


A mixed methods study using case studies prepared by nursing students as a clinical practice evaluation tool

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Abstract

Aim: To identify the presence of variability in the evaluation of case studies prepared by nursing students during their primary care rotations based on the existing evaluation rubric. To explore the difficulties experienced by link lecturers and students in preparing and evaluating case studies.

Design: A mixed methods study.

Methods: The scores for the rubric items and the final grades for the case studies were collected from a sample of 132 cases. Qualitative information was collected by conducting open-ended interviews with lecturers and a focus group session with students.

Results: Statistically significant differences were identified between the lecturers' mean final grades [$F(5.136) = 3.984, p = 0.002$] and a variety of items in the evaluation rubric ($p < 0.05$). In addition, effect sizes [$\eta^2 (\approx 0.14)$] of considerable magnitude were found.

Two themes emerged from the qualitative data: (1). the challenge of preparing the case studies and (2). the variable nature of the evaluations.

KEYWORDS

case study, community placement, evaluation, link lecturer, mixed methods, nursing student, rubric

1 | INTRODUCTION

Clinical training of nursing students is an essential part of the nursing degree curriculum. In the European context, this training is determined by a European Union directive and accounts for 'at least one half of the minimum duration of the training'. The same directive states that 'this training shall take place in hospitals and other health institutions and the community, under the responsibility of nursing teachers, in cooperation with and assisted by other qualified

nurses' (Directive 2005/36/EC of the European Parliament, 2005). Evaluating skills in a real-life environment with a multitude of different professionals accompanying the students' learning process poses a challenge for institutions training future nursing professionals (Almalkawi et al., 2018; Pramila-Savukoski et al., 2020).

Evaluating the acquisition of clinical practice skills is an ongoing task for clinical mentors that poses a constant challenge (Tuomikoski et al., 2020). Although clinical mentors have improved the evaluation procedures and rubrics at their disposal (Stanley et al., 2020),

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they continue to call for greater communication with universities (Bos et al., 2015). At most institutions, this continuous evaluation process is supplemented by reflective evaluation in an attempt to measure not only performance but also the thought processes leading to that performance, that is, critical thinking and decision-making. Various methods and tools have been used for this purpose, including portfolios (Buckley et al., 2009), reflective journals (Hwang et al., 2018), case scenarios and 360-degree evaluations (González-Gil et al., 2020) and performance checklist and assessment tests, like in the Objective Structured Clinical Examination (OSCE) (Sabzi et al., 2018). These methods have all proven effective in evaluating nursing students' clinical practice and are considered not only evaluation tools but also learning tools (Driessen, 2017).

2 | BACKGROUND

Case studies have been widely used in nursing theory training because they help students to build on the basic knowledge taught and to collect information and analyse it to make diagnoses and support interventions (O'Rourke & Zerwic, 2016). In addition, there is considerable research on the use of case studies in simulation settings, which are practical environments where students gain confidence before moving on to clinical practice (Wong & Kowitlawakul, 2020). Case studies have been included in OSCEs as part of the final evaluation of skills acquired through clinical practice (Kelly et al., 2016) and as tools for learning critical thinking and decision-making skills in healthcare institutions (Englund, 2020). At our university, the students study the nursing process and the standardised nursing languages (North American Nursing Diagnosis Classification (NANDA), Nursing Outcomes Classification (NOC) and Nursing Interventions Classification (NIC)) in the first year. In the second and third years, the students are asked to prepare a clinical case consisting in designing a care plan for a person or a family in their clinical practice unit. The students must develop the different phases of the nursing process: assessment, diagnosis, planning, implementation and evaluation of their care plan. They must use the standardised nursing languages too. To guide this process, the student is supervised by a link lecturer, who can be an academic lecturer (full lecturer) or a clinical lecturer (assistant lecturer), who combines their teaching work at the university with clinical activity. The grade obtained in the clinical case is part of the overall evaluation of the clinical practice module, which also includes other components such as being assessed by the clinical nurse responsible for mentoring them at the clinical placement and a self-evaluation component. This kind of summative assessment with several tools used in direct patient care and simulated practice, which are marked using a multi-level observational rubric, supplemented by self-evaluation of clinical performance, is in line with the findings of Clemett and Raleigh (2021) in their systematic review.

Despite the wide use and positive outcomes gained from cases studies, students still feel that the evaluation of their clinical practice varies depending on the clinical nurse mentor, who decides what is relevant in 'the real world' and the link lecturer, who, despite being

relatively invisible to students during their clinical practice, has a major influence on their final grade (Foster et al., 2015; Helminen et al., 2016).

3 | THE STUDY

3.1 | Aims

The aim of this study is twofold. On the one hand, to identify the presence of variability in the evaluation of case studies prepared by nursing students during their primary care rotations based on a module's existing evaluation rubric. On the other hand, to explore the difficulties experienced by link lecturers and students in preparing and evaluating case studies.

4 | METHODS

4.1 | Design

A mixed methods design was used, analysing the scores given to the case studies during the evaluation and qualitative information on link lecturers' and students' assessments of the evaluation process.

4.2 | Population and sample

The study was carried out during the 7-week rotation of third-year students on primary care clinical placements during the 2018–2019 academic year. The study population included 132 students, who prepared a case study during their rotation in primary care, and 6 link lecturers, who assessed their case studies. Each case study was evaluated by the link lecturer responsible for monitoring that student during the clinical practices in that period. During the 2018–2019 academic year, evaluation of the primary care case studies was undertaken by six link lecturers.

4.3 | Data collection

Data were collected in the following ways: the scores awarded to the 132 case studies by the various link lecturers, a focus group session with the participating students and in-depth interviews with the lecturers involved in their evaluation.

Data were collected on the following variables: the link lecturer responsible for evaluating each student, the final grade for each student's case and the grades awarded to each of the items in the evaluation rubric. This rubric (see Annex 1) is the tool usually used by link lecturers to correct clinical cases. This evaluation tool was developed by a group of nursing professors with extensive experience in the preparation of clinical cases but has not been subjected to a formal validation process.

Four of the six link lecturers were interviewed since two of the link lecturers had participated in the development of the research

project and their participation in the interviews was not considered appropriate. Of the four link lecturers interviewed: one was an academic lecturer (full lecturer) and three were clinical lecturers (who combine clinical care with teaching). An interview script covering the following topics was used: experience in evaluating case studies; the influence of the aspects they value most and least on the grades they award; difficulties in using the rubric and recommendations for improvement (see Annex 2). The interviews lasted between 40 and 60min and took place in a space chosen by each participant. They were audio-recorded and then transcribed for analysis.

Students with the highest and lowest grades in the case study were invited to participate in a focus group session. To ensure the heterogeneity of the group, students evaluated by different link lecturers were represented. For the focus group session, a thematic script was created, addressing aspects relating to the preparation of students' case studies during their clinical placements and recommendations for improvement (see Annex 3). Five students participated in the focus group, which was led by a moderator accompanied by an observer who took notes during the development of the session. All students actively participated in the discussion. The focus group session lasted 90min and was audio-recorded and transcribed for subsequent analysis, after obtaining informed consent from all participants.

4.4 | Data analysis

The data from the case study evaluation were statistically analysed to assess any differences between link lecturers in the final grade they awarded to each case study and the grades they awarded to each of the items in the evaluation rubric. To analyse the data, a between-subjects one-factor ANOVA model was used (one lecturer representing one factor) using the total score given by the lecturer (the sum of all the rubric items) and each rubric item separately as the dependent variable. This was used to assess whether the average scores differed. Pairwise comparisons of lecturers were performed to establish whether lecturers differed in the average scores awarded using Tukey's method (controlling for the type I error rate). The statistical significance threshold for all analyses was set at 0.05. In addition, the assumptions of normality

and homoscedasticity were fulfilled for the dependent variables. Normality was assessed using the Kolmogorov–Smirnov test. The assumption of homoscedasticity was assessed using Levene's test. When the assumption of the equality of variances was not met, Welch's corrected *F*-statistic was used. The non-parametric Kruskal–Wallis test was also used to analyse whether the results were sensitive to the statistical model. The data were analysed using SPSS (version 25) software from IBM.

The qualitative data from the interviews and focus group sessions were analysed thematically using Braun and Clarke method (2006). All authors read and underlined the interview and focus group transcripts to familiarise themselves with the data and to identify the first emerging codes. At a series of analytical meetings, the authors identified potential themes by clustering the codes and created a relationship map to refine and link the themes found. This refinement of the themes led to the final report, which included quotes from participants and analytical notes on each theme.

4.5 | Ethical considerations

This study is part of a teaching innovation project entitled 'Strategies for harmonising clinical practice evaluation standards', approved by the Autonomous University of Madrid Teaching Innovation Ethical Committee, involving internal and external evaluators, with reference number M_015.18_INN.

All individuals involved in the study participated voluntarily, were informed about the study objectives and signed an informed consent form. Students were assured that their participation would have no impact on their grades. To this end, double anonymisation was carried out at the time of recruitment and during transcription.

5 | RESULTS

A total of 132 case study evaluations were collected from 6 lecturers, with the number of cases evaluated by each lecturer ranging between 18 and 26 (see Table 1).

Table 2 shows the results comparing the means of the six lecturers. The results of the parametric ANOVA model and the non-parametric

TABLE 1 Means, standard deviations and number of students (*N*) per lecturer based on final grades and rubric items.

Lecturer	N	Final grade*	Structure selection*	Information analysis*	Planning*	Follow-up*	Final assessment*	Literature review*	Written communication*
1	21	7.52 (1.35)	2.16 (0.63)	1.34 (0.46)	1.27 (0.51)	0.88 (0.27)	0.89 (0.25)	0.35 (0.31)	0.33 (0.18)
2	23	7.87 (0.92)	2.30 (0.43)	1.32 (0.36)	1.71 (0.32)	0.87 (0.21)	0.75 (0.31)	0.44 (0.11)	0.50 (0.00)
3	26	7.83 (1.23)	2.35 (0.36)	1.65 (0.30)	1.52 (0.33)	0.76 (0.16)	0.75 (0.14)	0.40 (0.07)	0.41 (0.06)
4	22	7.21 (1.24)	2.34 (0.61)	1.31 (0.31)	1.57 (1.48)	0.71 (0.23)	0.72 (0.19)	0.29 (0.19)	0.45 (0.06)
5	18	7.90 (1.07)	2.45 (0.36)	1.56 (0.21)	1.58 (0.21)	0.79 (0.13)	0.74 (0.22)	0.38 (0.06)	0.40 (0.06)
6	22	8.66 (0.95)	2.48 (0.37)	1.74 (0.26)	1.75 (0.25)	0.95 (0.10)	0.85(0.16)	0.45 (0.11)	0.45 (0.08)
Total	132	7.83 (1.23)	2.34 (0.48)	1.49 (0.36)	1.57 (0.69)	0.83 (0.21)	0.78 (0.22)	0.39 (0.14)	0.43 (0.10)

*Mean (SD).

TABLE 2 Significance of ANOVA tests based on final grades and rubric items.

	Final grade	Structure selection	Information analysis	Planning	Follow-up	Final assessment	Literature review	Written communication
One-way ANOVA (lecturer)	$F(5,136)=3.984$ $p=0.002$ $\eta^2=0.137$	$F(5,126)=1.392$ $p=0.232$ $\eta^2=0.052$	$F(5,58)=7.914^a$ $p<0.001$ $\eta^2=0.228$	$F(5,58)=3.791^a$ $p=0.005$ $\eta^2=0.039$	$F(5,57)=7.968^a$ $p<0.001$ $\eta^2=0.155$	$F(5,126)=2.325$ $p=0.055$ $\eta^2=0.078$	$F(5,54)=1.801^a$ $p=0.128$ $\eta^2=0.073$	$F(5,126)=9.186$ $p<0.001$ $\eta^2=0.267$
Kruskal–Wallis test	$H(5)=17.069$ $p=0.004$	$H(5)=7.083$ $p=0.215$	$H(5)=29.969$ $p<0.001$	$H(5)=23.925$ $p<0.001$	$H(5)=34.480$ $p<0.001$	$H(5)=20.289$ $p=0.001$	$H(5)=14.983$ $p=0.010$	$H(5)=44.271$ $p<0.001$

^aWelch's robust F is used as the assumption of homoscedasticity is not fulfilled.

Note: Bold values indicate the statistical significance of $p < 0.05$.

Kruskal–Wallis model are also provided, with a sensitivity analysis performed in consideration of the fact that the assumptions required by the ANOVA are not always met. The results suggest that the two statistical models are robust and consistent with one another. In virtually all items of the rubric (in addition to the final grade), there are statistically significant differences in the mean grades awarded between the lecturers. The items in which significant differences were identified between the lecturers using both statistical models were information analysis, planning, follow-up of the individual's progress and written communication. In the final assessment and literature review, differences were detected only in the non-parametric test. Furthermore, in the final grade, the effect size measure, η^2 , exhibited a considerable magnitude according to Cohen's criteria (1988, ps. 280–287), where 0.01, 0.07 and 0.14 are set as criteria for weak, moderate and strong effect sizes respectively. Table 2 shows that in four of the eight items evaluated, the effect size was high.

Pairwise comparisons between all lecturers were also assessed and one lecturer was found to differ significantly from two other lecturers ($p < 0.05$). Lecturer 6, in particular, awarded significantly higher averages than lecturers 1 and 4 (see Table 1). Finally, the six lecturers were grouped into two categories according to their job category (academic lecturer or clinical lecturer) in order to analyse whether academic and clinical lecturers used the rubric differently. The T -test for independent samples was used to compare the averages. The results showed no significant differences in any of the items analysed or in the total, except for written communication. In this item, the group of academic lecturers ($M=0.38$, $SD=0.12$) awarded significantly lower average scores than the group of clinical lecturers ($M=0.47$, $SD=0.06$): $T(93)=5.281$, $p < 0.001$.

Regarding the qualitative phase of the study, the thematic analysis of the discourses from the interviews with the link lecturers and the focus group with the students generated two core categories:

1. The challenge of preparing the case study
2. The variable nature of the evaluations

5.1 | The challenge of preparing the case study

The link lecturers participating in the study viewed case studies as an opportunity to integrate theory and practice. However, they highlighted students' difficulties in incorporating theory into the case they are working on. They also pointed out that students tended to focus their attention on the physical problems of the people they care for. They stressed that a reductionist, superficial nursing assessment will not lead to a deep understanding of the social and emotional problems of the individual under their care.

The link lecturers participating in the study explained that the limitations of the case study were due, on the one hand, to the incorporation of the nursing process into the computer system, which simplifies the approach of a comprehensive vision of said process,

and on the other hand, to the internalisation of care models that fail to take a holistic view of the individual by nursing students during their placements.

So, I think that this may be influencing a lot [...] that they are influenced a lot by the computer systems, which, in some way, shape how you think, or your own mentalization. But, sometimes, what I am seeing is that there are students who do not go further.

(E1)

(They are preparing) a case with a mentor, who almost always has a hospital background, who is not teaching them a holistic approach to patients.

(E4)

During the focus group, the students stated that the clinical nurse mentors helped them in choosing a patient and support them in preparing their case. However, they pointed out that sometimes the clinical nurse mentors failed to fully understand the work they must carry out, even questioning the practicality of this type of exercise for their future professional practice.

I've even heard that. They [clinical nurse mentors] say "but this is a waste of time, you're never going to do this..." If the person who is above you, so to speak, comes to you and says: "don't do that, it's nonsense" or "it's no use", they're not exactly going to be of much help.

(FG)

In the focus group, the students identified the lack of precise, uniform instructions from all link lecturers as to the structure and basic contents of the case study as one of the main difficulties involved in the process. This prompts them to prioritise the creation of their own case study, 'the model case study', for which they resort to the following: 1. reviewing learning materials from previous modules in their academic training; 2. using available bibliographic resources; and 3. compiling case studies carried out by colleagues or by themselves that have already been corrected. The students expressed that they felt that some of the instructions provided by link lecturers were contradictory and wondered whether those instructions reflect personal inclinations rather than academic criteria.

The link lecturers who participated in the study also pointed to the lack of a precise, standardised structure and content as particularly problematic when it came to helping them guide the student in the development of the clinical case. They considered that the fact that the students could receive different indications from each link lecturer contributed to generating confusion among them.

Yes, I see the fact that you can have a tutor every year as an inconvenience, [...]each tutor asks you really one thing. Maybe it's not worth it, even if it's well done,

it's not worth it, because they wants... "No, I don't want this, I want you to develop this pattern more for me", "I don't like this, remove it", and then, suddenly, the following year, or in the following practice, you get another one, and it's the other way around, they likes what you had done at the beginning better.

(FG)

I really don't think the problem is that students aren't trying hard enough, it's that they're quite disoriented. We're giving them different instructions if you like.

(E2)

During the focus group, the students complained that case studies were expected to meet certain requirements without considering the reality in which they carry out their clinical placements, such as requiring the case study to be carried out in a home environment or demanding that the care plan designed to be put into practice. This last point is also noted by the interviewed link lecturers.

The students and link lecturers mentioned that they sometimes resorted to 'embellishing' the real case study with fictitious content as a way of fulfilling the requirements, or to taking more simplistic approaches enabling them to obtain results in the short term.

I understand that the student may have difficulty understanding that we propose a care plan, and an evaluation, above all [...], but the evaluation is very difficult, an evaluation in three weeks [the duration of the internship], in primary care. It is that sometimes not even in three weeks is a wound managed, nor is a therapeutic eating plan managed, nor is a grieving coping plan managed, nor do you manage... it is that practically very little.

(E4)

But to comply with all the requirements, I think that I personally, in some cases, and I think other people too, end up having to make something up in the end. And just for that, for a good grade, when in reality it's not entirely true.

(FG)

5.2 | The variable nature of the evaluations

Despite the evaluation rubric, the students participating in the focus group perceived differences in the demands made by different link lecturers. They believed that there was variability in the grading of the cases that was intrinsic to the lecturers themselves and did not reflect the quality of their work. Students felt evaluation discrepancies as 'unfair', indicating the need to establish common, precise standards in line with the level of skills to be acquired.

Really, I've had classmates whose cases would have been graded a 9 (by the mentors that I've had), but if I'd handed over my case to their mentor, my case would've got a 5 instead of an 8. That's unacceptable. (FG)

Link lecturers participating in the study viewed the rubric as an instrument that could sometimes 'constrict' the evaluation process by requiring a separate grade for each item, overlooking the fact that the final grade was based on the overall quality of the student's work rather than on the sum of the individual parts of the rubric.

The rubric (...) was a bit constricting, I mean, it didn't allow me (...) to be consistent with my impressions after evaluating the student and after adjusting the items to the main dimensions of the rubric. (E2)

The link lecturers reported that the tool displays a central tendency in grades, causing difficulties in the evaluation of the case studies when it comes to minimum and maximum grades. They also believed that there were items in the rubric that needed to be changed and that, in order to reduce variability, certain adjectives should be more specific, for example, 'complete', 'consistent' and 'appropriate'. They argued that the fact that not all link lecturers were experts in nursing methodology, and evaluation strategies resulted in the rubric not being used properly or in each link lecturer using it 'in their own way' in the evaluation process.

Each of us evaluators evaluate in a different way, from a different perspective. I think we try to do it in the same way, but we end up doing it in a different way. We all have different professional experience, or different academic experience (...). Each one of us might add a different nuance to it. (E3)

Link lecturers also mentioned that students failed to take on board their recommendations for improvement, partly due to discrepancies as to what was considered relevant in each case study.

6 | DISCUSSION

The results of our study suggest that, despite the availability of a rubric for evaluating case studies, there are statistically significant differences in the mean grades given by the sample of lecturers. This echoes the findings of previous studies suggesting that, although the availability of rubrics reduces between-lecturer variability, rubrics fail to eliminate all differences attributable to lecturer idiosyncrasies (Bearman & Ajjawi, 2021).

The benefits of using rubrics include the possibility of directing students' efforts towards core aspects of learning. When teachers'

expectations are made explicit to students, they are more likely to be met (Panadero & Jonsson, 2013). No mention was made of the utility of the rubric as a 'guide' for the learning process by the participating students. Rubrics have been justified in academia as a way of ensuring transparency in evaluation. However, without student participation in their development and use, they provide little support for student learning and evaluation (Bearman & Ajjawi, 2021; Kilgour et al., 2020).

Case studies have been incorporated into nursing degrees as a tool for learning to apply critical reasoning to nursing diagnoses, outcomes and interventions. Most of the experiences reported refer to the use of case studies designed by teachers and incorporated into clinical practice by students (Popil, 2011) or in comparison with other methods, such as simulated patients (Karadag et al., 2016). Several studies analysing the development of care plans by students based on real patients highlight the importance of nursing taxonomies (NANDA, NIC and NOC) in incorporating evaluation criteria into the case study objectives and improving nursing interventions of a less technical nature (Palese et al., 2009). However, as in our study, students report that nurses working at the healthcare facilities where they are carrying out their clinical placements make marginal use of the nursing methodology. Link lecturers also highlight the biological approach occasionally permeating case studies. Echoing these findings, Türk et al. (2013) explain the significant presence of physiological diagnoses in care plans made by students based on Benner's Novice to Expert Model. To these authors, the fact that 'novices' tend to identify problems of a biological nature results from their limited capacity to understand the situation of the individual being cared for as a whole, to apply critical thinking and to take a holistic approach. It is expected that novices will develop these skills with experience as they become experts. At the same time, identification of psychosocial problems requires a level of communication skill that is not available to students in the early stages of their training.

In our study, students and link lecturers both said that the case study script lacked clarity and specificity. In this sense, students and mentors said that having a follow-up structure, with specific tasks relating to the preparation of the case study, could be a viable avenue for improvement. This is consistent with a study by Brugnonli et al. (2011), where students reported that gradual, experiential and guided learning was the most appropriate mentoring tool for their learning process. Palese et al. (2008) found that students who had received more intensive mentoring in the development of critical thinking skills made fewer errors in the initial formulation of hypotheses in case studies.

Furthermore, in a review by Flott and Linden (2016), the interaction between mentors and students in clinical practice learning, along with the physical space where learning takes place and the organisational culture, were considered essential components of the clinical learning environment (CLE). Student 'exposure' to clinical practice conditions echoes existing findings in the literature regarding the gap between theory and practice. Solutions include greater involvement of link lecturers in the acquisition of clinical skills and experimentation with the realities of practice, as well as a greater presence of clinical mentors in theory training, allowing them to build more meaningful bonds with students (Masterson et al., 2020). This is especially relevant in primary care, where

the gap between the hospital setting and the academic environment has been highlighted by various authors (Peters et al., 2015; Valaitis et al., 2020).

Finally, in our study, students and link lecturers feel that they are expected to produce work in accordance with requirements that are far removed from the reality of care. The theory taught at educational institutions aims to provide general practice guidelines that may be meaningless when they materialise in the dynamic, changing world of clinical care, causing feelings of frustration and futility (Salifu et al., 2019).

6.1 | Limitations

This study has some limitations. First, for the exploration of the difficulties expressed by the students, only one focus group was conducted with nursing students. This affects the possibility that different student profiles could be represented within the group. Nevertheless, an attempt was made to ensure a certain heterogeneity of the attendees in terms of experiential characteristics considered relevant to the phenomenon under study, such as grades obtained in the clinical case and specific primary health centre of clinical practice. Another limitation of the study is the number of cases evaluated by each teacher, which made it necessary to use non-parametric tests. It should also be noted that the participants were recruited from a single university institution. This limits transferability to other academic contexts. On the other hand, it should be noted that the rubric used in the elaboration of the clinical cases was developed by a group of expert teachers in this teaching methodology, and has not been subjected to a formal validation process. This prevents knowing the reliability and validity of the instrument to evaluate the clinical cases prepared by the student.

7 | CONCLUSION

The use of case studies based on real individuals cared for by students during their practical training as an evaluation tool poses several challenges. Students and link lecturers point out the complexity of the process of preparing a case study and consider that having uniform, clear criteria in line with the reality of clinical settings is essential to facilitate this task. The use of case studies as an evaluation tool requires the availability of rubrics that concisely reflect lecturers' expectations as to the work to be carried out, which can be used by students as a roadmap in preparing their case study.

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CONFLICT OF INTEREST STATEMENT

None.

DATA AVAILABILITY STATEMENT

Data available on request from the authors: The data that support the findings of this study are available from the corresponding author upon reasonable request.

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ANNEX 1

Rubric for evaluating case studies.

Case study	Inadequate <5	Adequate 5–6	Good 7–8	Excellent 9–10
Selection and structure of the individual's data (3 points)	Selects incomplete information and does not structure it on the basis of a theoretical model or functional health patterns (FHPs)	Selects incomplete information and structures it on the basis of a theoretical nursing model or FHP in a disorganised way	Selects sufficient information and structures it on the basis of a theoretical nursing model or FHP	Selects complete and relevant information, structuring it on the basis of a theoretical nursing model or FHP
Data analysis: problem identification and formulation (2 points)	Only 25% of the problems identified are based on the data provided and/or are well described	50% of the problems identified are based on the data provided and/or are well described	75% of the problems identified are based on the data provided and are well described	All problems are well identified, analysed and described.
Planning (2 points)	Does not set priorities. Selects outcomes and interventions that are not relevant to the patient's problems. Plans inappropriate activities	Does not set priorities. Selects outcomes and interventions that are 50% relevant to the patient's problems. Incomplete planning of activities	Sets priorities. Selects outcomes, interventions and activities that are 75% relevant to the patient's problems. Plans an adequate number of activities.	The care plan is comprehensive, consistent and relevant to the patient
Follow-up of the individual's progress (1 point)	Does not make notes on the individual's progress	Incomplete monitoring of the individual's progress	Monitors the individual's progress but fails to propose changes to the care plan	Monitors the individual's progress and proposes changes to the care plan
Final assessment (1 point)	Fails to carry out a final assessment	Makes an incomplete assessment of the expected outcomes for the individual	Describes the current status of the outcomes correctly but fails to consider making any changes to the care plan	Analyses the outcomes and makes proposals for improving the care plan
Literature review (0.5 points)	Fails to provide references or selects non-technical references. References do not conform to international standards	Provides references relevant to solving the case but these are insufficient and/or poorly referenced	References are relevant, appropriate and sufficient. Not all of them are well referenced	Includes articles and guidelines supporting evidence-based practice. References conform to international standards
Writing skills (0.5 points)	Disorganised structure. Grammatical errors. Incorrect use of technical language	Organised structure. Makes no grammatical errors, although writing is not very sophisticated. Difficulty in using technical language	Organised structure. Writes and uses technical language correctly	Excellent structure, writing skills and use of professional language. Employs typographical resources that facilitate the understanding of the text

ANNEX 2

Interview guide for link lecturers.

Thematic fields	Questions
General experience in evaluating clinical cases	How has your experience been in the assessment of clinical cases in this academic year?
Aspects considered in the evaluation of clinical cases	<p>What aspects do you value most in a clinical case?</p> <p>How do these positive aspects influence the marks?</p> <p>What aspects do you value most negatively in a clinical case?</p> <p>How do these negative aspects influence the marking?</p>
Tools used in the evaluation of the clinical cases.	<p>What tools do you use to correct the clinical case?</p> <p>What difficulties do you encounter in using the rubric to correct the clinical case? What do you do in those situations?</p> <p>How do you think the available rubric could be improved?</p>

ANNEX 3

Focus group guide.

Thematic fields	Questions
Elaboration of the clinical case	<p>Could you talk about how is the process that you follow for the elaboration of the clinical case?</p> <p>What resources do you use to make it?</p> <p>What difficulties do you encounter when making it?</p> <p>How do you think they could be fixed?</p> <p>How do the clinical tutors participate in the elaboration of the clinical case?</p>
Evaluation of the clinical case	<p>What has been your experience in relation to the evaluation of your clinical case?</p> <p>What do you think about the clinical case evaluation rubric?</p> <p>Have you had discrepancies with the evaluation report of your clinical case?</p> <p>What have these been? How were they resolved? How do you think the difficulties encountered could be better overcome?</p> <p>What do you think is positive about the evaluation process?</p>