

Clinical learning Environment and the Influential Factors from Nursing Students perspectives

بيئة التعلم الميداني والعوامل المؤثرة من وجهات نظر طلاب التمريض

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الخلاصة

خلفية البحث: بيئة التعلم الميداني (العملي) هي كل ما يحيط بالطالب في هذه البيئة من مستلزمات وكوادر بشرية قائمة على التدريب كالمدرسين والمرمضات بالإضافة الي المرضى ولتحقيق التعليم المرغوب فيه يتطلب من القائمين علي التعلم تقييم مستمر لفهم الأوضاع الحالية للتعليم الميداني وتحديد نقاط القوة والضعف والتركيز على نقاط الضعف.

الهدف: تهدف الدراسة الي تقييم بيئة التعلم الميداني والعوامل المؤثرة من وجهات نظر طلاب التمريض.

المنهجية: دراسة وصفية أجريت بكلية التمريض جامعه سوهاج على ١٨٣ طالب وطالبة بالفرقة الثانية في الكلية للفصل الدراسي الاول ٢٠١٥-٢٠١٦. وقد تم جمع البيانات من الطلاب بعد الإنتهاء من فترة التدريب العملي باستخدام (استبيان تقييم بيئة التعلم الميداني وإستبيانقياس أهم المعوقات التي تواجههم اثناء التدريب) وتم تحليلها إحصائيا من خلال إستخدام برنامج التحليل الإحصائي (SPSS) الإصدار (١٦) لإدخال وتحليل البيانات.

النتائج: أظهرت النتائج أن مجموع متوسطات مقياس تقييم بيئة التعلم الميداني بلغت ١٤٠.٣±١١٢.٣ من المجموع الكلي للإستبيان البالغ ١٦٨ درجة

وأن حوالي من ٥٠% الي ٨٦% من آراء الطلاب كانت سلبية تجاه بيئة تعليمهم الميداني وكانت درجة رضا أغلب الطلاب متوسطة ما بين ٦١-٧٩ درجة.

وأظهرت الدراسة أيضا بوجود فروق ذات دلالة إحصائية بين متوسطات أبعاد المقياس على أساس الجنس في المحاور التالية (معرفة

الطلاب للمهام المطلوبة وأستخدام الإبتكار في التدريس). بينما لم تظهر الدراسة أي فروق ذات دلالة إحصائية لمتغير العمر رغم أن أغلب

متوسطات محاور بيئة التعلم الميداني كانت أعلى في الفئات العمرية الأكبر من ٢٠ عاما. وتوصلت الدراسة أن معظم الطلاب يعانون من كثير من

المشكلات المتعلقة بالتعليم الميداني وكانت أكثر مشكلة واجهتهم أثناء التعليم الميداني هي نقص المرافق التعليمية المناسبة في بيئة التعليم الميداني

(٣٦.٦%)، وأقلها كانت التداخل بين جدول التدريب العملي والمتدربين الآخرين (٣٦.٦%).

الإستنتاج: هناك معوقات وتحديات تجابه الطلاب في بيئة تعلمهم الميداني والتي قد تؤثر على تعلمهم وكفاءتهم بعد التخرج.

التوصيات: على الجهات المسؤولة والقائمة على العملية التعليمية بجامعة سوهاج ومعلمي التمريض بالكلية أن يولي اهتماما خاصا للقضايا التعليمية

التي تواجه الطلاب وإتخاذ إجراءات حازمة للتغلب على عقبات التعلم من أجل خلق بيئة التعلم الميداني المرغوب فيها وتحقيق الاهداف المرجوة

منه.

ABSTRACT

Background: Clinical environment is all that surrounds the nursing student within clinical areas, such as places, resources, staff skills, patients, peer group and nursing tutors.

Aim: to assess the clinical learning environment and the influential factors from nursing students perspectives.

Methodology: A descriptive study is carried out in Faculty of Nursing, Sohag University at the end of 1st semester (2015-2016). The sample comprised of (183) out of the total number of 2nd year nursing students. Data was collected using the Clinical Learning Environment Inventory, Obstacles to Learning Clinical Skills tools and analyzed by using a descriptive statistics in the form of frequencies, percentages, mean and standard deviation and independent t-test using (SPSS v.16).

Results: The average score of total clinical learning environment scale was (112.3 ±14.0) from the total score (168), and about from 50% to 86% of the students' had a negative opinion towards their clinical learning environment, and majority of them 72.2% were moderately satisfied. Although the mean scores of clinical learning environment domains were higher in some domains, no statistical differences were found between the respondents viewpoints depend on age groups (p>0.05). Moreover, it was found that the mean scores of clinical learning environment domains were higher in females than males but no statistical differences were found between the students opinions based on gender except in the following domains: task orientation and teaching innovation only (17.2±3.4, 16.1±4.0; 15.7±3.1, 15.3±3.9) respectively. The most significant obstacles which faced the students during clinical learning were lack of educational facilities (69.3%), and the least was interference between the training schedule with other trainers (36.6%).

Conclusion: There are significant obstacles and challenges that face nursing students in clinical learning environment, all of which could influence their learning and competency after graduation.

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Recommendations: Educational authorities at Sohag University and nursing educators in the faculty should pay special attention to the issues and take assertive action to overcome the learning obstacles in order to create a desirable clinical climate.

KeyWords: Clinical Learning Environment; Obstacles; clinical settings; Nursing students.

Introduction

The clinical learning environment is considered a primary area of professional practice for nurses and students, and their viewpoints contribute to its improvement⁽¹⁾. Papp et al. describe CLE as an interactive network of power within the clinical areas which influences the students learning outcomes; it consists of all that surrounds the student such as places, equipment, ward staff, patients and educators; the learning environment is therefore a main element in the whole learning process⁽²⁾.

Clinical learning climate can be divided into two separate environments namely; the academic and applied places Clarke et al.,⁽³⁾. During the clinical training sessions, the students acquire new knowledge, comprehend and integrate information and apply to the patients what they have learned in classroom situation, and help them make independent nursing decisions Elcigil and Sari⁽⁴⁾ and have the chance to perform nursing role model in the clinical settings Thorell-Ekstrand⁽⁵⁾. Andrews and Roberts argue that clinical practicum should take about fifty percent of the all undergraduate nursing curricula⁽⁶⁾. The quality of nurse education depends immensely on the goodness of the practical experiences that student nurses receive in the clinical settings⁽⁷⁾.

Experimental learning within clinical places is a vital component of undergraduate nursing education which helps students to become socialized into the standards and culture of the nursing career⁽⁸⁾.

There are several factors that influence the effectiveness of student's learning in clinical areas and that could certainly have an impact on the aptitude and confidence of the students such as presence of a mix of patients, the directives they receive, organizational quality and the number of students who learn together at the site of training Dolmans et al., and Duraket al.⁽⁹⁻¹⁰⁾. Courtney-Pratt et al; Lewin, identified two factors as key determinants of students satisfaction of clinical training: the quality clinical facilitator bolster and the obtainable range of clinical learning chances⁽¹¹⁻¹²⁾.

Rahmani et al., and Ali et al., evaluated the students perceptions towards CLE. These studies also highlighted the significance of a supportive CLE that places focus on effective two-way communication. A thorough comprehensive understanding of students' perceptions of their CLE is necessary for ensure the demanded teaching and optimal learning process. In addition to the nursing education institutions, healthcare agencies should pay attention to the quality of CLE to meet the needs of nursing students^(13,14). In Egypt, Zakaria and Gheith argue that ongoing evaluation of the efficiency of clinical climate will improve the quality of clinical practices and enhance knowledge and skills of the students' which they need as a registered nurses⁽¹⁵⁾.

Significance of study:

As nursing educators, we observed and often heard students complains and dissatisfaction with their clinical learning experiences. This concern created an interest to formally assess the views of students at the end of clinical training. On other hand, the regular evaluation and feedback will provide further valuable input for institution strategic planning and help educators and faculty administration to better recognize the quality of the learning environment within such places and appreciate the expectations of students when they are specified to the wards for clinical training, and also direct institutional resources to those areas that need urgent remedial actions and to inform the clinical teachers how best to supervise the students. Therefore, we thought it

necessary to assess the CLE and the influential factors from the viewpoint of nursing students.

OBJECTIVE: to assess the clinical learning environment and the influential factors from nursing students perspectives.

SUBJECTS AND METHODS:

Design: A descriptive approach was adopted to accomplish the study.

Setting: The study was conducted at Faculty of Nursing, Sohag University at the end of clinical training both in faculty lab and hospital departments following; medical, surgical and and plastic surgery department. The clinical training placements lasted between thirteen to fifteen weeks. The students spent 20 hours weekly in the clinical area during placements after three weeks training in the faculty lab on the nursing procedures in addition to the theoretical study, one instructor or assistant lecture for each group as their trainers were allocated in the clinical settings either from the Medical-Surgical Nursing department or other faculty departments.

Subjects: The sample included in the study were 183 out of 243 of nursing students registered in the 2nd year (2015-2016) 1st semester who studied Special Medical-Surgical Nursing course. Sixty students were excluded from the study for the following reasons: 21 students disapproved to share in the study and 18 students were taken as a pilot study. In addition, 21 were repeats in one or two courses. In order to obtain a homogeneous sample of participants, the sample involved only students in 2nd year to meet identity criteria and minimize the effects of exogenous factors, such as students' different grades and clinical places.

Tools of data collection:

Tools I: Clinical Learning Environment Inventory (CLEI): It was designed by Chan⁽¹⁶⁾ and consists of two parts:

Part (I). Demographic data such as respondents age and gender.

Part (II). Clinical Learning Environment Evaluation: This part it contains of 42 items grouped into 6 domains, each domain contains of 7 items. It was designed to assess the perceptions of the students toward CLE on two forms; the actual form and the favorites form. In this study, the actual form only was used.

Description of the CLE Domains:

1. Individualization: assesses the extent to which students are permission to make decisions and are treated differently according to their capabilities or interest shown.

2. Teaching innovation: estimate the extent to which the clinical nursing educators use innovation in clinical learning, introduce advanced teaching strategies and learning activities.

3. Student involvement: evaluate the degree to which students engage actively and intently in different clinical areas activities.

4. Personalization: emphasizes on chances of students to interact individually with the clinical educators.

5. Task orientations: assesses the degree of the instructions for hospital wards tasks were definite to the students and well organized.

6. Satisfaction: measures the degree of satisfaction felt by the students in a clinical learning settings.

Scoring system:

Each item in the CLE was computed on a 4-point Likert ranged from 1 (Completely disagree) to 4 (Completely agree), while the scores on negative items were reversed. The total score ranged from 42 to 168. Scores of students' satisfaction for CLE were categorized into 80–100, 61–79 and ≤ 60 translating: good, moderate and poor respectively.

Tools II: Obstacles to Learning Clinical Skills Tool (OLCS): This tool was developed by Moghimi et al.,⁽¹⁷⁾ it included 16 items regarding the current bothersome obstacles to learning clinical skills, divided into four sections; the first section is related to the trainer, second is related to educational program, third is related to environment, while the last section is related to students. In addition to one open-ended question related to students' suggestion to improve the clinical training was developed by the researchers.

Scoring system:

Responses were rated on a 5-point Likert scale ranged from the highest item "strongly agree" to the lowest "strongly disagree". The total score ranged from 16 to 80. According to open-end question the researchers read all students suggestions to improve clinical learning and based on suggestions defined categories of responses. After that the authors independently coded the suggestions.

Validity and reliability:

The questionnaire was translated into the Arabic language, then the Arabic and English questionnaire have been examined by a panel of five experts in the field of nursing to ensure its content validity. The panelists indicated that some items need to be modified, and they confirmed that each tool contributed to achieving the aim of the study. Cronbach alphas for each of the five subscales in tool (1) ranged from 0.70 to 0.77, and 0.70 for tool (2), asserting good internal consistency of the tools in the current study.

Pilot study:

Once the tools were modified and constructed, a pilot study was performed on 10% of students to check the wording and clarity of the questions, identify the obstacles that may be encountered during data collection and to estimate the time required to fill the questionnaire. Based on results of the pilot study, minor changes were done by rephrasing some items to avoid the ambiguity of the questionnaire.

Filed work:

Data was collected from the respondents at the end of clinical learning for each of simulation lab and hospital departments in the clinical areas mentioned previously during first semester of the academic year 2015-2016. The aim and purpose of the study were introduced to all students before collecting data. In addition, written information was attached to the questionnaire and the researchers were existent to answer any questions. Respondents were given the opportunity to answer the questionnaire in the classroom during the last theoretical lecture in the last week at Faculty of Nursing, Sohag University to attain opinions about CLE as a part indivisible from learning process and to determine the influential factors which adversely affect their learning in these places for undergraduate nursing degree. Filling the questionnaire consumed about 20-25 min.

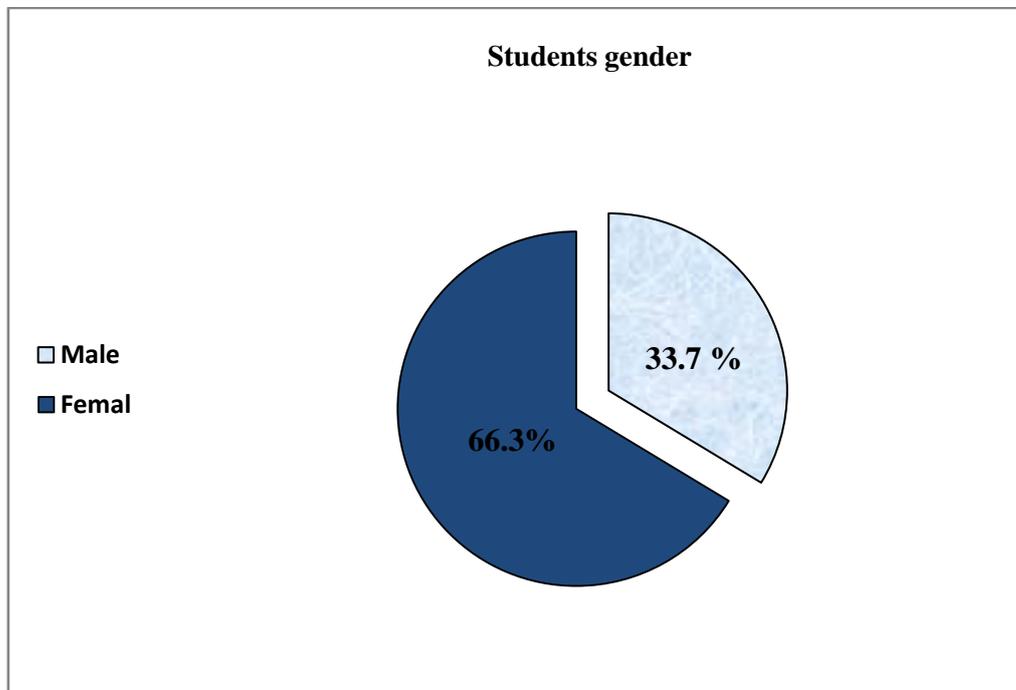
Administrative and ethical considerations:

Before embarking on the actual study, the research proposal was offered to the ethical committee of academic ethics to be approved, official approvals were obtained from the pertinent authority, Sohag University to conduct the study amongst the students. Also oral consent was received from the respondents to share in the study. The respondents were informed that they have the right to abstain to be involved or retreat from the study at any time without any negative effects on them.

Statistical analysis:

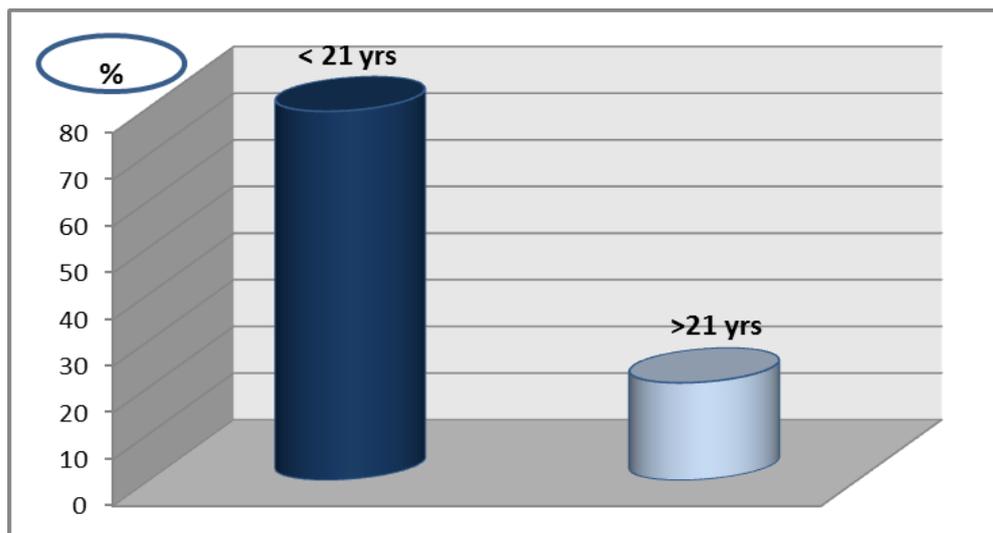
Statistical analysis was conducted by using (SPSS version 16). Data was presented using descriptive statistics in the form of frequencies, percentages, means value, and standard deviation and independent t-test was used to compare between groups. Differences were considered significant at $p < 0.05$ for all comparisons.

Results:



Figure(1): Frequency distribution of students regarding to gender

Figure(1) shows that, about two thirds of the study sample were females (66.3%), while (33.7%) were males.



Figure(2): Frequency distribution of students regarding to age

Figure(2) clarifies that, highest percent of the study sample aged < 20 years old (79.1%), while (20.9%) of the respondents were > 20 years.

Table(1) The opinions of students towards clinical learning environment

| CLE domains | Mean | Standard Deviation | Positive attitude | | Negative attitude | |
|----------------------------------|--------------|--------------------|-------------------|--------------|-------------------|--------------|
| | | | Number | Percent | Number | Percent |
| Individualization | 20.3 | 3.9 | 99 | 50.51 | 97 | 49.49 |
| Personalization | 20.1 | 3.0 | 60 | 30.61 | 136 | 69.38 |
| Student involvement | 20.3 | 4.3 | 100 | 51.02 | 96 | 48.98 |
| Satisfaction | 19.0 | 3.8 | 75 | 38.26 | 121 | 61.73 |
| Task orientation | 16.8 | 3.6 | 29 | 14.80 | 167 | 85.20 |
| Teaching innovation | 15.6 | 3.4 | 27 | 13.78 | 169 | 86.22 |
| Total viewpoint about CLE | 112.3 | 14.0 | 31 | 15.82 | 165 | 84.18 |

Table(1) shows that the students opinions about CLE,as can be seen, in all domains of CLE, except individualization to make decisions and involvement of the students in clinical settings activities, most of students had negative views toward CLE.

Table(2): Mean(SD) subscale and CLEI scores of nursing students by age(n=183)

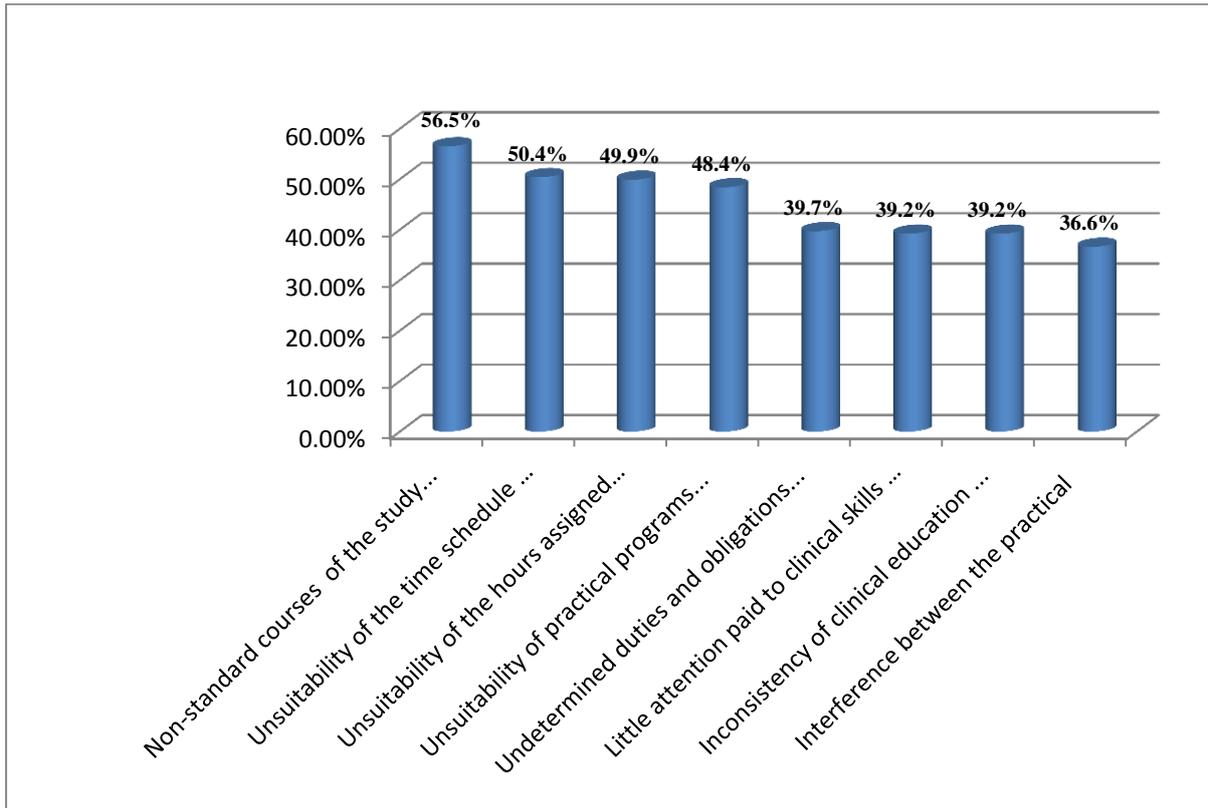
| CLE domains | Age (years) | | P.Value |
|----------------------------------|-----------------------|------------------------|---------------|
| | <20years Mean ± SD | > 20years Mean ± SD | |
| Individualization | 20.21±3.80 | 20.78±4.41 | 0.460 |
| Personalization | 20.18±3.11 | 20.17±3.04 | 0.985 |
| Student involvement | 20.23±4.21 | 20.73±4.72 | 0.546 |
| Satisfaction | 18.90±3.91 | 19.51±3.56 | 0.433 |
| Task orientation | 16.76±3.52 | 17.12±4.14 | 0.612 |
| Teaching innovation | 15.63±3.38 | 15.51±3.79 | 0.847 |
| Total viewpoint about CLE | 112.07±14.13 | 113.34±13.73 | 0.604 |
| Obstacle overall mean | 55.87±23.63 | 47.75±20.88 | 0.035* |

This table shows the comparison of respondents views in CLE based on their ages. It was found that, despite the mean scores of respondents views domains were higher in ages>20 years than less of 20 years in following domains individualization 20.7±4.4;20.1±3.1, student involvement 20.7±4.7;20.2±4.2, satisfaction 19.5±3.5,18.9±3.9 and task orientation 17.1±4.1, 16.7±3.5, but no statistical significant difference was found between them (p> 0.05). While, it was found a significant differences in the overall learning obstacles between age groups.

Table(3):Mean(SD) subscale and total CLEI scores of nursing students by gender (n=183)

| CLE domains | Gender | Mean± SD | P. value |
|---------------------------|--------|--------------|----------|
| Individualization | Male | 20.40±3.67 | 0.850 |
| | Female | 20.30±4.07 | |
| Personalization | Male | 19.92±2.85 | 0.396 |
| | Female | 20.44±3.21 | |
| Student involvement | Male | 20.13±4.36 | 0.638 |
| | Female | 20.44±4.30 | |
| Satisfaction | Male | 18.95±3.86 | 0.844 |
| | Female | 19.06±3.84 | |
| Task orientation | Male | 16.12±4.02 | 0.065* |
| | Female | 17.20±3.41 | |
| Teaching innovation | Male | 15.36±3.97 | 0.048* |
| | Female | 15.73±3.18 | |
| Total viewpoint about CLE | Male | 111.09±14.77 | 0.388 |
| | Female | 112.97±13.63 | |
| Obstacle overall mean | Male | 48.16±19.74 | 0.006* |
| | Female | 57.23±24.37 | |

Table(3) This table shows the comparison of the views of students' in CLE based on their gender. It was noticed that the mean scores of females were higher in the following domains only, task orientation and teaching innovation with statistically significant differences (17.2± 3.4, 16.1±4.0; 15.7±3.1,15.3±3.9) respectively, but although the other means scores of domains were higher not meaningful differences were found between the two groups. Also, it was found a significant difference in the overall score in determining the obstacles which adversely affect students learning in the clinical environment from viewpoints of the students' (57.2±24.3; 48.1±19.7) respectively.



Figure(3): Top eight obstacles regarding the hindering influence of learning environment and facilities on learning clinical skills

Figure (3) clearly shows the top eight obstacles that influence of learning climate and facilities on learning clinical skills, as illustrated in this figure, non-standard courses of study designed for clinical education reported as the highest obstacle for learning by 56.5% of students, followed by unsuitability of the time schedule for learning (50.4%). Unsuitability of the hours assigned for clinical education (49.9%), unsuitability of practical programs and courses (48.4%), undetermined duties and obligations of students' (39.7%). While the little attention paid to clinical skills in practice, inconsistency of clinical education with the regular schedule and interference between practical schedule of the nursing students' with other trainees were (39.2%, 39.2% and 36.6%) respectively.

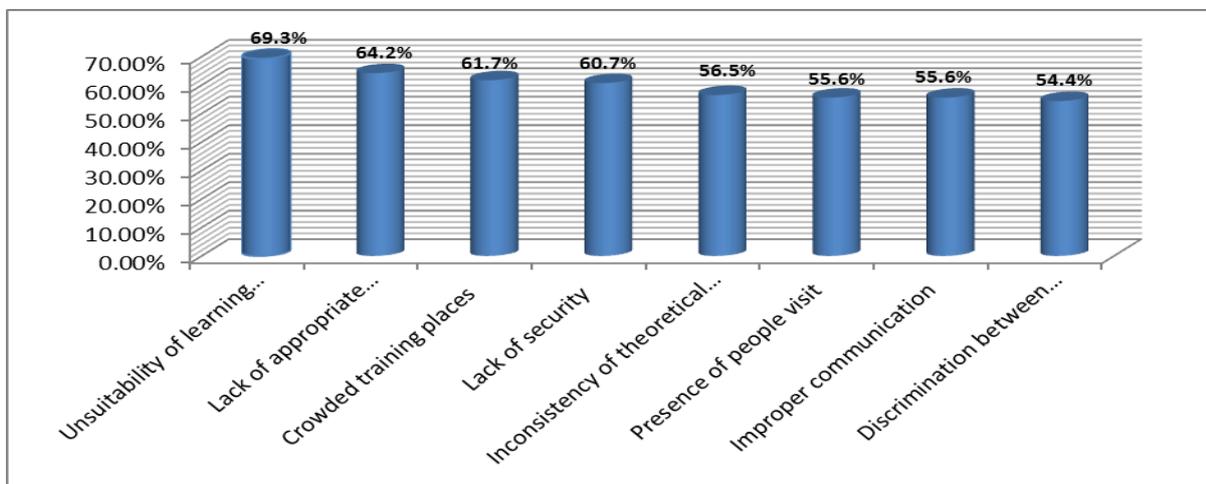


Figure (4): The most important eight obstacles to learning clinical skills

Figure (4) shows the top eight obstacles to learning clinical skills. About two thirds of the students reported unsuitability of training environments and facilities, lack of appropriate educational facilities for students in clinical environment, crowded workplaces, and absence of security while treating patients or carrying out medical procedures (69.3%, 64.2%, 61.7%, and 60.7%) respectively. On the other hand, other problems that face the students during clinical training included discrimination between nursing students and those in other majors (54.4%), inconsistency of theoretical knowledge with practical experiences (56.6%), improper communication among physicians, nursing staff and students and presence of people who come to visit or accompany patients during clinical training were the same (55.6%).

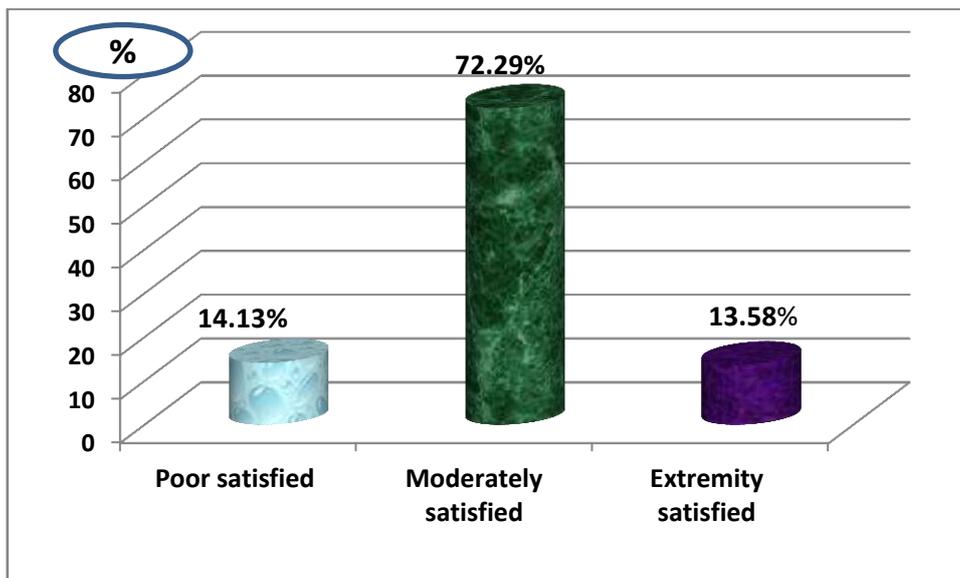


Figure (5) Overall degree of the students' satisfaction with clinical learning environment

Figure (5) explains the overall degree of the students' satisfaction as related to CLE, it was noticed that the majority of respondents 72.2% were moderately satisfied, while around one quarter only of the respondents were extremely satisfied 13.5%.

Table (4): Students suggestions for improvement of the CLE for themselves and future nursing students

| |
|---|
| <p>According to training time/supervision during clinical training:</p> <ol style="list-style-type: none">1. Increase number of instructors or clinical educators.2. Don't leave the students during training.3. Don't use the instructors or clinical educators from other departments.4. Reduce the time allocated to theoretical lectures and increase time allotted to hospital training.5. Apply the rounds system as in physicians. <p>According to facilities and equipment:</p> <ol style="list-style-type: none">1. Provide room and locker to change their clothes and save their belongings2. Provide equipment for training.3. Provide model like hospital environment in faculty lab <p>According to coordination between college and healthcare agencies:</p> <ol style="list-style-type: none">1. Increase coordination and cooperation between the faculty authority and training settings. <p>According to students number, visitors and educational schedule:</p> <ol style="list-style-type: none">1. Decrease number of students and avoid overlap with other trainees.2. Prevent visits to patients during the daytime.3. Do not give the theoretical lectures and training in the same day. |
|---|

Table(4) shows that the students' suggestions for improvement of the clinical learning process. As for the training and supervision time, the students' suggestion, increase number of clinical educators, non-recourse by clinical educators from other departments, decrease time allocated to theoretical lectures and increase time allocated to hospital training. As regards facilities and training equipment, the students' suggested providing room with locker to change clothes and save their belongings, provide equipment for training and models like hospital environment in faculty labs. On other hand, students suggestion that there must be coordination between the faculty authority and training places, also students suggest to develop the training process should decrease number of students and avoid overlap with other trainees and prevent visiting during the daytime. Students also suggested separating or giving the theoretical lectures on different days.

Discussion:

Effective clinical learning requires engaging of students into hospital wards duties, staff engagement to address individual students' learning needs, and use of innovation in clinical learning.

The present study indicated that the most negative viewpoint of nursing students was regarding innovation in clinical learning. The results of Rahmani et al. showed that in views of nursing students, students think that their clinical educators didn't use innovative clinical techniques in their education and training practices which are very important factor in the quality of clinical learning. Today several clinical teaching methods are innovative and nursing educators can use them⁽¹³⁾.

Among other recurrent complaints of nursing students against CLE was that their tasks at hospital wards was unspecified and disorganized. Baraz et al.,⁽¹⁸⁾ argues that one of the unprofessional behaviors of the clinical educators with the students was to ask them things which are not particularly defined as their tasks.

Nearly half of the students complained about the chances to interact individually with the clinical educators and on concern for students personal interest. These findings

are supported by what Rahmani et al., who found that among other problems that face nursing students in CLE was the lack of attention to students' individualization from all surroundings⁽¹³⁾.

In the same way, it seems that nearly half of the students also claimed that they had little opportunities to involve in the hospital wards activities. O'Connor⁽¹⁹⁾ claimed that importance of integrating the students in hospital wards activities prepares them for their future nursing career, to become competent practitioners, be able to provide quality health care and improve health of the clients they serve, and give chance to apply theoretical knowledge, skills and concepts they have learned in classrooms situation and in a simulation laboratory. Furthermore, in this climate, students could observe role models, and reflect on any things which he/she sees, hears, and does.

Concerning the effect of age on students' perception, it was found that despite the mean scores of CLE respondents' views domains were higher in age >20 years than less of 20 years; not meaningful differences were found between them ($p > 0.05$). However, significant differences were found in the learning obstacles between age groups. These results were compatible with Jaradeen et al.,⁽²⁰⁾ who reported that no statistical significant difference between students' satisfaction with their CLE, and students' characteristics.

As regard the effect of sex on students' perception, the present study revealed that the mean score of the CLE domains were higher in female than male, but no significant statistical difference was found except only in task orientation and teaching innovation. These results conformed with Rahmani et al.⁽¹³⁾ results who assumed that no meaningful difference was found between the respondents' viewpoints mean depend on gender.

In relation to the top eight obstacles which influence learning environment and facilities on learning clinical skills, as perceived by nursing students, the present study shows that more than half of the students complained from non-standard and unsuitability of practice programs and courses designed for clinical learning, which is consistent with the results obtained by Rahmani and Ahmed (2005).⁽¹³⁾

Among the important effective factors on students' clinical learning is unsuitability of the number of hours and time schedule assigned for clinical learning. These findings were agreed with Moghimi et al.,⁽¹⁷⁾ who reported that most students complained from inaptitude of the hours allocated for clinical learning and time schedule.

Moreover, students complained from lack of appropriate CLE facilities. These results were compatible with study result by Baraz et al.,⁽¹⁸⁾; Anarado et al.,⁽²¹⁾ which concluded that the most important influencing factors on clinical learning were insufficiency in practical and academic preparation facilities. These factors diminish the ability of the clinical educators for training and providing a suitable climate for effective learning in students.

Overcrowded training places was the third challenge that encounter the students during training, which is consistent with research done by Mabuda et al., who contended that crowded clinical training places by large numbers of students impedes effective clinical learning and learning chances and self-confidence which leads to students not competent to some remedial tasks when completing training hence unable to provide quality care⁽²²⁾, and to improve clinical learning, the number of the trainees should be reduced in training-places⁽²³⁾. Among other problems that faced students during training was the discrimination between nursing students and those in other majors. This finding is in congruence with the findings of the Jamshide et al.⁽²⁴⁾ who reported that many of

the nursing students complained of the staff discrimination between them and other trainees in the clinical settings.

Among the important factors which affect students clinical learning was the gap between the theoretical knowledge and practical experience and this impedes their clinical learning. These results were consistent with the study results by Jahanpour et al.,⁽²⁵⁾ who found that students become concerned and confused if they practice something different from what they learnt in the class or like nurses in real situations or differentiate between real and ideal practice. What is practiced in the CLE has an impact on students learning in clinical skills. Nabolsi et al.,⁽²⁶⁾ mentioned that the CLE and clinical educators play a vital role in empowering students encouragement in learning, transferring theory into practical clinical situations, promoting their sense of liability, and providing them with chances to explain nursing competence.

Another challenge that encountered the students during their clinical learning was improper communication between physicians and nursing staff and students. The result of current study agrees with study conducted by Moghimi et al.,⁽¹⁷⁾ who believed that, students complained from poor communication between students and clinical staffs and the cooperation was barely with each other and which inevitably leads to frustration and demotivation thus, negatively affecting students learning in acquisition of knowledge and skills. Baraz et al.,⁽¹⁸⁾ emphasized on, the importance of communication between the students, clinical staff and health team in promoting students clinical learning which undeniable in addition to introduction of eligible role models into the clinical placements. Esmailivand et al.,⁽²⁷⁾ added that proper communication between key stakeholders can support and simplify the clinical learning community and help to illustrate the roles of both students and overseers.

As for students' satisfaction as regard to CLE, it was found that the majority of the respondents were moderately satisfied with CLE, while around one quarter only of the respondents were extremely satisfied. These findings are supported by Salmani and Amirian⁽³¹⁾ who reported that the majority of nursing students felt that the quality of CLE was moderate, and when the students work together with professional nurses, the nurses self-confidence and in student-perceived for satisfaction with the learning environment were elevated and clinical learning experiences flourished⁽²⁹⁾.

Regarding students suggestions for development of the CLE for themselves and future nursing students, a number of suggestions were introduced: increase number of clinical educators, non-recourse by clinical educators from other departments, decrease the time allocated to theoretical lectures and increase time allotted to hospital training. Gurková et al., maintained that supervision and duration of the clinical training had a significant factor influencing student's evaluation for CLE.⁽³⁰⁾

According to facilities and training equipment the students suggested that a room with locker should be provided to change and save their belongings. Equipment for training and model like hospital environment in faculty lab should be afforded. These suggestions were consistent with Manoochehri et al., who viewed that promoting the educational condition of trainings by allocating skilled clinical educators and providing facilities and equipment, engaging nursing students in decisions related to their clinical training to improve the quality of care provided, and to help accelerate the professionalism of the students⁽³¹⁾ Msiska et al., argued that the lack of resources is one of the most important factors which cause students to learn in a difficult way.⁽³²⁾

The students also suggested that coordination between the faculty authority and training places should be enhanced, number of students should be decreased and avoid

overlapping with other trainees should be avoided and visits in the daytime should be banned. Dinmohammadi et al., reported that to speed up appropriate clinical teaching and learning cooperation between the health care agencies and nursing faculties a welcoming clinical environment is needed, which values and esteems the nursing students and help them to become knowledgeable, skilled and fit for practice with the ability to deliver a high-quality health care⁽³³⁾. Esmailivand et al. thought that when the hospital wards are crowded with too many students, clinical learning is negatively influenced and becomes difficult to achieve effective learning⁽²⁷⁾.

The students also suggested that they take the theoretical lectures on a different day other than that specified for practical training. They argue that when they return from hospital training they were very tired, and can't concentrate and follow-up theory lessons.

According to students suggestions for development of the training process, they demanded an increase in collaboration between faculty authorities and clinical areas. Lawal et al., believed that collaboration between faculties and clinical settings and student-patient ratio need to be improved⁽³⁴⁾. Manoochehri et al.⁽³¹⁾ concluded that promoting clinical learning by employing skilled educators, providing facilities and equipment and engaging students in decisions related to their clinical training are essential to improve the quality of care provided, and to help accelerate the professionalism process of the students.

Conclusion

The current study provided important information about the students perceptions for their learning climate by using the CLE inventory. The perceptions of students towards the quality of CLE were more negative with a significant difference between the students based on sex on domains task orientation and teaching innovation. Also, the findings have shown that learning during the clinical placement is associated with many obstacles and challenges, which could influence their experiences and competencies after graduation. Other challenges included unsuitability of learning climates and facilities, lack of appropriate educational facilities for students in clinical environment and crowding the learning places with too many students.

Recommendation:

Based on the results of this study, the researchers recommend the following:

1. Nurse educators should be offered regular faculty enhancement programs to maximize their learning skills and enhance the quality of their clinical learning experiences through wording of guideline for improvement and enhancement of learning during clinical practice.
2. Opportunities for clinical educators to discuss their clinical work and clinical issues with educational authorities should be provided in order to create similar clinical experience and reinforcement the development of self-confidence at nursing students.
3. It is essential for educational authorities at Sohag University and nursing educators in the faculty to pay special attention to the difficulties and take assertive action to overcoming learning obstacles and challenges in order to create a desirable clinical learning environment.
4. The results support the need for faculty of nursing to plan nursing curriculum in which nursing students are actively involved in their education and training plan.

5. There is an urgent need to increase collaboration between faculty of nursing and healthcare institutions to provide the preferred and effective clinical practice climate as perceived by students.
6. Consistent orientation, providing program for new or clinical educators from other faculty departments about the basics of adult nursing, bridging the gap between theory and practice, assessing students' needs and evaluating students' performance are also required.
7. Systematic and continuous evaluation for CLE to improve training skills by nurse educators is essential.
8. There is also a need to conduct the study to follow the students in subsequent years in order to reconnoitre the pattern of alter in their appreciation to the social climate of the clinical practice environment.

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