

Clinical learning environment and supervision: experiences of Norwegian nursing students. A questionnaire survey.

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Manuscript submitted for publication.

Abstract

Clinical learning environment and supervision: experiences of Norwegian nursing students. A questionnaire survey.

Background

Nursing students' experiences of the clinical learning environment are important with respect to their perceptions of nursing and future workplaces. A validated questionnaire was used to measure experiences with clinical learning environments in a sample of Norwegian nursing students.

Objective

The aim of this study was to measure nursing students' experiences and satisfaction with their clinical learning environments. The objective was to compare the results between students with respect to clinical practice in nursing homes and those in hospital wards.

Design

A cross sectional, descriptive, correlational design.

Settings

Nursing education departments at five university colleges in Norway.

Participants

A total of 511 nursing students completed a Norwegian version of the questionnaire, Clinical Learning Environment, Supervision and Nurse Teacher (CLES+T) evaluation scale in 2009.

Methods

The questionnaire was applied empirically to all nursing students from five non-randomly selected university colleges in Norway. Data including descriptive statistics were analysed using the Statistical Program for the Social Sciences, release 15.0. Differences across sub-groups were tested with chi-square tests for categorical variables and t-tests for continuous variables. Multiple linear regression analysis of perceptions of the ward as a good learning environment was performed controlling for age, sex, study year, supervisory conditions and institutional context.

Results

The participating nursing students with clinical placements in nursing homes assessed their clinical learning environment significantly more negatively than those with hospital placements on nearly all sub-dimensions.

Conclusions

The evidence found in this study indicates that measures should be taken to strengthen nursing homes as learning environments for nursing students. Nursing students must be assisted in discovering good clinical learning environments in nursing homes.

Key words: Nursing education, clinical learning environment, nursing student, CLES+T.

What is already known about this topic

- The clinical learning environment is a complex social entity
- The pedagogical atmosphere determines whether the environment is conducive to learning
- The supervisory relationship is an important factor in clinical learning

What this paper adds

- The Clinical Learning Environment, Supervision and Nurse Teacher (CLES+T) evaluation scale is used in a Norwegian context for the first time
- CLES +T was used to compare Norwegian nursing students' perceptions of nursing homes and hospital wards as learning environments
- Nursing students performing clinical practice in nursing homes are generally more dissatisfied with their clinical learning environment as compared to those performing clinical practice in hospital wards
- Perceptions of wards as good learning environments are affected by a stable and good relation with the supervisor and by the occurrence of spontaneous supervision

1. Introduction

Nursing students' (NSs) clinical experiences are important for their learning, professional development and preferences for future workplaces (Edwards *et al.*, 2004, Myrick *et al.* 2006). Several studies show that clinical experiences have an impact on preferences regarding nursing homes (NHs) as future workplaces (Bergland & Lærum 2002, Kloster *et al.* 2007). The number of NSs interested in working with older people has declined (Herdman 2002; Lovell 2006, Kloster *et al.* 2007). It is therefore of interest to examine how nursing students experience different clinical learning environments they are assigned to as parts of the nursing education. Before this study, the Clinical Learning Environment, Supervision and Nurse Teacher (CLES+T) evaluation scale (Saarikoski *et al.* 2008) was not yet tested in Norway.

The background of this study is based on research on clinical learning and learning environment undertaken since the 1990s (Dunn & Hansford 1997, Nolan 1998, Papp *et al.* 2003). Several research studies show that the learning environment is a significant component with respect to clinical learning and learning outcomes (Löfmark & Wikblad 2001, Spouse 2001, Andrews *et al.* 2006).

A clinical learning environment includes everything that surrounds the NS, including the clinical settings, the staff and the patients (Papp *et al.* 2003). Bergland (2001) describes a learning environment to be constituted by psychosocial, physical and organizational factors. The learning environment is furthermore described as “[...] the conditions, forces and external stimuli that affect the individual [...]. We regard the environment as providing a network of forces and factors which surround, engulf, and play on the individual” (Bloom, 1964 p. 87).

In clinical placements nursing students enter new settings for learning purposes. In order to learn the students depend upon a supportive atmosphere based on psychological and pedagogical aspects (Saarikoski *et al.*, 2002, Chan 2004). This includes staff – student relationships and meaningful learning situations constituting a pedagogic atmosphere (Saarikoski *et al.* 2002).

Ward managers carry many responsibilities. The main task is to assess patients' need for care. Leadership is a catalyst for transforming potential into action and reality (Pfeiffer 2002) and includes responsibilities for allocating clinical placements for nursing students (Cowie *et al.* 2008). Leadership within nursing is based upon the ability to influence the staff toward the achievement of goals through motivation and support (Bezuidenhout *et al.* 1999). Regarding the clinical learning environment the ward manager holds a pivotal role in creating a positive ward atmosphere that is conducive to learning (*ibid*). In general ward managers in Norway are not directly involved in clinical teaching or in the supervision of nursing students.

Good interpersonal relations, support and feedback have an impact on the clinical learning environment, and they create and maintain a positive clinical learning environment for NSs (Levett-Jones *et al.* 2008). The concept of “supervision” is used with a unifying meaning and includes different aspects of supporting NSs in their clinical learning, e.g. teaching practical skills, assessing and facilitating learning, supporting the NSs in obtaining clinical knowledge, giving feedback, facilitating the fusion of theory and practice, role modelling and engaging in critical reflection with the student (Lyth 2000, Lambert & Glacken 2005, Kilcullen 2007). Furthermore the supervisor helps students to socialise to the nursing profession. According to Löfmark & Wikblad (2001) staff nurses' negative attitudes and behaviours have impact on nursing students' learning in clinical placements.

1.1. Norwegian nursing education

Norwegian nursing education is a three-year bachelor programme covering 180 European Credit Transfer System (ECTS) points and is approved in European Community countries.

The number of places for nursing students in Norway is approximately 9000 (Ministry of Education and Research 2009) including both public and private university colleges. In 2009 about 8920 nurses were expected to graduate (Ministry of Education and Research 2009).

Clinical practice and theoretical study each amounts to 90 ECTS. Clinical practice consists of general nursing during the first year of study, medical and surgical nursing during the second year and community and mental health care in the third year. Through the clinical placements in the nursing education, the nursing students experience mainly acute care and long-term residential care. Acute care is chiefly characterised by a practice focusing on curing illness and saving lives so that patients become self-reliant as a result of treatment. This is in contrast to long-term residential care, where patients cannot be expected to become self-reliant.

Alvsvåg (1997) has described the overall value of acute care as being based on a utilitarian perspective, and that of long-term care as being based on unconditional nursing care where measurable progress is more difficult to achieve, e.g., in patients with dementia.

In Norway, sites for nursing students' clinical placements are established through mutual agreements between university colleges and health care institutions (Ministry of Education and Research 2008). In its general plan the Ministry of Education and Research (2008) states that each student has the right to receive expert advice, supervision and support to facilitate learning. How this is arranged may vary between the different university colleges and clinical sites. The most common structure is that during clinical practice, the students receive expert advice and individualised supervision from an appointed supervisory, registered staff nurse on a daily basis.

1.2. Objective of the study

The aim of this study was to measure nursing students' experiences and satisfaction with their clinical learning environments and supervision in a Norwegian nursing education. The specific objective was:

- To compare the experiences and satisfaction between nursing students with respect to clinical practice in nursing homes and those in hospital wards.

2. Method

2.1. Design

This cross-sectional study entailed a quantitative questionnaire analysis (CLES +T) of nursing students at five university colleges in Norway selected at a non-random basis. The study was conducted in 2009.

2.2. Participants and context of study

The original data were collected from nursing students (n= 511) at two small university colleges, two middle-range university colleges and one larger university college. The deans at the university colleges allowed the study to take place by releasing the names and addresses of the nursing students. The study population consisted of all first-, second- and third- year students. The students were asked to respond to the questions according to their most recent clinical placement in their education programme at the time of the completion of the questionnaire. The sample size was based on the recommendation by Polit & Beck (2008), advocating that the number of respondents be 10 times the number of items for performing factor analysis of items.

Of a total of 1229 nursing students 511 answered the questionnaire, giving a response rate of 41.6%. The sample consists of 4.5 % of the approximately 9000 nursing students in Norway, but cannot be considered statistically representative of the study population. Our primary interest was to compare perceptions among nursing students regarding the clinical learning environments in nursing homes and hospital wards (acute care and psychiatric hospitals). From the total sample, (n= 511) 407 respondents who had clinical practice in nursing homes and hospitals (64 % of the total sample) fulfilled the selection criteria for this study. Respondents who marked their practice area as to home-based care and “other” were excluded. In this paper we present the responses from students who had their last clinical placements in institutionalised health care; nursing homes, acute care hospitals and psychiatric hospitals. Some missing data exist; therefore, the number of answers does not reach 407 for all variables. From the sample included in this paper, 146 (35.9 %) NSs had performed clinical practice in nursing homes, while 261 (64.1 %) had their clinical placements in hospitals.

Insert table 1.

2.3. The questionnaire

The questionnaire used in this study was developed by Saarikoski & Leino-Kilpi (2002) and Saarikoski *et al.* (2005, 2008) from a literature review covering the 1980s (Fretwell 1980, 1983, Ogier 1981, Sellek 1982) and 1990s (Wilson-Barnett *et al.*, 1995, Levec & Jones 1996). The use of the questionnaire was approved by Saarikoski. The questionnaire consists of background variables (10 items). Furthermore the questionnaire (CLES+T) consists of 34 statements regarding three subject areas: 1 Clinical Learning Environment: *pedagogical atmosphere* (nine items); *leadership style of the ward manager* (WM) (four items) and

nursing care on the ward (four items), 2 Supervision: *the content of supervisory relationship* (eight items) and 3 Role of the Nurse Teacher: *enabling of the integration of theory and practice by the nurse teacher* (three items), *cooperation between clinical placement and nurse teacher* (three items) and *relationship among student, mentor and nurse teacher* (three items). This last sub-dimension is not included in this paper, as it will be presented in a separate paper. The respondents answered the statements using a five-step Likert type scale with the following alternatives: (1) fully disagree; (2) disagree to some extent; (3) neither agree nor disagree; (4) agree to some extent and (5) fully agree. The questionnaire also contains background variables for the professional title of the supervisor, types of supervisors and occurrence of supervision.

The original questionnaire (CLES+T) in English was translated into Norwegian and blindly back-translated by two bi-lingual independent translators using the procedure described by Polit & Beck (2008). As there were no words with specific cultural bearing in the original questionnaire, the translation was centred with loyalty to the original scale items (CLES+T). Before finalising the Norwegian version of the questionnaire, a panel of university teachers evaluated the translated version. Finally a pilot study was conducted among 14 health care profession students at a university college in order to pre-test the questionnaire before the major study. The pre-test resulted in minor revisions and refinements. The factor analysis of items differed somewhat from the original structure found by Saarikoski *et al.* (2008) as three of the items originally contributing to “*pedagogical atmosphere*” loaded on the sub-dimension “*nursing care on the ward*”. The results in the present paper are presented according to this new factor structure resulting in renaming of the sub-dimension “*nursing care on the ward*” as “*nursing care and learning situations on the ward*”.

2.4. Procedure

The participants received an information sheet and the questionnaire with a stamped reply envelope. When the deadline had expired a reminder was sent to non-respondents.

2.5. Analysis

The statistical analyses were carried out using the Statistical Program for the Social Sciences (SPSS) for Windows, standard version: release 15.0. For the comparison between types of institutions statements on single items were recoded with the response categories “fully agree” and “disagree to some extent” (=1), “neither agree nor disagree” (=2) and “agree to some extent” and “fully agree” (=3), and differences were tested across sub-groups by applying chi-square tests. The average sum-scores for the sub-scales were compared between institution types using independent samples t-tests. A multiple linear regression analysis was performed for the single item “*The ward can be regarded as a good learning environment*” as the dependent variable controlling for age, sex, study year, supervisory relationship, spontaneous supervision and institutional context. The statistical significance level for all tests was 5%.

2.6. Ethical considerations

The study was approved by the Norwegian Social Science Data Services. The principals at the university colleges received a letter that described the study with a request of a list with the names and addresses of the students. They were informed that no details referring to university colleges or clinical sites would become public. The participants were informed about the purpose of the study. Their informed consent was given by completing and returning the questionnaire. Confidentiality and anonymity were guaranteed.

3. Results

Nursing students' perceptions of the clinical learning environment

The students evaluated their perceptions of their clinical learning environment according to the sub-dimensions “*pedagogical atmosphere*”, “*leadership style of the ward manager (WM)*”, “*nursing care on the ward*” and “*the content of supervisory relationship*”. The results on the sub-dimensions are presented according to the responses “agree to some extent” or “fully agree” (Table 2). Overall students in nursing homes evaluated their learning environments more negatively than those in the hospital group on most items (Table 2).

For the sub-dimension “*pedagogical atmosphere*”, differences on three out of six items proved statistically significant with more positive evaluations for NSs with placements in hospitals as compared to those with nursing home placements (Table 2). On the item concerning “*The staff learned to know the student by their personal name*”, the experiences from nursing homes had a higher positive score than those from hospital placements with statistical significance.

Evaluation in favour of the hospital setting was found regarding the sub-dimension “*leadership style of the ward manager*” (Table 2). There were significantly more positive results in hospitals regarding whether the ward manager viewed the staff on the ward as a key resource and whether the ward manager was regarded as a team member. For the items concerning feedback from the ward manager as a learning situation and appreciation of employees' individual efforts, the differences between the two groups proved to be non-significant.

Regarding the new sub-dimension “*nursing care and learning situations on the ward*” all items proved statistically significant in favour of hospital placements. The strongest differences were found regarding documentation of nursing, meaningful and multidimensional learning situations and perceptions of the ward as a good learning environment.

The single item “*the ward can be regarded as a good learning environment*” proved strongly statistically significant with p-value = .000 (Table 2), with nursing homes showing a more negative score compared to hospital wards.

The sub-dimension “*the content of the supervisory relationship*” consisted of eight items related to pedagogical and psychological aspects of the supervisory relationship (Table 2). Overall the students in hospital placements were more satisfied with their supervisory relationships compared with students in nursing homes. Of the eight items, five proved statistically significant. Students referring to nursing home placements were least satisfied with the experience of receiving individual supervision, the continuity of feedback and supervision that promoted learning.

Insert table 2

Total scores favoured hospital wards in the areas of nursing care and learning situations on the wards and for supervisory relationships.

Insert table 3.

In the linear regression analysis, a good relationship with one supervisor, the occurrence of spontaneous supervision and clinical placement in hospitals as opposed to nursing homes, significantly predicted scores on the item “*the ward can be regarded as a good learning environment*”.

Insert table 4

Discussion

The outcomes of this study indicate that the participating nursing students whose clinical placements were in nursing homes (n= 146) assessed their clinical learning environment more negatively than those (n= 261) with hospital placements. We have not found any Norwegian or international quantitative studies comparing the clinical learning environment in nursing homes with that in hospital settings. Several qualitative studies (Happel 1999, 2002, Herdman 2000; Kloster *et al.* 2007) indicate that nursing students hold a negative view of the clientele in nursing homes, the working environment, negative feedback, previous personal experiences in this area and the lack of professional challenges in this line of work. The experience of a negative working environment will result in nursing students finding care for older people unsatisfactory. Ageism exists in modern society (Herdman 2000, de la Rue 2002) and work in aged-care institutions is one of the lowest rated preferences for future work among nursing students (McKinlay & Cowan 2003, Kloster *et al.* 2007). This may be based on several conditions. One interpretation may be that nursing students are influenced by myths and stereotypes about ageing (Hweidi & Al Obeisat 2006). Perceptions of care for older people as having a low status and older people as economic burdens on society may also have an impact (Lovell 2006). Another interpretation may be that nursing students regard the scientific nursing tradition with observable and useful outcomes (Stevens & Crouch 1998) as being

more interesting than nursing care-based values which are not measurable to the same degree and mainly focus on psycho-social life conditions (cf. Alvsvåg 1997) and the patients' feeling of home (de Veer & Kerkstra 2001). This has been described as the cure-care dichotomy (Stevens & Crouch 1995) resulting in nursing students preferring to work in acute health care settings involving curing illness and saving lives.

A Norwegian study (Espeland & Indrehus 2003) showed that Norwegian nursing students were generally satisfied with the clinical practice as part of their nursing education as compared to nursing theory instruction. This supports the importance of investigating nursing students' perceptions of and experiences with their clinical learning environments. From such knowledge proper actions can be implemented in order to strengthen nursing homes as learning environments. This may increase the recruitment of graduated nurses to this field of work (Kirkevold & Kårikstad 1999) as clinical experiences are found to have impact on future choice of workplace (Edwards *et al.* 2004).

In the questionnaire the sub-dimension "*pedagogical atmosphere*" included items concerning psychological and learning aspects. There were differences among the two groups in favour of the nursing home group regarding "*the staff learned to know the student by their personal name*". The majority nursing home students reported that staff learned to know the students by name, with a lower result among students in hospital settings. This indicates that the students to some degree experienced a positive psychosocial atmosphere where they were known to staff by their names. One way of interpreting this can be that hospital wards normally are larger than nursing homes, with more staff, patients and higher turnover (Norwegian Directorate for Health 2008). Such conditions may make it difficult for hospital staff to remember the names of new, temporary members of the practice community. From

scores on other items though, this is not sufficient for the environment to be perceived as instructive.

Students in nursing homes found it less easy to approach the staff as compared to students in hospital placements. This may be caused by the fact that nursing homes in Norway are often lower staffed than hospitals, perhaps resulting in nursing students feeling that they were a disturbance when and if approaching nurses. In Norway there is a lack of nurses in nursing homes (Dolonen 2009) and the number of nurses as part of the total staff is lower than in hospitals.

The item dealing with the atmosphere on the ward showed statistically significant variation between the two groups of students with a lower percentage finding a positive atmosphere in nursing homes than in hospitals. Whether the atmosphere in a clinical placement is perceived as positive or not depends upon several interwoven factors. Whether the students feel welcomed will have an impact on how they experience the atmosphere in the ward. An unwelcoming environment will not support learning and will make the students focus on being accepted rather than on learning (Ranse & Grealish 2007). Clinical practice as a potentially stressful experience was noted in a study by Elliott (2002) and Chan (2004) that focused on the relationship between student learning in clinical placement and the social climate in the learning environment.

Another important factor deals with how nursing students experience that they are being supported in their learning process (Robinson *et al.* 2007). There is a global focus on shortage of nurses (Oulton 2006) and the lack of nurses who wish to work in nursing homes (Kirkevold & Kårikstad 1999, Lovell 2006). In Norway, only half of the staff at nursing homes are

registered nurses, and care provided by auxiliary nurses and unlicensed nursing assistants has increased proportionally (Dolonen 2009). These conditions raise both capacity and professional competence issues regarding the possibilities of creating a positive atmosphere for nursing students entering nursing homes for educational purposes. Capacity issues will affect the integration of the students into the professional nursing community. The lack of nurses will affect clinical teaching and learning outcomes for the nursing students.

No studies focusing on differences in interest for the supervision of nursing students in nursing homes and hospitals have been found. In this study, students reporting from hospital wards experienced a stronger interest in student supervision than the respondents from nursing homes. The difference was highly statistically significant (p -value = .002). Staff nurses' experiences of workload in nursing homes may be part of the reason why nursing home staff showed less interest for supervision than staff nurses in hospitals. This may be caused by the fact that nursing staffing is lower in nursing homes than in hospital settings (Dolonen 2009). Negative attitudes towards aged care will negatively impact nurses working within this field (cf. Happel 2002) and hence affect the efforts to provide nursing students with professionally confident supervision during clinical practice. It will also be easier for clinical settings with sufficient nursing staff to free nurses to participate in supervision training courses. Preparation for supporting and supervising nursing students will make nurses more confident with their role in facilitating learning in clinical placements (Landmark et al., 2003) and contribute to nursing students' experiences of the clinical learning environment (Clarke *et al.* 2003).

For the two items concerning meaningful learning situations and multi-dimensional learning situations there were highly significant differences in favour of the hospital group (Table 2).

This is in agreement with findings in other studies (Happel 1999, 2002, Fagerberg *et al.* 2000; Kloster *et al.* 2007) showing that nursing students experience caring for older people as unchallenging, custodial and having a heavy workload, while nursing and nursing activities in hospitals are found more interesting, to have high status and high variety (Herdman 2002) and to be more in line with what they had learned in college (Fagerberg *et al.* 2000). Students also tend to perceive care in nursing homes as being routinised (Lumley *et al.* 2000).

Students in nursing home placements evaluated the item “*the ward can be regarded as a good learning environment*” more negatively than those in hospital settings with high statistical significance. Many factors impact on how the learning environment is perceived. Supportive relationships are important, as is how the students experience the learning situations that they are exposed to in terms of meaning and content. Nursing students undergoing clinical practice in nursing homes must be helped and supported in viewing gerontological nursing as not being unchallenging, repetitious or boring (cf. Happel 2002, Brown *et al.* 2008); this may allow them to perceive nursing homes as good learning environments.

The sub-dimension “*leadership style of the ward manager (WM)*” consisted of four items. There were differences between the two samples on all items and the differences regarding “*the WM regarded the staff on her/his ward as a key resource*” and “*the WM was a team member*” was statistically significant. Overall this sub-dimension was not identified as being very visible in this study. This might be because in both in Norwegian nursing homes and Norwegian hospitals, the WM normally does not have supervisory responsibilities with regard to nursing students. Still, the WM was shown to have an impact on the learning environment in a study by Bezuidenhout *et al.* (1999); this role consists of welcoming the students, giving

them sufficient orientation and promoting motivation in the staff for the inclusion and involvement of the students in the ward.

The quality of nursing care was identified in the sub-dimension “*nursing care and learning situations on the ward*”. All items were statistically significant showing that students performing clinical practice in hospital settings experienced a clearer defined nursing philosophy and that patients received individual patient care, an unproblematic information flow and clear documentation of nursing. The largest variation was in connection with the item about documentation. More students in nursing homes reported dissatisfaction with nursing care documentation as compared to students referring to experiences with hospital placements ($p = .000$). Shift reporting as part of nursing care documentation is one of the situations nursing students regularly encounter when undergoing clinical practice. For nursing students oral shift reporting may assist with education, social interaction, emotional support and socialisation into the professional nursing role (Kerr 2002). These factors will influence the students’ perceptions of the clinical learning environment, as several studies have shown that thorough and patient-centred shift reporting may promote learning (Sherlock 1995, Lamond 2000, Kerr 2002). Normally the condition of patients in nursing homes does not change drastically from day to day, resulting in task-orientated documentation (Liukkonen 1993). This may be a reason why students in the nursing home group reported having unclear nursing documentation and a lack of nursing plans and recordings of procedures.

From the results in this study the supervisory relationship is important. This corroborates with other studies showing that the supervisory relationship is an important factor for nursing students while undergoing clinical practice (Lloyd Jones *et al.* 2001, Vallant & Neville 2006, Zilembo & Monterosso 2008). The participating students were overall supervised by staff

nurses who were appointed for individualised supervision. There existed differences between the two groups of students in all items concerning the supervisory relationship, with more negative results for students in nursing homes. The experiences concerning mutual respect and approval and a supervisory relationship characterised by a sense of trust varied between the two groups, but was without statistical significance (Table 2). On the other items, students from nursing homes showed significantly lower scores than students in hospital wards for their experience of the supervisory relationship. This implies that students who had clinical practice in nursing homes, experienced less individual supervision than those reporting from hospital settings, and that they were less satisfied with the supervision they received. Taking into consideration the importance that clinical experience has for socialisation to and perceptions of the nursing profession, it is notable that only half of the students in nursing homes “agreed to some extent” or “fully agreed” that they continuously received feedback from their supervisor and also that they were less satisfied with the promotion of learning by supervision.

The results are interpreted in light of the limitations connected to cross-sectional study design and self-reporting on variables. Generalisations cannot be made because this is a convenience sample and had a low response rate. However, we find that the study offers valuable insights into nursing students’ experiences of supervision in nursing homes and hospital wards as learning environments and in a Norwegian context. The validity of the study is strengthened by comparing institutional placements in order to provide comparable contexts for the use of the instrument.

Conclusions

The results of this study reveal that there are challenges for practitioners and educators in achieving positive clinical learning environments in nursing homes. However, it is important to note that the data from this survey were statistically analysed by measuring the results according to the alternatives “*agree to some extent*” and “*fully agree*” on the Likert scale. This indicates that even if Norwegian nursing students are more dissatisfied with nursing homes than hospitals as learning environments, the overall results suggest that the majority are satisfied. The results suggest a potential for the improvement of nursing homes as learning environments.

There are few Norwegian studies giving data on Norwegian nursing students’ experiences and perceptions of their clinical learning environment except those referring to preferences for future workplace (Bergland & Lærum 2002, Kloster *et al.* 2007). The findings in this study confirm the importance of a pedagogical atmosphere characterised by positive engagement and supervision in a supportive and trusting atmosphere (Chan 2004, Saarikoski *et al.* 2005). Nursing students are eager to learn and to practice theory obtained at school (Ranse & Grealish 2007). In order to recruit graduated nurses to work in nursing homes, it is necessary that nursing students experience positive clinical learning environments characterised by a pedagogic atmosphere conducive to teaching and learning with a clear nursing philosophy and systematic individual supervision in a one-to-one relationship.

Relevance to clinical practice

In order to support recruitment of nurses to nursing homes it is of importance to examine factors influencing the clinical learning environments nursing students participate in during their nursing education. The CLES+ T instrument has proven to be an adequate data

collection tool across both groups, but in order to obtain a representative selection the study must be repeated in institutional contexts more similar to those in studies conducted by Saarikoski *et al.* (2002, 2005, 2007, 2008) and to a representative sample.

Acknowledgements

The authors wish to thank Saarikoski for allowing us to use the CLES+T evaluation scale. Furthermore we wish to thank the deans who allowed the study by releasing names and addresses of the participating students whom we also thank.

Conflict of interest: All authors confirm that there is not any actual or potential conflict of interest.

Funding: This study was funded through a scholarship at the University of Tromsø, Faculty of Health Sciences, Department of Health and Care Sciences.

Contributions

Study design: MWS, NH, HKN.

Data collection: MWS.

Data analysis: MWS, NH, HKN.

Manuscript preparation: MWS, NH, HKN.

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Table 1 Demographic characteristics, practice sites and supervision conditions of nursing students (n=407)⁷. Per cent unless otherwise indicated.

Age (years, mean, SD)

Total	27.4 (7.9)
Female	27.1 (7.7)
Male	29.6 (9.3)

Study year

First	24.7
Second	42.4
Third	32.9

Practice site

Nursing home	35.9
Acute care hospital	44.0
Psychiatric hospital	20.1

Supervisor title

Nurse	79.8
Specialist nurse	19.4
Ward manager	0.8

Organization of supervision

No supervisor appointed	0.5
One supervisor, strained relation	10.4
Changed supervisor	4.4
Situational supervisor	10.1
Group supervision	6.5
One supervisor, good relation	68.1

Spontaneous supervision

Never	8.9
1-2 times	21.8
< Weekly	14.9
Weekly	17.8
> Weekly	36.6

⁷ N may vary slightly due to differing missing rates

Table 2 Per cent reporting “agree to some extent ” or “fully agree” to statements regarding aspects of learning environment quality in nursing homes and other practice sites (acute care hospitals, psychiatric institutions) for student nurses (n=407)⁸.

(n)	Nursing homes (146)	Other sites (261)	χ^2	p-value
<i>Learning environment</i>				
- <i>Pedagogical atmosphere</i>				
The staffs were easy to approach	77.4	86.2	9.49	.009
I felt comfortable going to the ward at the start of my shift	72.6	77.8	1.47	.480
During staff meetings (e.g. before shifts) I felt comfortable taking part in the discussions	50.7	49.2	0.12	.941
There was a positive atmosphere on the ward	66.2	78.1	7.12	.028
The staffs were generally interested in student supervision	47.9	62.5	12.94	.002
The staff learned to know the student by their personal name	78.1	65.1	8.09	.018
- <i>Leadership style of the ward manager (WM)</i>				
The WM regarded the staff on her/his ward as a key resource	64.1	76.6	8.63	.013
The WM was a team member	52.7	65.9	7.49	.024
Feedback from the WM could easily be regarded as a learning situation	38.0	45.0	2.52	.284
The effort of individual employees was appreciated	57.3	68.3	5.57	.062
- <i>Nursing care and learning situations on the ward</i>				
The wards nursing philosophy was clearly defined	45.4	58.7	9.50	.009
Patients received individual nursing care	74.3	85.4	8.82	.012
There were no problems in the information flow related to patient’s care	52.1	65.5	7.08	.029
Documentation of nursing (e.g. nursing plans, recording of nursing procedures etc) was clear	57.9	74.9	19.1	.000
There were sufficient meaningful learning situations on the ward	51.4	74.9	28.6	.000
The learning situations were multi-dimensional in terms of content	42.1	69.4	29.6	.000
The ward can be regarded as a good learning environment	57.6	76.8	17.0	.000

⁸ n may vary slightly due to differing missing rates for single items

- <i>The content of the supervisory relationship</i>				
My supervisor showed a positive attitude towards supervision	74.5	83.5	5.13	.077
I felt that I received individual supervision	62.3	81.2	17.4	.000
I continuously received feedback from my supervisor	50.7	66.3	11.6	.003
Overall I am satisfied with the supervision I received	64.1	76.5	8.72	.013
The supervision was based on a relationship of equality and promoted my learning	64.4	75.4	9.99	.007
There was a mutual interaction in the supervisory relationship	64.1	77.2	8.66	.013
Mutual respect and approval prevailed in the supervisory relationship	77.4	85.4	4.31	.116
The supervisory relationship was characterized by a sense of trust	75.9	83.1	3.17	.205

Table 3 Student nurses' evaluation on CLES sub-scales in nursing homes and other practice sites (acute care hospitals, psychiatric institutions)

	Nursing homes	Other sites	Total
(n) ⁹	(141)	(255)	(396)
p-value	M (SD)	M (SD)	M (SD)
Pedagogical atmosphere on the ward .146	3.73 (0.92)	3.87 (0.82)	3.82 (0,86)
Leadership style of the WM .099	3.55 (0.95)	3.71 (0.97)	3,72 (0.96)
Premises of nursing and learning situations on the ward .000	3.51 (0.85)	3.94 (0.70)	3.79 (0.78)
Supervisory relationship .000	3.80 (1.14)	4.18 (0.96)	4.04 (1.04)

⁹ n may vary slightly due to differing missing rates for single items

Table 4 Multiple linear regression analysis of "The ward can be regarded as a good learning environment" (1=fully disagree, 5=fully agree) among student nurses (n=368)

	B	SE B	t	p-value
One supervisor, good relation (1,2)	0.67	0.12	5.19	.000
Spontaneous supervision (1,5)	0.23	0.04	5.35	.000
Practice in hospital vs. nursing home (1,2)	-0.42	0.13	-3.01	.002

$R^2 = .23$

Excluded variables: Age, sex, study year