correlations and differences where $p < 0.05$ were considered statistically significant.

Ethical Considerations: The current study is one part of the applied research "Nursing students' assessment of the learning environment and mentoring during clinical practice 2021-2029" (permit no. 1-16/44 03.03.2021). Permission to conduct the research has been received from the Ethics Committee of the National Institute for Health Development (permit no. 695, 25.03.2021). Participation in the research was voluntary. The results of the research are published in a generalised form. Research participants are guaranteed anonymity and confidentiality.

Results

Background Data and Description of Clinical Learning Environment

The majority were second-year students - 63 (57.3%), and the practice was performed almost equally in the surgical (54 i.e. 49.1%) and medical ward (56 i.e. 50.9%). Students perceived some mental (53 i.e. 48.2%) and physical (54 i.e. 49.1%) tension in the nurses working in the ward. More than half of the students - 66 (60%) were very satisfied with their internship ward.

Student Evaluation of the Clinical Learning Environment

The students rated the management style of the ward manager the highest (4.32 ± 0.696) and the pedagogical atmosphere the lowest (4.14 ± 0.561). In the pedagogical atmosphere, feeling comfortable at ward meetings was rated the lowest (3.49 ± 1.217) (see Table 1).

Table 1: Satisfaction with the clinical learning environment.

	Mean	SD	Median	Min	Max
Pedagogical Atmosphere	4,14	0,561	4	1	5
The staffs were easy to approach	4,12	0,916	4	1	5
I felt comfortable going to the ward at the start of my shift	3,98	1,075	4	1	5
During staff meetings (e.g. before shifts) I felt comfortable taking part in the discussions.	3,49	1,217	4	1	5
There was a positive atmosphere in the ward	3,91	0,914	4	1	5
The staffs were generally interested in student supervision	3,96	0,985	4	1	5
The staff learned to know the student by their personal names	4,45	0,894	5	1	5
There were sufficient meaningful learning situations on the ward	4,54	0,553	5	1	5
The learning situations were multi-dimensional in terms of content	4,31	0,687	4	1	5
The ward can be regarded as a good learning environment	4,47	0,713	5	1	5
Leadership style of the ward manager	4,32	0,696	5	1	5
The WM regarded the staff on her/his ward as a key resource	4,47	0,7	5	1	5
The WM was a team member	4,43	0,807	5	1	5
Feedback from the WM could easily be considered as a learning situation	4,28	0,869	5	1	5
The effort of individual employees was appreciated.	4,08	0,930	4	1	5
Nursing care on the ward	4,20	0,568	4	1	5
The ward nursing philosophy was clearly defined	3,85	0,979	4	1	5
Patients received individual nursing care	4,42	0,626	4	1	5
There were no problems in the information flow related to patients' care	4,23	0,762	4	1	5
Documentation of nursing (e.g. nursing plans, daily recording of nursing procedures etc.) was clear	4,29	0,758	4	1	5

Student Evaluation of Supervision

More than half of the students (69 i.e. 62.7%) had an individual internship supervisor and the relationship worked during this placement. Most of the students (78 i.e. 70.9%) were supervised by a nurse,

but in 16 (14.5%) cases it was the ward manager. The satisfaction with the supervisory relationship was the highest (4.44 ± 0.818) and the co-operation between placement staff and nurse teacher (3.58 ± 0.783) the lowest (see Table 2).

Table 2: Satisfaction with supervision.

	Mean	SD	Median	Min	Max
The supervisory relationship	4,44	0,818	5	1	5
My supervisor showed a positive attitude towards supervision	4,53	0,821	5	1	5
I felt that I received individual supervision	4,36	1,038	5	1	5
I continuously received feedback from my supervisor	4,42	0,990	5	1	5
Overall I am satisfied with the supervision I received	4,41	1,061	5	1	5
The supervision was based on a relationship of equality and promoted my learning	4,30	1,019	5	1	5
There was a mutual interaction in the supervisory relationship	4,42	0,961	5	1	5
Mutual respect and approval prevailed in the supervisory relationship	4,55	0,773	5	1	5
Role of the nurse teacher	3,95	0,753	4	1	5
In my opinion, the nurse teacher was capable integrating theoretical knowledge and everyday practice of nursing	4,06	0,827	4	1	5
The teacher was capable of operationalizing the learning goals of this clinical placement.	4,02	0,813	4	1	5
The nurse teacher helped me reduce the theory-practice gap	3,77	0,974	4	1	5
Cooperation between placement staff and nurse teacher	3,58	0,783	4	1	5
The nurse teacher was a member of the nursing team	3,35	1,170	3	1	5
The nurse teacher was able to give his or her pedagogical expertise to the clinical team	3,82	0,940	4	1	5
The nurse teacher and the clinical team worked together in supporting my learning.	3,71	0,989	4	1	5
The joint meetings between myself, my mentor and my nurse teacher were comfortable experiences.	3,56	0,991	3	1	5
In our meetings, I felt that we are colleagues	3,46	1,046	3	1	5
In meetings, the focus was on my learning needs	3,57	0,990	3	1	5

Relationships with Background Variables, Relationships between CLES+T Dimensions, and Between-Group Differences

The ward team was easier to contact (p=0.041) and the nursing teacher and hospital team worked more collaboratively to support learning (p=0.033) in the medical ward (see Table 3).The strongest

and most statistically significant correlations occurred between the pedagogical atmosphere and satisfaction with practice guidance and nursing assistance in the ward; between the leadership style of the head nurse of the ward and nursing care in the ward; between satisfaction with internship guidance and nursing care in the ward (p<0.0001) (see Table 3).

Table 3: Statistically significant differences based on the specifics of the ward.

Statement	Surgical ward		Medical ward	
	Mean	SD	Mean	SD
The staffs were easy to approach	3,94	0,979	4,29	0,825
The nurse teacher and the clinical team worked together in supporting my learning	3,52	0,986	3,89	0,966

Note: *Mann Whitney U

Discussion

Research results show that students were satisfied with the internship supervision and with the internship base. The study by Ekstedt et al. [19] has shown that students who had the same mentor throughout the internship were more satisfied with the mentor-student relationship than those who changed mentors daily. This study found that more than half (62.7%) of students had an individual mentor. The students valued the cooperation between the mentor and

the student based on mutual trust and respect. The students rated the mentor highly, who addressed them by name and considered a practice base with interesting learning situations a good learning environment. Cooperation between the nursing teacher and the practice base was rated the lowest (3.58). This assessment may come from the school-side internship supervisor - a nursing teacher who doesn't visit the internship base regularly and only contacts the internship base in case of problems. Also, the three-way internship evaluation

and feedback are only done electronically in the Moodle e-learning environment, and there are no meetings between the student, the practice base mentor, and the nursing teacher. The role of the nursing teacher was rated just as low (3.9), which matches the results of Ekstedt et al.'s [19] research conducted in Sweden among students who completed nursing practice in the medical and surgical wards. Satisfaction with mentoring was rated the highest in the practice base (4.4), which is also similar to the survey conducted by Ekstedt et al.'s [19] in Sweden (4,3).

In the present study, the students pointed out the mental and physical stress experienced by the nurses in the ward during their clinical practice. Whereas both psychological and physical tensions were generally equal (49%). The pressure on nurses in the ward also affects the quality of supervision. Therefore, it is essential to ensure the work of nurses in the department in such a way that they aren't overstressed and guiding the students gives satisfaction to the mentor. In this study, the students rated the atmosphere of the departments relatively low. The expected result was that the different dimensions of the CLES+T are interrelated: the higher the rating for one component, the higher the rating for the other components. At the same time, the assessment of cooperation between the practice base and the nursing teacher was related only to the pedagogical atmosphere and the role of the nursing teacher. The fact that there is no direct contact with the nursing teacher on the internship base plays a role here, and the students also perceived this. Improving cooperation between teaching staff and mentors in the learning environment on practice bases must be enhanced. Similar to previous studies, this study appeared that the student assessment of the role of the nursing teacher during the internship was low. It pointed out that there were few meetings with the nursing teacher; the students did not feel they were colleagues with the nursing teacher, and the nursing teacher was not a member of the nursing team. Therefore, should think about which methods to implement to improve cooperation.

Conclusion

The research results showed student satisfaction with mentoring of practice in the practice base. Satisfaction was rated higher when the student had an individual mentor who supported adaptation. The role of the nurse teacher and cooperation between the practice base and the nurse teacher was rated lower. In the future, a study could be conducted among nurse teachers, on how they perceive their role as school-side practice supervisors. Students evaluated the practice environment positively, as they had the opportunity to learn through different situations. However, the negative experience was with the mental and physical stress of the ward's nurses, which sometimes affected the quality of supervision. Therefore, the causes of the mental and physical stress of nursing staff must be studied. It is important to ensure the work of nurses in the department in such a way that they are not overstressed, and supervising students gives satisfaction to the mentor.

Acknowledgements

We thank the students who participated in the study.

Funding

No external funding for the research.

Conflicts of Interest

None.

References

- Moghaddam HR, Aghamohammadi V, Jafari M, Absalan M, Nasiri K (2020) Challenges Faced by Nursing Students to Work with Nursing Personnel: A Qualitative Study. *Adv Med Educ Pract* 11: 313-339.
- Papastavrou E, Dimitriadou M, Tsangari H, Andreou C (2016) Nursing students' satisfaction of the clinical learning environment: a research study. *BMC Nurs* 15: 1-10.
- Siti DK, Munjiyah N, Amimaruddin PG, Ruditaidris D (2022) Exploring Student Nurses' Learning Experience in the Clinical Setting: A Literature Review. *International Journal of Nursing Education* 14(1): 31-37.
- Budgen C, Gamroth L (2008) An overview of practice education models. *Nurse Educ Today* 28(3): 273-283.
- Dunn SV, Hansford B (1997) Undergraduate nursing students' perceptions of their clinical learning environment. *J Adv Nurs* 25(6): 1299-1306
- Saarikoski M (2002) Clinical Learning Environment and Supervision. Development and validation of the CLES evaluation scale [Doctoral dissertation]. [Turku]: University of Turku.
- Dale B, Leland A, Dale JG (2013) What Factors Facilitate Good Learning Experiences in Clinical Studies in Nursing: Bachelor Students' Perceptions.
- Mikkonen K, Elo S, Miettunen J, Saarikoski M, Kääriäinen M (2017) Clinical learning environment and supervision of international nursing students: A cross-sectional study. *Nurse Educ Today* 52: 73-80.
- Asberg M (2008) Eesti tervishoiu kõrgkoolide õendusüliõpilaste hinnang õpikeskkonnale ja mentorlusele kliinilisel õenduspraktikal. [Tartu].
- Bril I, Boer HJ, Degens N, Fleeer J (2022) Nursing students' experiences with clinical placement as a learning environment for assertiveness: a qualitative interview study. *Teaching and Learning in Nursing* 17(4): 383-391.
- Mikkonen K, Tomietto M, Tuomikoski AM, Miha Kaučič B, Riklikieni O, et al. (2022) Mentors' competence in mentoring nursing students in clinical practice: Detecting profiles to enhance mentoring practices. *Nurs Open* 9(1): 593-603.
- Parm L (2013) Õendusüliõpilaste hinnang kliinilisele õpikeskkonnale ja juhendamisele-võrdlev kirjeldav uurimus. [Tartu]: Tartu Ülikool.
- Mwale OG, Kalawa R (2016) Factors affecting acquisition of psychomotor clinical skills by student nurses and midwives in CHAM Nursing Colleges in Malawi: A qualitative exploratory study. *BMC Nurs* 15(1): 1-10.
- Rajeswaran L (2017) Clinical Experiences of Nursing Students at a Selected Institute of Health Sciences in Botswana. *Health Science Journal* 10(6): 1-6.
- Mbakaya BC, Kalembo FW, Zgambo M, Konyani A, Lungu F, et al. (2020) Nursing and midwifery students' experiences and perception of their clinical learning environment in Malawi: a mixed-method study. *BMC Nurs* 19: 1-14.

16. Atakro CA, Armah E, Menlah A, Garti I, Addo SB, et al. (2019) Clinical placement experiences by undergraduate nursing students in selected teaching hospitals in Ghana. BMC Nurs 18(1): 1.
17. Eyi S, Eyi I (2020) Nursing Students' Occupational Health and Safety Problems in Surgical Clinical Practice. Sage Open 10(1): 1-21.
18. Foolchand D, Maritz JE (2020) Experience of nurses regarding the clinical mentoring of student nurses in resource-limited settings. Health SA Gesondheid 25: 1-7.
19. Ekstedt M, Lindblad M, Löfmark A (2019) Nursing students' perception of the clinical learning environment and supervision in relation to two different supervision models-a comparative cross-sectional study. BMC Nurs 18: 1-12.
20. Hoffmann M, Daniels FM (2020) View of Clinical Supervisors' Preparedness for Clinical Teaching of Undergraduate Nurses at a University in the Western Cape. Afr J Nurs Midwifery 22(2): 1-15.
21. Dordunoo D, An M, Chu MS, Yeun EJ, Hwang YY, et al. (2021) The Impact of Practice Environment and Resilience on Burnout among Clinical Nurses in a Tertiary Hospital Setting. Public Health 18.
22. Weerasekara I, Hall M, Shaw L, Kiegaldie D (2023) Instruments evaluating the quality of the clinical learning environment in nursing education: An updated systematic review. Nurse Educ Pract 71.

ISSN: 2574-1241

DOI: 10.26717/BJSTR.2024.54.008550

Irma Nool. Biomed J Sci & Tech Res



This work is licensed under Creative Commons Attribution 4.0 License

Submission Link: <https://biomedres.us/submit-manuscript.php>



Assets of Publishing with us

- Global archiving of articles
- Immediate, unrestricted online access
- Rigorous Peer Review Process
- Authors Retain Copyrights
- Unique DOI for all articles

<https://biomedres.us/>