

# Evaluation of midwifery students' satisfaction with regards to clinical internship

*Giovanna Gemmellaro<sup>1</sup>, Alba Ricchi<sup>1</sup>, Daniela Menichini<sup>2</sup>, Maria Teresa Molinazzi<sup>1</sup>, Federico Banchelli<sup>3</sup>, Ramona Infante<sup>1</sup>, Giovanna Artioli<sup>4</sup>, Chiara Foà<sup>5</sup>, Isabella Neri<sup>1</sup>*

<sup>1</sup> School of Midwifery Department of Medical and Surgical Sciences, University of Modena and Reggio Emilia, Italy;

<sup>2</sup> International Doctorate School in Clinical and Experimental Medicine, Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, Modena, Italy; <sup>3</sup> Department of Diagnostics, Clinical and Public Health

Medicine, Statistics Unit, University of Modena e Reggio Emilia, Italy; <sup>4</sup> Azienda USL-IRCCS di Reggio Emilia, Italy;

<sup>5</sup> Department of Medicine and Surgery, University of Parma, Italy.

**Abstract.** *Background and aim of the work.* The clinical internship is fundamental for the training of the future socio-health professional. Through the practical activity, the student develops professional skills, critical thinking and decision-making ability, internalizing the complexity of the professional role. While in the nursing field there are several tools for assessing the clinical experience of students, in the obstetric field there is a lack of validated tools. Therefore, the purpose of this work was to investigate the perception of the students of the Degree Course in Midwifery regarding the internship experience. *Method.* The study was conducted at the obstetric clinical internship where students carry out practical activities and involved all the students of the Degree Course in Midwifery at the University of Modena and Reggio Emilia. The data were collected through an anonymous online questionnaire (Google Model), which was inspired by the nursing CLES + T, simplified and adapted to the obstetric field. *Results.* In total, 54 students took part in the research (81.8% of all students enrolled in the degree program examined). They were mainly of Italian nationality (98.1%), women (94.4%), aged between 18-22 years (85.2%). In general, the third-year students were more satisfied with the internship experience than the second- and first-year students, most likely for having achieved a degree of autonomy of care, awareness and greater professional motivation. *Conclusions.* The results indicate the need to periodically investigate the quality and satisfaction of the clinical internships to ensure increasingly effective obstetric training. ([www.actabiomedica.it](http://www.actabiomedica.it))

**Key words:** satisfaction; students; setting; midwifery; training; internship

## Introduction

Clinical care learning has always played an essential role in preparing students of the Degree Course in Midwifery.

It is important for the achievement of the training objectives deriving from the skills enshrined in the Professional Profile DM 740/9 (1) and the rules of the Ethics code of the Midwife, 2014 (2). Thanks to the clinical practice, the student is able to develop professional skills, diagnostic reasoning, and critical thinking (3).

The quality of the clinical learning experience, as well as the skills acquired, can be influenced by the organizational characteristics of the clinical context (3, 4) and by the positive atmosphere of the setting (5). Indeed, a department characterized by good internal relations, excellent coordinators and an adequate level of supervision by clinical tutors, leads the student to acquire a critical attitude and develop the ability to live the training experience within different contexts (3).

Therefore the student's satisfaction with the training experience becomes an important indicator of the

achievement of learning outcomes (6). The experience in the various learning settings allows the student to face complex situations by putting into practice the knowledge acquired theoretically. In this case, reflexivity and active thinking become the tools and the priority attitudes to learn professional skills.

The internship therefore constitutes the test bench and the privileged channel for learning the profession (7). The tutors (8, 9, 10) and the training guides (11) also guarantee a constant supervision, so that the student increase his sense of responsibility and has continuous support from experienced professionals.

A study conducted at the Faculty of Health and Social Sciences of Bergen University College in Norway (12), used individual interviews and focus groups with students of the Degree Course in Midwifery to identify the conditions that influenced the learning process during the internship of students in various settings. The learning outcomes of the students resulted to be influenced by the midwives, who played the role of tutor, by the students themselves and by the learning environment. Tutors played a key role in facilitating students' learning by improving their self-esteem and their learning process.

Despite several nursing studies affirm that the internship represents the privileged opportunity of learning, in which the role of the tutor and the characteristics of the context are the main factors capable of influencing the quality of the experience and skills acquired (13,14), there are still few studies in the obstetrics field, both national and international, which have attempted to investigate these learning settings.

For example, a study conducted in Italy at the Degree Course in Midwifery of the University of Chieti in Italy (15) set itself the objective of exploring the level of satisfaction and clinical learning experience of Midwifery students of the first year of course, after the first clinical training, using the Italian version of the questionnaire "clinical Learning Environment, Supervision and plus Nurse Teacher (CLES + T) scales" (16, 17). The study showed the association between high student motivation towards practical activity, and a higher sense of satisfaction of the internship addressed.

Another study conducted at the University of Lund in Sweden (18) investigated the learning progression and the professional development of obstetrics

students, using their daily notes written during the internship in the delivery room units. Written notes appeared to be useful for students to think, in a structured way, about their professional development. Furthermore, they were also useful for clinical tutors, to understand the cognitive needs of individual students.

Therefore, in this context it appears important to analyze and describe the quality perceived by the students of the Degree Course in Midwifery regarding the learning settings, in order to ensure increasingly satisfactory clinical training and a continuous improvement of the integration between the theoretical and practical activities. It should be considered that the clinical internship has a 60 training credits during the studies (1) with 100% attendance obligation, and therefore the training becomes essential for the future midwife.

## Aims

The goal of the study was to assess the perception of students of the Degree Course in Midwifery regarding clinical experience-based learning.

The specific aim was to analyze and compare the perception of the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year of Midwifery students about the welcome process in the working-team, the learning atmosphere during the internship, to the supervision and evaluation carried out by the internship guide(s) on the student's practical activity.

## Method

### *Instrument*

The descriptive study was conducted through an online questionnaire (Google model) using the Italian version of the "Clinical Learning Environment, Supervision and plus Nurse Teacher (CLES+T) scale" (15). The instrument considered the gold standard in the nursing field (3, 16), has been adapted to the obstetric field. The questionnaire was filled up anonymously.

The CLES+T consists of 24 items relating to various aspects of the internship experience, preceded by 4 questions relating to socio-personal data, such

as gender, nationality, age group and type of obtained training.

The items are divided into 5 areas, such as: 1) welcome at the internship site (4 items); 2) learning atmosphere at the internship site (4 items); 3) guidance and support at the internship site (8 items), 4) evaluation carried out by the internship guide (s) (4 items); 5) final overall judgment on the internship activity (3 items). The answers for each item are on a Likert scale where 1 means "Definitely Yes", 2 "More Yes than No", 3 "More No than Yes", 4 "Definitely No".

The last item asks the student to express a general assessment of the practical experience carried out that takes into account all the above variables. In this case, the expected answers are: 1 *Excellent*, 2 *Good*, 3 *Sufficient*, 4 *Insufficient*. In order to achieve the objective of the study, the nursing questionnaire was adapted to the obstetrics field. In particular, 8 items from the 24 of the original scale were selected, as they respond to the questions strictly necessary to evaluate the perception of the Midwifery students regarding: the welcome received at beginning of the internship; to the learning atmosphere; the supervision and evaluation carried out by the internship guide(s) on the student's practical activity. The questionnaire submitted to the students is shown in Table 1.

**Table 1.** CLES+T adapted questionnaire

Items	Questions
1	Have the internship objectives to be achieved been clearly presented?
2	Did I carry out the various activities and procedures in a calm and peaceful way?
3	Did the internship guides give me moments to talk about the internship experience?
4	Did I receive adequate supervision based on my skills on performing procedures?
5	Did I receive exhaustive answers to my requests for clarification in the face of perplexity?
6	Have the final evaluations been contextualized to me?
7	Do I consider the internship experience at this Department useful for my professional future?
8	My overall and final judgment on the internship experience carried out is ...

### Statistical analysis

The categorical variables were measured through absolute frequencies and percentages. For the 8 items of the questionnaire, measured through Likert scales between 0 and 4, the average values and the relative standard deviations were reported. The average values of the items were compared between the course years (1<sup>st</sup> vs 2<sup>nd</sup>, 1<sup>st</sup> vs 3<sup>rd</sup>, 2<sup>nd</sup> vs 3<sup>rd</sup>) using the Wilcoxon-Mann-Whitney test, using the Holm correction for multiple comparisons. Statistical analyzes were performed with R 3.4.3 (Foundation R for statistical calculation, Vienna) using a significance level of  $p < 0.05$ .

### Participants

The questionnaire was completed by an Italian convenience sample, represented by Midwifery students of the Faculty of Medicine and Surgery of the University of Modena and Reggio Emilia.

All students ( $n=66$ ) attending the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year of the course (2017/2018) and who have carried out clinical internships at the locations scheduled for each year of the three-year period have been included, taking into consideration the Departments, the outpatient clinics, delivery rooms and territory assistance centers in Modena, Carpi, Reggio Emilia and Sassuolo (Emilia Romagna Region), where students carry out internships during the three-year period. The students, in the three years of the course, are divided as follows: n. 21 students attending the first year of the course, n. 23 attending the second year and finally n. 22 attending the third and final year of the Degree in Obstetrics. Each student received a link for completing the questionnaire via email. All students attending the I, II and III year of the Degree in Obstetrics (AY 2017/2018) who carried out clinical internships at the locations scheduled for each year of the three-year period from November 2017 to June 2018.

In total, 54 questionnaires were received, which correspond to 81.8% of all students of the Degree Course examined. Table 2 shows the internship locations that were involved in the study.

The socio-demographic characteristics of the students were reported in Table 3. Overall, of the 54 students who answered the questionnaire, 22 attended

**Table 2.** Description of internship settings and number of students for year (N = 54)

First year	Second year	Third year
• Gynecology Department (n = 5)	• GBreastfeeding (n = 2)	• Delivery room of Modena (n = 6)
• Department of Obstetrics (n = 6)	• GObstetric pathology (n = 1)	• Delivery room of Carpi (n = 2)
• High risk Pregnancy Department (n = 1)	• GHigh risk Pregnancy Department (n = 1)	• Delivery room of Sassuolo (n = 4)
• Prenatal Diagnosis (n = 2)	• GCTG service (n = 2)	
• Obstetrics Emergency Room (n = 5)	• GObstetrics Emergency Room (n = 3)	
• Clinical Record Opening (n = 3)	• GColposcopy Service (n = 2)	
	• GPerineal Rehabilitation (n = 1)	
	• GReproductive Medicine Service (n = 1)	
	• GTerritory assistance center (n = 7)	

**Table 3.** Socio-demographic characteristics of the participants (N = 54)

			First year (n = 22)		Second year (n = 20)		Third year (n = 12)	
Gender	Female	n %	19	86.4%	20	100.0%	12	100.0%
	Male	n %	3	13.6%	0	0.0%	0	0.0%
Nationality	Italian	n %	22	100.0%	19	95.0%	12	100.0%
	Foreign	n %	0	0.0%	1	5.0%	0	0.0%
High school	Scientific degree	n %	16	72.7%	8	40.0%	9	75.0%
	Not scientific degree	n %	3	13.6%	4	20.0%	3	25.0%
	Technical degree	n %	3	13.6%	8	40.0%	0	0.0%
Age class	18-22	n %	18	81.8%	19	95.0%	9	75.0%
	23-26	n %	4	18.2%	1	5.0%	3	25.0%

the first year of the course, 20 the second and 12 the third and last year. Most were Italians (98.1%), females (94.4%), aged between 18 and 22 years (85.2%). The majority of participants obtained a scientific high school diploma (61.1%).

## Results

In Table 4 and in Graph 1, the values of the items relating to students attending the three years of the Course are shown in comparison. In general, third year students recorded the highest average values observed in all items. Statistically significant differences emerged in the students of the third year compared to those of the second and first year in the presentation of the objectives of the internship (III vs II year p value = 0.0004; III vs I year p value = 0.0344), in carrying out in a serene way of the various activities foreseen

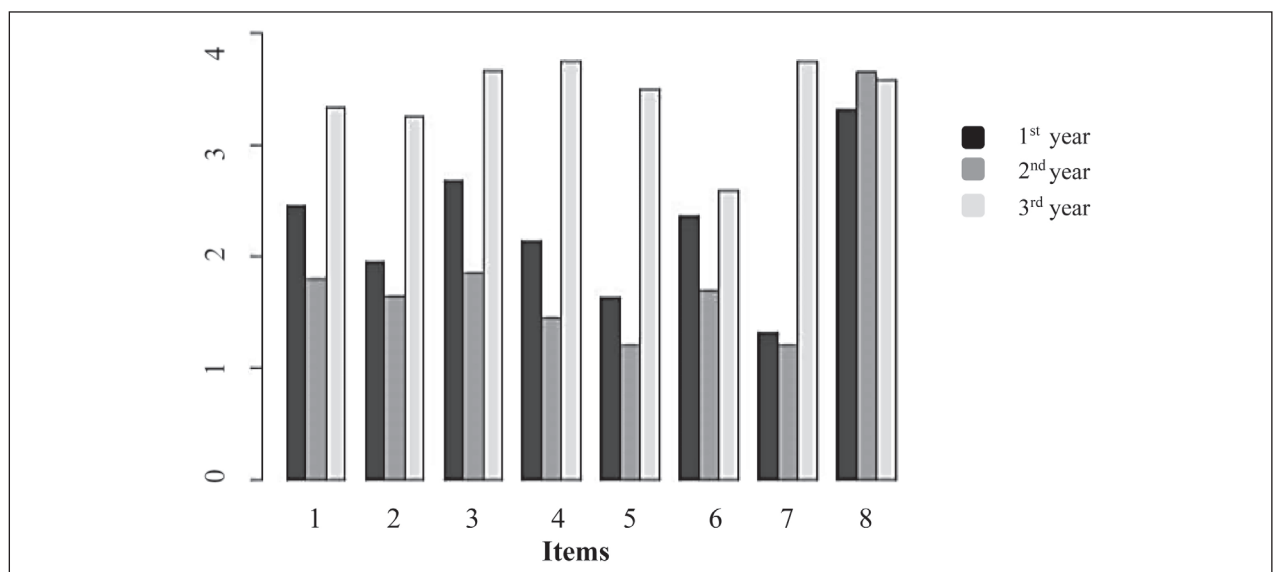
by the internship (III vs II year p value = 0.0002; III vs I year p value = 0.0011) and in discussing with the training guides the training experience they were experiencing (III vs II year p value = 0.0001; III vs I year p value = 0.0080).

First year students reported significantly higher scores than second year students in the presentation of the internship objectives (1<sup>st</sup> vs 2<sup>nd</sup> year p value = 0.0356), in discussing the training experience with the internship guides (1<sup>st</sup> vs 2<sup>nd</sup> year p value = 0.0082), in receiving adequate supervision during the execution of procedures (1<sup>st</sup> vs 2<sup>nd</sup> year p value = 0.0074) and on the exhaustive responses received to requests for clarification (1<sup>st</sup> vs 2<sup>nd</sup> year p value = 0.0212).

No significant differences were observed between the three cohorts of students as regards the contextualization of the final assessments (1<sup>st</sup> vs 2<sup>nd</sup> year p value = 0.1861; 1<sup>st</sup> vs 3<sup>rd</sup> year p value = 0.6656; 2<sup>nd</sup> vs 3<sup>rd</sup> year p value = 0.1861) and in the final and overall

**Table 4.** Comparison between 1st, 2<sup>nd</sup> and 3<sup>rd</sup> years scores (descriptive statistics and Wilcoxon-Mann-Whitney test)

Items	First year		Second year		Third year		First vs second year	First vs third year	Second vs third year
	M	SD	M	SD	M	SD	p-value	p-value	p-value
1	2.45	1.01	1.80	0.77	3.33	0.78	0.0356	0.0344	0.0004
2	1.95	0.79	1.65	0.67	3.25	0.87	0.2080	0.0011	0.0002
3	2.68	0.99	1.85	0.88	3.67	0.49	0.0082	0.0080	0.0001
4	2.14	0.89	1.45	0.76	3.75	0.45	0.0074	0.0000	0.0000
5	1.64	0.73	1.20	0.41	3.50	0.67	0.0212	0.0000	0.0000
6	2.36	1.26	1.70	1.03	2.58	1.31	0.1861	0.6656	0.1861
7	1.32	0.72	1.20	0.41	3.75	0.62	0.7911	0.0000	0.0000
8	3.32	0.84	3.65	0.59	3.58	0.67	0.5096	0.7242	0.8293

**Graph 1.** Mean scores of the items among the three years of the Midwifery Course Degree

judgment on the internship experience (1<sup>st</sup> vs 2<sup>nd</sup> year p value = 0.5096; 1<sup>st</sup> vs 3<sup>rd</sup> year p value = 0.7242; 2<sup>nd</sup> vs 3<sup>rd</sup> year p value = 0.8293).

## Discussion and Conclusions

Third year students, who completed the internship in the delivery rooms, were more satisfied with the internship experience than the second- and first-year students, most likely for having achieved a degree of autonomy of care, awareness and greater professional motivation. The students of the first year of the course

were more satisfied than those of the second year in presenting the objectives of the internship, in discussing with the internship guides the training experience they were experiencing, in receiving adequate supervision during the execution of procedures and in obtaining exhaustive answers to requests for clarifications. The explanation for this difference could be the result of the initial enthusiasm of the first-year students in starting a completely new experience. On the contrary, second year students are already “trained” on certain techniques, but they are not yet independent and autonomous, as are third year students, so they could experience this transition phase as “less satisfactory”. From the results



of this study, the need to periodically investigate the quality and satisfaction of the clinical internships seems to emerge to guarantee an increasingly effective obstetric training and, consequently, a high professional competence. In order to provide a more accurate interpretation of these data, however, further studies are necessary.

## Limits

Among the limits of the study, we point out that the tool used is a questionnaire that has not yet been validated in the obstetric field, even if it has been validated in the nursing field and considered the gold standard (15). Furthermore, to answer the objectives of the study, only 8 items out of the 24 of the questionnaires were selected and this could limit the vision regarding student satisfaction in its entirety. Another limitation of the research is the low number of participants which make the results obtained not generalizable to other Italian realities and to other students. To overcome these limitations, it would be interesting to use the tool on a larger sample of students who also take into consideration other degree courses in obstetrics active in other Italian universities. This could yield more interesting results to test student satisfaction with the clinical placement. Despite the limitations described, the results of the present study could be a starting point for future studies.

**Conflict of interest:** Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article

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Correspondence:  
Alba Ricchi  
School of Midwifery Department of Medical and Surgical Sciences, University of Modena and Reggio Emilia, Italy;  
E-mail: [alba.ricchi@unimore.it](mailto:alba.ricchi@unimore.it)