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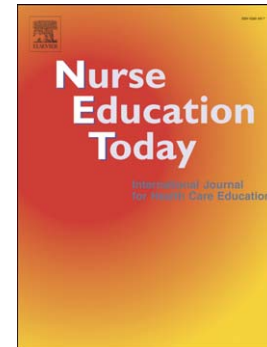
Nursing student and professor perceptions and assessments of the achievement of practicum competencies: A mixed method approach

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## TITLE PAGE

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## **Abstract**

Within the context of the European Higher Education Area's requirement of competency-based assessments, the objective of the present study was to evaluate the Nursing Degree Practicum experience at the University of Girona (Spain) and ascertain student and faculty perceptions of the degree of competency achieved as a result of the practicum. This cross-sectional, descriptive, study combined quantitative analysis of a questionnaire and qualitative analysis of focus group comments. In the quantitative part of the study, 163 fourth-year nursing students completed the questionnaire; the qualitative analysis was derived from a focus group of 5 students and 5 professors.

On the questionnaire, overall practicum evaluation was 8.39 on a 10-point Likert scale; scores evaluating the nurse mentor/instructor and nursing professor were 8.43 and 7.98, respectively. The geriatrics practicum experience received the lowest overall score (7.81), while the surgical practicum received the lowest score on the adequacy of knowledge acquired in the classroom in previous courses (5.54). The best scores were earned by the mental health and intensive/emergency care practicum experiences (a mean of 9.05 and 8.70, respectively). Students and professors in the focus group agreed that the practicum met the Nursing degree program's competency goals, highlighting practical activity as the best methodology to evaluate competencies. Participants highlighted the importance of reflective practice and the role of the nurse mentor/instructor in student learning, and indicated that it is essential for the university and the health care centers where students take practicum courses to maintain a strong relationship and good communication. Finally, feedback from the nurse mentor/instructor and Nursing professor was very important to students, both to motivate them and to help them learn.

## **Keywords**

Clinical practice; Clinical skills learning and teaching; Nursing Students; Competence; Reflective practice; Students' and teachers' experiences.

## Introduction

Practicum is an educational activity that provides training at an off-campus site, mainly at health care facilities, and integrates the knowledge, attitudes, and skills that have been acquired throughout the degree program in Nursing. This is an important part of the training received by nursing students and gives them the opportunity to experience the professional life of a nurse (Levett-Jones and Bourgeois, 2009). In accordance with European Higher Education Area (EHEA) directives, practicum experience is evaluated on the basis of competencies acquired; in other words, the capacity or skill required to complete a task successfully (ten Cate and Scheele, 2007). Nonetheless, Eraut (1994) considered a competent person to be not only someone with the needed competencies, but one who can apply them and can make decisions and judgments that are appropriate to the context. This makes competency a multidimensional concept that is complex to measure (National Education Framework, 2008; Yanhua and Watson, 2011); as a result, the first difficulty faced in evaluating practicum students based on their competencies is the broad and ambiguous definition of the concept.

Multiple observations are required during the practicum experience to determine whether a nursing student is competent, and the observations must include a great diversity of contexts and consider more than one perspective or focus (Epstein and Hundert, 2002). Some authors describe the difficulty of determining student competency based on the level of performance (Watson et al., 2002). The National Education Framework (2008) highlights the need to incorporate various methods into the assessment of competencies. On the other hand, Zupiria-Gorostidi et al. (2003) showed that the main source of students' stress is "lack of competency", both at the beginning and at the end of their nursing studies.

The nursing degree program, in consonance with EHEA directives, often chooses reflective practice as a teaching methodology during the practicum. Reflective practice

is a process of learning and development through the examination of one's own practice, opening it up to scrutiny by others and taking into account the scientific evidence that support it (Dahl and Eriksen, 2015; Goudreau et al., 2015). Some authors (Gustafsson and Fagerberg, 2004; Peden-McAlpine et al., 2005) have shown that nurses use reflection during their learning process and, using reflective practice, they change their point of view with respect to patients' families, modifying their values and beliefs.

Portfolios, reflective journals, tutorials, clinical sessions and practical activity are considered appropriate learning activities for assessing competencies in reflective practice. The portfolio develops critical thinking, promotes discussion between student and professor, and helps students strengthen their reflection skills and self-assessment ability during the practicum (Buckley et al., 2009; McMullan et al., 2003). The reflective journal improves abilities related to clinical decision-making (Fakude and Bruce, 2003). Carlson et al. (2009) define tutorials as a continuous process that includes different levels and establishes open communication focused on the student's individual learning needs. In 2009, the Nursing Department of the University of Girona (Spain) initiated its practicum coursework, following the new EHEA directives that require an assessment of the practicum upon full implementation of the four-year university degree in nursing.

## **Objectives**

The study objective was to evaluate the fourth-year practicum course of the Nursing degree program at the University of Girona (Spain), and to gather student and faculty perceptions of the achievement of required competencies using the various learning activities.

## **Methods**

**Study Design**

This was a cross-sectional, descriptive study combining quantitative analysis of a questionnaire and qualitative analysis of focus group comments, carried out between September 2013 and May 2014.

**Population and Setting**

The study population was fourth-year nursing students at the University of Girona, Catalonia.

**Definitions**

The third- and fourth-year Nursing degree curriculum includes practicum rotations in general hospital nursing, community nursing, and five required specialty areas completed (in any order) over these final two years of study: surgical, maternity, geriatrics, intensive/emergency care, and mental health. The present study focused on the four-week specialty rotations, two of which are completed in the third year and the remaining three during the fourth year. Students were asked specifically about their fourth-year rotations in three specialty areas.

Two main instructional roles exist: professor and nurse mentor/instructor. The professors are university faculty members who provide tutorials and monitor and evaluate the practicum activities: portfolio, reflective journal, and clinical sessions. Each professor is responsible for about 5 students in each practicum rotation. A nurse mentor/instructor working in the specific center where the student is assigned for the practicum also provides instruction. This nurse receives training from the Nursing faculty in the relevant curriculum material, reflective practice, and the different learning methodologies used in the practicum. The responsibility of the mentor/instructor is to provide training, monitor the student's clinical practice activities and evaluate them based on observation.

**Study sample**

The quantitative part of the study involved a population of 253 students, of which 163 (64.43%) participated in the survey. The qualitative part of the study consisted of a

focus group of 5 students and a second focus group of 5 practicum professors. These participants were recruited as a convenience sample using the snowball technique.

The inclusion criterion for students was the same for the quantitative and qualitative studies: fourth-year status in the Nursing degree program. By definition, these students have completed practicum rotations in two of the five required nursing specialty areas and are enrolled in the remaining three required specialty rotations.

### **Instruments**

The quantitative part of the study consisted of an *ad hoc* questionnaire that had two sections:

1. Sociodemographic data (age and sex) and questions related to evaluating the practicum. Using a 10-point Likert scale, students were asked to provide a general evaluation of the instruction and training they received from the nurse mentor/instructor at the health care center(s) where they completed a practicum, the monitoring provided by the practicum professor, the usefulness of the knowledge and skills acquired in the classroom before beginning their practicum experience, and their overall satisfaction with the practicum.
2. Questions related to the students' evaluation of the specific methodologies used during the practicum (practical activity, portfolio, reflective journal, tutorials and clinical session). Students were asked if these methodologies had helped them to acquire the 19 required competencies related to the practicum, and to indicate which learning methodologies helped them to achieve each competency (marking all that applied).

The qualitative part of the study was a semi-structured group interview, with one focus group of practicum students and another of practicum professors. From a phenomenological perspective, information was collected about the achievement of the competencies related to the practicum, their evaluation of the learning methodologies used to assess their competency, and their evaluation of the



usefulness during the practicum of the knowledge and abilities previously acquired in the classroom.

### **Ethical considerations**

The study was approved by the Dean of Nursing at the University of Girona (Spain) in accordance with university policies on classroom research. Students and professors who participated in the study received information about the study. Confidentiality and the anonymization of data was guaranteed under Spanish law (BOE, 1999) protecting data of a personal nature; signed informed consent was obtained from focus group participants.

### **Data Collection Procedures**

The study questionnaire was administered by the researchers and other professors who participated in the study as students completed their practicum in the different centers. At the same time, students and professors were also invited to participate in the focus groups for more in-depth discussion related to the study objective.

The focus groups were carried out in a nursing classroom; two researchers participated in each session, one in the role of observer. To avoid possible bias, the student focus group was led by individuals who had not been their professors during the practicum. Both sessions lasted about 70 minutes and were audio-recorded, with prior permission of the participants. To preserve confidentiality, each participant was identified only by an alphanumeric code in the transcription and tapes were destroyed after they were transcribed.

### **Data Analysis**

Univariate descriptive analysis was done of all variables using SPSS for Windows, version 18 (SPSS, Chicago, IL); continuous variables were described as mean and standard deviation and range and categorical variables as percentages.

Qualitative analysis of the information collected during the focus groups using content analysis techniques, coding, and categorizing the data with the Atlas.ti program,

version 7. The data were reviewed using a literal reading of the content and then reduced using an inductive approach.

## Results

### Quantitative study

The mean age of the student sample (n=163, 91.6% women) was 24.27 years (SD:4.41), and responses were well distributed across the 5 practicum areas (Table 1). The largest number of students had completed the mental health practicum (26.5%); the fewest responses were related to intensive/emergency care and geriatrics (each 16.5%). The remaining practicum areas, surgical nursing and maternal and child health, had been completed by 17.3% and 27.8% of students, respectively.

*Insert table 1*

With respect to the students' evaluation of their practicum experience in general, the mean score assigned to the nurse mentor/instructor was 8.43 (SD:1.58); to the practicum professor's monitoring, 7.98 (SD:1.89); and to the usefulness during the practicum of the knowledge acquired in the classroom, 6.99 (SD:1.69) and of the skills acquired in the classroom, 6.90 (SD:1.62). The global evaluation of the practicum was 8.39 (SD:1.43) (Table 2).

*Insert Table 2*

In evaluating the practicum according to specialization, higher scores were assigned to the majority of the items in the areas of mental health and intensive/emergency care; the lowest score was given for the usefulness of knowledge previously acquired in the classroom by students who completed the surgical practicum (Table 3).

*Insert Table 3*

Table 4 shows the score students assigned to their achievement of the 19 competencies (C) associated with the practicum.

*Insert Table 4*

When asked to rate the effectiveness of the five different methodologies to achieve the competencies required for the degree (shown in Table 4), from 53% to 89.6% of the students valued practical activity over other methodologies as helping them to achieve these competencies. The exceptions were C5, C18 and C19, for which the highest scores went to the portfolio methodology (60.1%, 49.1%, and 66.3%, respectively).

Other students indicated that the reflective journal was the best tool to help achieve competencies C6 (27%) and C13 (32.5%). With respect to tutorials, the highest percentages were assigned to C17 (40.5%) and C19 (27.6%) for this methodology. Finally, the highest percentages for the clinical session as a methodology to achieve competencies were assigned to C13 (18.4%) and C17 (17.2%).

### **Qualitative study**

Four categories were derived from the qualitative analysis (the fourth occurring only in the student focus group): competencies related to the practicum (acquired, strengths and weaknesses), evaluation of knowledge acquired in the classroom as meeting the needs of the practicum student, teaching methodologies (strengths or appropriateness, weaknesses), and evaluation of the nurse mentor/instructor.

### ***Competencies related to the practicum (acquired, strengths and weaknesses)***

The professors reported that students acquired all of the practicum competencies, to a greater or lesser extent. They emphasized the importance that students place on technique, compared to communication and relationship skills and an overall view of the patient, especially in the intensive and emergency care, maternal and child health (maternity-pediatrics-premature births), and surgical practicum sections.

**P2:** *"In the Emergency Department, everyone works on technique, technique ... and leaves out the overall perspective. But they acquire solid techniques."*

The gap in patient assessment and skill in communicating with patients and their families that was observed in the intensive/emergency care units was not observed when students completed the geriatric and mental health practicum experiences.

**P3:** *“They worry less about techniques. They have to practice their communication skills more, the nurse-patient relationship and active listening.”*

Students also believed that they achieve the required competencies:

**S4:** *“In the 3rd year you’ve achieved the competencies.”*

On the other hand, they also had difficulties:

**S1:** *“At the University they teach us to know how to do it, but when it comes to the practicum lots of times you don’t know why you are doing it. You have this difficulty ...”*

As the professors observed, the students considered it very important to correctly execute techniques and appreciated it when the nurse mentor/instructor encouraged them to carry out techniques and procedures during the practicum.

**S3:** *“Letting us do more things or not has a big influence, because observing is fine... you learn how something is done, but you really learn to do it when you can practice it.”*

**S2:** *“I expected to learn how to hand instruments to the surgeon (in the surgical practicum) and that wasn’t the case.”*

Students reported that they learned about the importance of having an integrated view of the patient, from the very beginning of their nursing program until they had completely achieved this competency:

**S5:** *“We don’t see a patient; we see a person with different needs, the person as a biopsychosocial being.”*

The professors highlighted the students’ capacity to search for scientific evidence to compare or justify nursing actions:

**P3:** *“They know how to autonomously select information sources. They know a lot about that!”*

On this topic, students described the development of knowledge that encouraged them to make evidence-based choices about the care provided to patients and all the decisions they had to make:

*S1: "We are critical about our actions but that's because we already have a theoretical basis, and that helps us modify our actions."*

The professors reported that reflective practice helped their students to be constructively critical in their interactions with nurse mentor/instructors, which on one hand is stimulating and motivational for the nurses but on the other hand can feel like a threat:

*P3: "When we base a protocol on scientific evidence and then they criticize what you do wrong on the unit, that's pretty tough."*

*P5: "When I face something like that, I ask them to be respectful and constructive."*

The professors agreed that the students are well prepared in terms of ethics and deontological codes and can serve as examples for the practicing nurses in protecting confidentiality and patient privacy:

*P1: "I think about professional discretion and confidentiality, and they are very mature in this area."*

### ***Evaluation of knowledge acquired in the classroom as meeting the needs of the practicum student***

The professors framed the practicum experience as the time for students to put the knowledge acquired in the classroom into practice with actual patients, using the content they had learned in the Techniques and Procedures course. They also commented on the complementarity of the different courses and methodologies, and reported that some students denied having carried out some particular technique or procedure in the simulation laboratory, but the professors knew that the activity had been completed. This was interpreted by some professors as reflecting the insecurity

student have when it comes to putting into practice a technique or procedure from the classroom simulation.

**P1:** *“I think that it’s a kind of fear of making a mistake. They have the knowledge and we know they have it, but it’s easier to say ‘I don’t know that’. It’s because of their insecurity.”*

**P2:** *“In one tutorial session, I found that the student said, “we never did that” and I knew that, yes we had done it.”*

With respect to theoretical-practical knowledge, the students said that they understand the value of that knowledge after they have completed the Techniques and Procedures course. They also constantly compared the care provided by nurses and what they had learned in the classroom:

**S1:** *“You get to the fourth year, with the practicum, and you are working as a health professional, and that’s when you really understand whether you really took advantage of that technique and that procedure or not.”*

The students indicated that they believe their theoretical basis is better than that of the practicing nurses they worked with. They attributed this difference to the developments that have occurred in nursing science and in the profession. Nonetheless, they expressed difficulties in assimilating the theoretical knowledge and putting it into practice:

**S4:** *“I think that the professors have ‘pounded it into us’ a lot. From the theoretical concepts, with Virginia Henderson and Florence (Nightingale) to the thing about the healthy person as a biopsychosocial being ... I think that we have interiorized that a lot. The university gives you a base.”*

**S1:** *“At the University they teach us HOW to do the techniques, but when you actually have to do them in practicum you often don’t know WHY you’re doing it. That’s the problem.”*

#### **Teaching methodologies (strengths or appropriateness, weaknesses)**

Assessment of practical activities is the responsibility of the nurse mentor/instructor. The professors insist on the importance of continuous feedback, an assessment that is more ongoing than final. Nonetheless, some nurse mentors find it difficult to make a face-to-face evaluation and provide the students with feedback.

**P2:** *“What I always ask of the nurse mentor/instructor is that they be able to discuss things with the student.”*

**P5:** *“Sometimes it’s hard for the nurse to do the assessment in front of the student.”*

When the requirements for completing a practical activity coincide or align with those of other assessment methods, this is a good indicator that the assessment is objective and well designed. The professors valued the different forms of assessment positively in different areas of the practicum.

**P1:** *“I don’t know the grade from the practical activities and yet sometimes my evaluation of the portfolio coincides, many times.”*

For students, the practical activity is fundamental to their achievement of the required competencies and to solidify their acquired knowledge:

**S2:** *“at first we observed so much ... you’re afraid to do things, you only observe; and this also gives you a basis for reflection when you do the practice.”*

**S4:** *“On the last day (in the surgical practicum), I handled the instruments for five hernias ... they left me there on my own.”*

The professors placed high value on the tutorials as a time to guide the student, observe the progress of their learning curve, and orient them toward better management of their time and resources in order to achieve the required competencies.

**P5:** *“I think that the tutorial is the most important”.*

Evaluation has negative connotations for students with respect to some professors, when they detect a lack of attention to monitoring their progress. On many occasions

they don't get the recommended tutorial time during the practicum or they find the content less than useful.

In this context, students ask for feedback from the professor when it comes to assessment, so they can improve their work and correct their mistakes:

**S2:** *"There are professors who explain what you did well in each activity and what went wrong, and then there are others who just give you a grade and you don't know what you did wrong on that assignment."*

**S3:** *"No, I haven't found that. I've had a good experience."*

**S4:** *"There are professors who give you the opportunity to repeat an activity that you didn't do well on. That's a positive reinforcement."*

The perception of the reflective journal changed in the fourth year, especially when the student begins to understand the purpose and it no longer is simply a daily routine and they aren't really sure what to write about. The tutorials are a good time to provide feedback on student reflections on very specific topics:

**P2:** *"But where can you see if they have acquired the competencies or not? You see it in the tutorials and you see it in the reflective journal."*

**P4:** *"You tell them that we will do this feedback session, and they are happy about that."*

**P5:** *"You see that it's hard for them but if they get into it, the tutorial is super interesting, you see that it is useful."*

The students recognized that the design of the reflective journal had improved in comparison with previous years. They suggested new ways of assessing the content:

**S2:** *"... and for the reflective journal, I think that there has been an improvement in terms of reflecting only on those aspects that are specified, not a journal of the whole day, what you did ..."*

**S4:** *"I don't think the reflective journal should not get a numerical grade. I think that it should be acceptable / not acceptable (pass / fail). I don't think that a person has sufficient capacity to assign a numerical score to the personal"*



*reflections of another person.”*

The clinical session was one of the methodologies that the professors most enjoy evaluating and find to be a good system not only for evaluating student competency in oral communication but also for them to share knowledge with other students and professionals.

**P5:** *“At a senior center, I think it’s very positive to have professionals visit, [for them] to have a friendly public to listen to them.”*

The students also explained the benefits they obtained compared to the effort required to prepare and present the clinical case. Although they described being nervous, the outcome was positive for their learning, despite the pressure of evaluation:

**S3:** *“It really is an effort that I have to make, but the secret is to practice; and it will be good [preparation] to be able to make a presentation at some conference. It’s part of our training and it has to be there.”*

**S5:** *“For me it was stressful to present the clinical case.”*

### **Evaluation of the nurse mentor/instructor**

For students, the level of trust they are able to develop in their relationship with their nurse mentor/instructor is a key indicator of their evaluation of the practicum experience. Their opinions about the nurses who have been responsible for guiding their day-to-day learning experience were varied:

**S3:** *“It depends on the nurse you get; the nurse I had hardly let me do anything.”*

**S4:** *“You have to break the barrier between the nurse mentor/instructor and you. A friend of mine learned a lot! She was drowning in work but she learned a lot and the nurse demanded a lot of her”.*

**S5:** *“It depends on whether (the nurse mentor/instructor) is more open or is more burned out ... “*

## Discussion

Overall student evaluations of the practicum course were very positive, as has been reported by other authors (Bisholt, et al., 2014; Levett-Jones and Bourgeois; 2009). The practicum can be a very important part of the nursing student's training, providing opportunities to experience the profession. The practicum that focused on geriatric care received the lowest evaluation, as in a previous study (Skaalvik et al., 2011) showing that nursing students reported a lower preference for working with older people and a higher preference for acute care units, finding the geriatric practicum activities boring and repetitive, and as a result they saw few opportunities for this area to contribute to their training and clinical education.

According to the students, practicum courses help them to achieve competencies in various specific services (Zabalegui and Cabrera, 2009) even though measuring those competencies is complex because of their multidimensional nature (National Education Framework, 2008; Yanhua and Watson, 2011).

Both students and professors indicated that in general the students achieved the nursing competencies required during the practicum. Within the EHEA framework's change in methodology, the student is at the center of the learning model and the new curriculum design is focused on the learner and based on learning outcomes and competencies. This facilitates student involvement in the process of addressing his or her learning needs (Siles González and Ruiz, 2012).

Our results reflected the high value students place on techniques and procedures, compared to other important aspects of nursing practice such as communication between health professionals and patients. This could also be the reason students gave low scores to the knowledge acquired in the classroom compared to the surgical practicum, for example. At the same time, there is a need to revise the curriculum so that students feel better prepared. As in other studies, during the mental health services practicum our students considered all competencies important, including those

related to communication (Canniford and Fox-Young, 2015; Fiedler et al., 2012; Hessels et al., 2015).

The importance of the complementarity between knowledge and skills acquired on campus was emphasized by the faculty members, although some students stated that they forgot some of what they had learned. This is why greater coordination between the university and participating health care centers is necessary, along with improved organization of theoretical-practical training, as other authors have pointed out (Fernández-Sola et al., 2014)

Among the various teaching methods used, both students and professors considered practical activities among the most useful in helping students achieve competencies, and valued them more than other self-directed learning methods such as the portfolio, reflective journal, and clinical sessions. The self-directed learning methods that require an effort on the part of students were not as popular as classic teaching methods (Zhang et al., 2012).

In focus group discussions, professors considered the reflective journal to be a good tool, but students reported difficulties in keeping their journals and did not value it very highly. The reflective journal facilitates the acquisition of competencies through introspection and metacognition, helping students connect the more generic competencies with specific clinical skills (Siles González and Ruiz, 2012).

The role of the nurse mentor/instructor is key to the training students receive during the practicum, and the students were very critical in their comments because their learning depended on this individual's role. Other authors have also reported that inadequate support from nurse mentors is one of the aspects that most concerns students because it can lead to unfair evaluations of the student's work (Elcigil and Sari, 2006). These same authors emphasized that positive feedback increased student motivation; in our

study, both students and professors commented on the importance of this aspect of the practicum course.

A limitation of the present research is the small sample recruited for the qualitative portion of the study. If more professors and students had participated in focus groups, more information would have been reported, improving data saturation.

## **Conclusions**

Practicum is the ideal context to achieve competencies required of nursing students. Students value these courses highly because they bring them closer to the professional world to which they aspire. The geriatric practicum was least valued by students, who preferred acute care units where they could develop more techniques and procedures. They had very little awareness of the relationship between knowledge they had previously acquired and the surgical practicum; there is clearly a need to revise the curriculum to strengthen this connection. With respect to teaching methods, clinical practice was valued most highly, followed by activities that required major effort from the students but helped them to acquire the required competencies: reflective journaling, tutorials, portfolio development, and clinical sessions.

Reflective practice was appreciated by both professors and students who participated in the focus group. The role of the nurse mentor/instructor is key to good student learning outcomes, and it is essential that the university and health care centers that provide the practicum experience for students establish good communication and relationships. Another very important aspect is the feedback provided to students by the nurse mentor/instructor and the professor responsible for the practicum course, both for its motivational impact and for its contribution to good learning outcomes.

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**Table 1. Distribution of participants (n=162\*) by practicum rotation**

Practicum rotation	Count	Percentage
Maternal-Child Health Premature Births	37	22.8
Geriatric	27	16.7
Intensive/Emergency Care	27	16.7
Mental Health	43	26.5
Surgical	28	17.3
Total	162	100.0

\* 1 student did not specify the Practicum rotation that was being evaluated

**Table 2. Student evaluations of their most recent practicum rotation (0=worst score, 10=best score)**

	n	Minimum	Maximum	Mean	Standard Deviation (SD)
Training received from the nurse tutor/mentor	163	0	10	8.43	1.583
Follow-up and tutoring from Practicum professor	160	0	10	7.98	1.895
Knowledge acquired in the classroom has been useful during the practicum (0=not useful, 10=totally useful)	163	2	10	6.99	1.692
Skills acquired in the classroom have been useful during the practicum (0=not useful, 10=totally useful)	163	1	10	6.90	1.626
<b>Overall satisfaction with this practicum rotation</b>	<b>161</b>	<b>2</b>	<b>10</b>	<b>8.39</b>	<b>1.433</b>

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Table 3. Mean scores assigned to each practicum rotation in student evaluations (0=worst score, 10=best score)

	Maternal-Child Health			Geriatrics			Intensive / Emergency Care			Mental Health			Surgical		
	Premature Births														
	n	Mean	SD	N	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
Training received from the nurse tutor/mentor	37	8.00	1.43	27	8.04	2.68	27	8.81	1.18	43	8.66	0.91	28	8.36	1.37
Follow-up and tutoring from Practicum professor	36	7.67	1.67	26	7.38	2.73	27	8.19	1.71	42	8.19	1.92	28	8.43	1.20
Knowledge acquired in the classroom has been useful during the practicum (0=not useful, 10=totally useful)	37	7.24	1.59	27	7.00	1.73	27	7.44	1.09	43	7.42	1.28	28	5.54	2.12
Skills acquired in the classroom have been useful during the practicum (0=not useful, 10=totally useful)	37	6.73	1.94	27	7.22	1.89	27	7.52	1.12	43	6.95	1.00	28	6.14	1.89
<b>Overall satisfaction with this practicum rotation</b>	<b>36</b>	<b>8.00</b>	<b>1.77</b>	<b>27</b>	<b>7.81</b>	<b>1.66</b>	<b>27</b>	<b>8.70</b>	<b>1.07</b>	<b>43</b>	<b>9.05</b>	<b>1.02</b>	<b>27</b>	<b>8.15</b>	<b>1.17</b>

**Table 4. Student evaluation of competencies achieved during this practicum rotation (0=worst score, 10=best score)**

Competency: Be able to ...	n	Min	Max	Mean	SD
C1. Provide technical and professional care that is appropriate to the patient's health needs.	162	5	10	8.05	1.002
C2. Evaluate a patient's needs and their surroundings based on a nursing model and develop a nursing care plan to meet these needs, execute it and evaluate it.	162	2	10	7.83	1.334
C3. Understand a patient's interpersonal behavior based on gender, group or community within a social and multicultural context.	160	2	10	7.95	1.288
C4. Design care systems for individuals, family members, or groups, evaluate their impact, and introduce appropriate modifications.	160	0	10	7.45	1.431
C5. Base nursing interventions on scientific evidence and available resources.	162	1	10	7.54	1.352
C6. Ensure respect for the opinions, beliefs and values of others and guarantee their right to privacy, confidentiality, and professional discretion.	161	4	10	8.87	1.173
C7. Promote and respect the rights of participation, information, autonomy and informed consent in patient care decisions, in accordance with the way they experience their own process of health and illness.	159	5	10	8.64	1.197
C8. Encourage healthy lifestyles and self-care by supporting preventive behaviors and adherence to treatment.	160	0	10	8.08	1.427
C9. Guarantee patient safety in life-threatening situations.	158	0	10	8.08	1.376
C10. Establish effective communication with patients, family members, friends and social groups, and encourage health education.	160	4	10	8.25	1.234
C11. Act in accordance with nursing and deontological ethics.	161	2	10	8.34	1.299
C12. Manage time, material and infrastructure resources efficiently and sustainably.	161	4	10	8.25	1.146
C13. Take responsibility for one's own learning, using the evaluation process as a means to reflect and improve future actions.	160	3	10	8.16	1.186
C14. Work with other members of the health care team, effectively contributing knowledge, strategies and skills.	159	0	10	8.31	1.253
C15. Carry out nursing care independently, planning and evaluating tasks with the participation of the patient and family members or other support group and together with other professionals.	161	0	10	8.13	1.370
C16. Provide the needed nursing care to guarantee well-being and comfort to patients at all stages of the life cycle when they are sick, suffering, or incapacitated, and also to their caregivers.	160	0	10	8.08	1.408
C17. Communicate verbally and in writing about topics in a selected specialty in an original and creative way, adapting the message to the audience and using other materials and resources as needed to make oral presentations more effective.	162	0	10	7.92	1.401

C18. Read and understand texts in English in an area of professional interest and knowledge.	159	0	10	5.22	3.335
C19. Select sources and information autonomously, demonstrating information literacy in an area of specialized knowledge in order to achieve specific objectives.	162	0	10	7.84	1.564

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**Highlights**

Reflective practice helps students develop self-directed learning.

The role of the nurse mentor/instructor is key to student learning.

Good communication and relationships between campus and practicum sites is essential.

Feedback from nurse mentors/instructors and professors motivates students.

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