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Review

Summative assessment of clinical practice of student nurses: A review of the literature

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ABSTRACT

Objectives: To provide an overview of summative assessment of student nurses’ practice currently in use.
Design: Narrative review and synthesis of qualitative and quantitative studies.
Data sources: With the support of an information specialist, the data were collected from scientific databases which included CINAHL, PubMed, Medic, ISI Web of Science, Cochrane library and ERIC published from January 2000 to May 2014. Sources used in all of the included studies were also reviewed.

Review methods: 725 articles concerned with student nurse clinical practice assessment were identified. After inclusion and exclusion criteria, 23 articles were selected for critical review.

Results: Findings suggest that the assessment process of student nurses’ clinical practice lacks consistency. It is open to the subjective bias of the assessor, and the quality of assessment varies greatly. Student nurses’ clinical assessment was divided into 3 themes: acts performed before final assessment, the actual final assessment situation and the acts after the final assessment situation. Mentors and students need teachers to provide them with an orientation to the assessment process and the paperwork. Terminology on evaluation forms is sometimes so difficult to grasp that the mentors did not understand what they mean. There is no consensus about written assignments’ ability to describe the students’ skills. Mentors have timing problems to ensure relevant assessment of student nurses. At the final interview students normally self-assess their performance; the mentor assesses by interview and by written assignments whether the student has achieved the criteria, and the role of the teacher is to support the mentor and the student in appropriate assessment. The variety of patient treatment environments in which student nurses perform their clinical practice periods is challenging also for the assessment of student nurses’ expertise.

Conclusions: Mentors want clinical practice to be a positive experience for student nurses and it might lead mentors to give higher grades than what student nurses in fact deserve. It is very rare that student nurses fail their clinical practice. If the student nurse does not
achieve the clinical competencies they are allowed to have extra time in clinical areas until they will be assessed as competent.

Further research needs to be carried out to have more knowledge about the final assessment in the end of clinical practice. Through further research it will be possible to have better methods for high quality assessment processes and feedback to student nurses. Quality in assessment improves patient safety.

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What is already known about the topic?

- Nursing students’ studies at the EU level comprise clinical practice in at least 50% of their total degree. In the United States the exact requirements of length of clinical practice vary from State to State.
- Relevant assessment is a significant part of professional growth in nursing education.
- Previous reviews of the literature on assessment of clinical practice in nursing education have focused on general training and feedback during their period of practice, rather than the final clinical assessment.

What this paper adds

- The explicit focus of assessment is very important as students tend to concentrate on achieving the required competencies which they are aware will be assessed.
- Assessment is inconsistent and personal characteristics of nursing students, mentors and nursing teachers significantly affect the process.
- In final assessment situations mentors have emotional and educational needs which educators need to be able to support to increase the validity of assessment.

1. Introduction

Clinical practice with appropriate assessment strategies is an important part of the nursing student education process. The purpose of assessment is to describe student nurses’ ability to perform the required skills based on the job description, that is, “fitness to practice.” Pre-registration education must ensure that student nurses meet standards of quality and safety in patient care (American Association of Colleges of Nursing, 2012; Willis Commission, 2012).

Student nurses spend variable amounts of the time in their clinical practice with their mentors but university-based teachers often have the responsibility for guiding and evaluating students (AACN, 2012; Wade and Hayes, 2010). Mentoring involves facilitating students’ learning in clinical placements and strengthening students’ professionalism (Jokelainen et al., 2011; Öhrling and Hallberg, 2000). There is still confusion about using the terms mentor or preceptor in the context of assessing students. In this review we will use the term ‘mentor’ to represent a clinical nurse who supervises, teaches and assesses nursing students during their clinical practice.

Formative assessment is an ongoing process and lasts throughout clinical education based on mentors giving feedback; its purpose is to advise the student towards a goal. Formative assessment prepares students for the summative assessment, which is usually undertaken at the end of the education modules, and if students are unsuccessful this may lead to the clinical practice period being terminated (Duers and Brown, 2009; Hand, 2006; Wallace, 2003).

The term ‘final assessment’ can be used both at the end of every nursing student’s clinical practice period and at the end of the program of studies before graduating (NMC, 2008). In this review we will use the term ‘final assessment’ to represent the assessment of student nurses’ clinical performance at the end of each clinical practice period. The mentor is meant to give the relevant evaluation feedback (Clemow, 2007) to ensure that student nurses have the ability to develop professionally.

It is difficult to reach consensus about what the core competency areas are for nursing, and opinions vary over time (Berkow et al., 2009). There are many different competency models used to evaluate nursing students (Karayurt et al., 2008). Carefully prepared evaluation forms make the assessment more objective and clear (Klein, 2006). Final assessment is an important method to ensure the nursing student has achieved the educational goals and therefore it is important to increase knowledge of final assessment processes in the learning environments.

Previous reviews on this topic of assessment of student nurses have dealt with the matter from a different perspective. For example, Yanhua and Watson (2011) investigated trends in the evaluation of clinical competence in student nurses such as instrument development and approaches to testing competence. Mentoring or student–mentor relationship has also been of interest in reviews (e.g., Henderson et al., 2012; Jokelainen et al., 2011; Wilkes, 2006). Chambers (1998) and Priest and Roberts (1998) have published reviews of the literature focusing on assessment of student nurses’ clinical assessment. These reviews are over fifteen years old and therefore it is important to update the illustration of this phenomenon in this review.

2. Aim of the review

The purpose of this review was to provide an overview of the approaches to the summative assessment of student nurses’ practice that are currently in use.

3. Methods

The argumentative nature of a narrative literature review, to aggregate and summarize evidence, has been considered a strength for the method (Webb and Roe, 2007). The narrative review in this review was carried out systematically and was based on a plan that can be
replicated if necessary. To counteract risks of subjectivity, bias and lack of rigor, this narrative review report includes evidence of the transparency of the review process, and it has a particular description of how decisions were made (Webb and Roe, 2007).

At the beginning of the literature search, the search strategy was considered in detail, and the goal was to narrow the focus of searches. Appropriate keywords are important for the success of the search process and the review must be based on a rigorous methodology to minimize bias, for example reviewers’ personal beliefs (Aveyard, 2011; Webb and Roe, 2007). In order to minimize selectivity bias two members of the research group independently reviewed and evaluated the articles based on the inclusion and exclusion criteria to increase the validity of output selection.

3.1. Literature search and study selection

The literature review was conducted using the following search terms: nurs* student*, clinical training, practical training, clinical placement, preceptor*, competence*, skill*, performance appraisal, assess*, evaluat*, judgment*.

The literature for this paper was identified accurately, critically and systematically through a variety of sources with the support of an information specialist. Seven inclusion criteria (Table 1) were used in the data collection. Criterion 7 (“articles obtained with reasonable resources”) did not need to be used because all articles were available in full text. The journal search was limited to publications from January 2000 to May 2014. Relevant articles were obtained from electronic databases: CINAHL (EBSCO), PubMed MEDLINE (Ovid), Medir, ISI Web of Science, Cochrane library and ERIC (Pro Quest). Duplicates were rejected. All of the included studies’ citations were also searched. Only papers in English, Finnish and Swedish were reviewed because team members together have competence in these languages (Table 2).

A review of journal articles was conducted. The literature review initially identified 725 papers, of which 23 were relevant to the review because they were explicitly and solely concerned with student nurse clinical practice assessment. If the assessment or evaluation of student nurses’ practice was the focus of the article, or was even briefly mentioned, it was accepted.

Letters, editorials and not-peer reviewed articles were also excluded. Articles dealing with patient assessment, nursing curriculum, teaching style, simulation sessions, journal writing process assessment, processing assessment tools, students’ common views of evaluating clinical practice placements, and mentoring not focused on assessment of student nurses, were also excluded. Exclusion of papers in the different stages of review retrieval is described in more detail in Fig. 1. According to subject classification, the majority of papers were concerned with assessment during the clinical practice, and a small number were concerned with the final assessment of clinical practice of student nurses.

3.2. Data analysis

According to the methodological classification, five of the papers fell into the qualitative category, six were of mixed qualitative and quantitative methods and six studies were quantitative. Literature reviews can be referred to as “original empirical research” to assist information (Aveyard, 2011; Webb and Roe, 2007), and therefore six literature reviews were also accepted. The 23

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<td>Criterion 2</td>
<td>Language</td>
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<td>Criterion 3</td>
<td>Terms/concepts/keywords</td>
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<td>Criterion 4</td>
<td>Content</td>
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<td>Criterion 5</td>
<td>Fields of science</td>
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<td>Criterion 6</td>
<td>Publication</td>
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<td>Criterion 7</td>
<td>Availability</td>
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| Table 2 | Search results of the review process. |
|---|---|---|
| Database | Search results based on the inclusion criteria n | Accepted nursing research articles on clinical assessment n |
| CINAHL (EBSCO) | 210 | 23 |
| PubMed MEDLINE (Ovid) | 163 | 24 |
| Medir | 0 | 0 |
| ISI Web of Science | 331 | 26 |
| Cochrane Library | 9 | 0 |
| Eric (Pro Quest) | 12 | 7 |
| Rejected duplicate publications | | |
| Total (n) | 725 | 23 |

papers that were included in this review were carried out in six different countries: the United Kingdom (9), Ireland (6), the United States (4), Australia (2), Sweden (1), and Canada (1). Table 3 includes details about the study type, characteristics of the population and results.

Two reviewers independently screened the title and abstracts against the inclusion and exclusion criteria. Two reviewers accepted or rejected relevant articles after full text reading, and discrepancies were resolved by consulting each other, and the outcome was consensus. A frame of classification was constructed for the analysis including the purpose of the review. A review, using narrative review methods, was conducted of the literature pertaining to the assessment of clinical practice of student nurses. Inductive content analysis (Finfgeld-Connett, 2014) was used for the analysis of these 23 scholarly outputs. The material was carefully read through to become familiar with the data and then the unit of analysis was chosen. The unit of analysis was one combination of words or the meaning of the sentence or phrase. Reduced impressions with the same meaning were categorized into the same class by classification and then combining the classes with similar content into subcategories. Next, subcategories with similar content were combined into upper categories. Finally, data was further categorized into three themes.

4. Results

Assessment of clinical practice of student nurses is presented in three themes labeled ‘Acts performed before final assessment of student nurse clinical practice,’ ‘The actual final assessment situation’ and the ‘Acts after the assessment situation.’ These include issues of student nurses’ clinical performance in the period before the final assessment at the end of each clinical practice period. These three themes are presented in detail below, based on the content of three major categories and nine subcategories.

4.1. Acts performed before final assessment of student nurse clinical practice

4.1.1. Orientation for clinical practice period

 Cotter et al. (2009) and Dolan (2003) highlighted the importance of the teacher, mentor, and student meeting in the beginning of the clinical practice period. Mentors need
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<tr>
<td>Bradshaw et al. (2012) Ireland</td>
<td>To establish students’ and preceptors’ experience and views of the competency assessment process and the assessment document.</td>
<td><strong>Quantitative and qualitative</strong> Focus groups with students (n = 13) and preceptors (n = 16), Survey of students (n = 232) and preceptors (n = 837).</td>
<td>Students and preceptors needed support for the competency assessment process. There were inconsistencies in how preceptors carry out the competency assessment process.</td>
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<td>Brown (2000) United Kingdom</td>
<td>To explore the criteria that mentors use to make judgments on the clinical performance of student mental health nurses.</td>
<td><strong>Quantitative and qualitative</strong> Written comments made by mentors (n = 150).</td>
<td>Assessment of students was not restricted by pre-determined behavioral learning outcomes. Personal characteristics of students significantly influenced judgments. Preceptors had difficulty understanding the language used in the competency assessment document. There was a lack of continuity in terms of the same preceptor to students over the assessment period and more than half of the preceptors gave less than 30 min for the formal interview process. Preceptors more frequently assessed knowledge and attitudes compared to skills.</td>
</tr>
<tr>
<td>Butler et al. (2011) Ireland</td>
<td>To explore preceptors’ perspectives concerning the content of a competency assessment tool and experience of the competency assessment process.</td>
<td><strong>Quantitative</strong> Questionnaire Preceptors (n = 837)</td>
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<tr>
<td>Calman et al. (2002) United Kingdom</td>
<td>To describe the methods and approaches of measuring progress in achieving competence.</td>
<td><strong>Quantitative and qualitative</strong> Questionnaire for program leaders in 7 institution and 12 group interviews with students (n = 72). Reviews of program documentations.</td>
<td>Each institution had its own tool to suit the program. Benner’s theoretical framework was commonly in use. Competence documenting was: pass/fail or competent/not competent; and tools had placement-specific competencies that students were expected to pass from 50% to 100%. System was open to the subjective bias of the assessor and all institutions ran courses for practice assessors (lasting from 2 or 3 days to 3 months). It was very rare for a student to fail. Failing students were allowed extra time in clinical areas to achieve clinical competency. Assessments were often completed in the last few minutes of a placement, or not at all, or mentors sent the assessments to students after completion of the placement. There was a lack of clarity regarding the concept of competence. Mentors’ level of confidence as assessors varied. Competence assessment depended on mentors’ subjective judgments about student performance.</td>
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<td>Cassidy (2009) United Kingdom</td>
<td>To explore how mentors interpret competence in their assessment of pre-registration nursing students.</td>
<td><strong>Literature review</strong></td>
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<tr>
<td>Cassidy et al. (2012) Ireland</td>
<td>To evaluate clinical competence assessment in BSc nursing registration education programs.</td>
<td><strong>Quantitative and qualitative</strong> Preceptors: Focus groups (n = 16) and survey (n = 837)</td>
<td>The flexible nature of competencies was valued. Difficulties were found with the wording of competency documentation. Timing of assessment was challenging.</td>
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<tr>
<td>Cotter et al. (2009) United States</td>
<td>To describe the development of a dual track offering for adult nurse practitioner programs and share clinical evaluation tools used with students.</td>
<td>Literature review</td>
<td>Formative and summative evaluations included reflective logs, clinical documentation of patient encounters, preceptor evaluations, and faculty site visits. The students' self-evaluative skills and quality written feedback from faculty members were important. Inconsistencies were found throughout the system: preceptors did not have enough time for assessment, some placements found it difficult to achieve certain competencies, and tutors and preceptors may have had individual interpretations of some competencies. Written evidence supported clinical competencies. Preceptors needed more training in the assessment process.</td>
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<td>Dolan (2003) United Kingdom</td>
<td>To determine if the revised system was an effective measure of clinical competency.</td>
<td>Qualitative Focus groups: students (n=8), preceptors and tutors.</td>
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<td>Duffy (2003) United Kingdom</td>
<td>To describe mentors' and lecturers' experiences of why some student nurses were allowed to pass clinical assessments without having demonstrated sufficient competence.</td>
<td>Qualitative Grounded theory. Lectures (n=14) and mentors (n=26).</td>
<td>Mentors had voiced concerns to lecturers regarding a student's performance, but they did not have enough courage to fail the student. Mentors needed support from lecturers, especially for failing students. Mentors did not want to hurt students' feelings and they felt they had personally failed as a mentor if they failed a student. Students and preceptors had difficulties with the language used in the competency assessment document. Students reported that it was challenging to find time for their required interviews with the preceptors. Preceptors identified that the students' focus was on the theory and completion of the competency document almost to the exclusion of other learning opportunities. Inconsistency and a lack of ability to give accurate feedback on professional values and behaviors in contrast to the feedback on clinical skills-written comments were supported by congruent scores in the relevant competencies. Inconsistencies were found between feedback given to students and feedback given to the teacher in a confidential manner that the student would never see. That appeared to be more honest.</td>
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<tr>
<td>Faby et al. (2011) Ireland</td>
<td>To evaluate clinical competency assessments in pre-registration BSc nursing programs.</td>
<td>Quantitative and qualitative Focus group: students (n=13) and preceptors (n=16) and survey questionnaires: students (n=232) and preceptors (n=837).</td>
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<td>Fitzgerald et al. (2010) United Kingdom</td>
<td>To reveal further insight into the disparity of documented feedback and provide evidence of failure to fail.</td>
<td>Qualitative Assessment documents from students (n=17) and anonymous questionnaires competed by the mentors (n=17).</td>
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<td>Fotheringham (2010) United Kingdom</td>
<td>To review the use and usefulness of the methodological strategy of triangulation in the assessment of skills in nursing curricula strategies.</td>
<td>Literature review</td>
<td>Very many methods of assessing clinical skills have been documented and there are inherent issues in ensuring both the reliability and validity of these assessment strategies for clinical skills.</td>
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<td>Hallin and Danielson (2010) Sweden</td>
<td>To describe RNs' perceptions of nursing students' preparation and study approaches in hospital workplaces and to explore relationships between RNs' perceptions and their personal/clinical characteristics.</td>
<td>Quantitative&lt;br&gt;Questionnaire (n = 142), response rate 72.5%.</td>
<td>The majority of RNs rated students' study approaches highly and thought students comprehended the outcomes of learning. Positive correlations were found between the RNs' perceptions of nursing students and their interest in preceptoring. Students' evaluation stated that the assessment helped them develop their clinical skills and reflect on their clinical practice. Students evaluated that the assessor was willing to assist and their feedback was clear and they spent sufficient time providing feedback. Students' evaluated assessment was consistent with their general clinical performance. The pressure caused by the assessment made students feel anxious. Competency assessment tools do not clearly define what is expected of the students. Preceptors avoid commenting on the more difficult areas of practice and focus on the students' good areas. Many preceptors were inexperienced, did not fully comprehend the assessment process and were not applying all of the recommended assessment strategies when they assessed students during clinical practice. Positive attitudes to the structure of the tool and positive experiences with its use in practice. Dissatisfaction with the amount of time spent completing the assessment tool and the amount of preparation needed to carry out the assessment process. Preceptors did not wish to sign off on the documentation because of the short duration of time the students spent in placement. 83% used pass/fail grading in clinical courses rather than letter or numerical grades. Most programs (70%) used the same evaluation tool in all courses but modified it to each course. Evaluation strategies were, for example: observation of performance by faculty, written assignments, self-assessment, simulations, and reflective journals. Grading was done on a 4-point scale (0–4). 95% of students' grades were at level of 3 or 4. Only 5% of grades were at a level of 2.</td>
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<td>Levett-Jones et al. (2011) Australia</td>
<td>To describe students perceptions of the Structured Observation and Assessment of Practice (SOAP) model.</td>
<td>Quantitative and qualitative&lt;br&gt;Data was collected via an anonymous online evaluation (n = 654).</td>
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<tr>
<td>Miller (2010) Australia</td>
<td>To review what the affective domain is and how it is related to both professional competencies and ethical standards.</td>
<td>Literature review</td>
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<tr>
<td>McCarthy and Murphy (2008) Ireland</td>
<td>To describe what assessment strategies preceptor nurses use to clinically assess BSc students and their assessors during the students' clinical placements.</td>
<td>Quantitative&lt;br&gt;Questionnaire&lt;br&gt;Preceptors (n = 470)</td>
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<tr>
<td>O'Connor et al. (2009) Ireland</td>
<td>To implement and evaluate a competence assessment tool for use by nursing students and their assessors during the students' clinical placements.</td>
<td>Quantitative&lt;br&gt;Survey among a non-probability sample of students (n = 29) and their preceptors (n = 27).</td>
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<td>Oervann et al. (2009) United States</td>
<td>To describe how nurse educators evaluate and grade students' clinical practice.</td>
<td>Quantitative&lt;br&gt;Survey, via questions on website (n = 1,534) of faculty in all types of RN prelicensure programs. It was not possible to calculate the response rate.</td>
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<td>Seldomridge and Walsh (2006) United States</td>
<td>To explore the challenges in evaluating student performance.</td>
<td>Quantitative&lt;br&gt;One university's records of two clinical preceptorships (n = 204)</td>
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<td>Watson et al. (2002)</td>
<td>United Kingdom and United States To design the use of clinical competency assessments in nursing.</td>
<td>Literature review</td>
<td>Confusion about the definition of clinical competence. Most of the methods used to measure competence are not developed systematically. The results uncovered tension between competence and other educational approaches: what is the purpose of the modern nurse?</td>
</tr>
<tr>
<td>Webb and Shakespeare (2008)</td>
<td>United Kingdom To describe how mentors actually make judgments about students' clinical competence.</td>
<td>Qualitative</td>
<td>Mentors might feel guilty if a student was not succeeding, and wonder if they themselves could have done better. Focus on judging the person as much as or perhaps more than performance. An ‘unwilling’ mentor might influence the learning experience.</td>
</tr>
<tr>
<td>Wells and McLoughlin (2014)</td>
<td>United Kingdom To investigate the issue of giving feedback to failing students.</td>
<td>Literature review</td>
<td>Barriers to feedback included having enough time and emotional involvement with students, mentors were sometimes reluctant to give negative feedback to students. Preceptors emphasized it is not their role to pass or fail student, but to provide feedback. Preceptors noted that contact with faculty was frequent (at least twice during the rotation by telephone with one final visit) in cases of unsafe students.</td>
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<tr>
<td>Yonge et al. (2011)</td>
<td>Canada To describe the experiences of preceptors and students in rural placements.</td>
<td>Qualitative</td>
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<td></td>
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<td>Grounded theory</td>
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<td>Rural preceptors (n = 12)</td>
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Support from teachers leading up to the assessment process during the student nurses’ clinical practice (Bradshaw et al., 2012; Cassidy et al., 2012).

4.1.2. Familiarizing with assessment forms

According to Seldomridge and Walsh (2006), mentors and student nurses should receive an orientation for the assessment process and the evaluation form from the teachers so that they will know what should be assessed. Mentors have noted that terminology on evaluation forms is sometimes so difficult to grasp, that the mentors did not understand what they mean (Brown, 2000; Butler et al., 2011; McCarthy and Murphy, 2008); carefully designed evaluation forms would make the assessment more objective and clear (Calman et al., 2002).

The studies in this review, from six different countries, found that common assessment practices have not yet been established nationally or internationally, but that practices also vary in different schools. Educational institutions have built their own grading mostly to meet their own needs and therefore their mutual comparison is difficult. Evaluation forms are often based on educational institutions’ own experiences, research, or for example Benner’s (1984) theory of development from novice to expert. The reliability and validity of methods in different schools has hardly been systematically assessed, and therefore this is clearly an area for development (Calman et al., 2002).

Institutions have a variety of tools for clinical practice assessment. Typically, the clinical practice courses are assessed on a pass/fail basis, and successful completion varies. Depending on the school they may require anything from 50 to 100% of the area of knowledge to be attained. Different areas of expertise may be assessed variously on three-, four- or five-level scales. To be as reliable as possible, knowledge should be assessed on verbal scales, such as “independent,” “safe and competent to practice,” “fitness to practice” and “dissemination level” (Calman et al., 2002). In the assessment report the majority of schools use a pass/fail scale, with a verbal or numerical scale used less frequently (Cotter et al., 2009; Oermann et al., 2009). In most cases, schools use the same student assessment forms, irrespective of the training theme. At some schools, assessment questionnaires are modified to better fit the theme (Oermann et al., 2009).

4.1.3. Different treatment environments

Students practice in a wide variety of treatment environments. They may sometimes find it difficult to demonstrate appropriate expertise in all competence areas (Dolan, 2003). In some places the students are assessed in specific nursing tasks/contexts for example, particular patient caring situation times and places are arranged; in other cases, the student’s competencies are evaluated much more frequently in a broad range of nursing situations across the clinical practice period (Calman et al., 2002). Information needs to be collected for the final assessment situation using multiple sampling strategies and sources of information. The lack of an adequately
broad assessment creates difficulties for the mentor in judging the students' ability (Fotheringham, 2010). Comprehensive knowledge of the whole context of the student nurse in practice is difficult to obtain (Dolan, 2003).

4.1.4. Observation of student nurses’ behavior

Overall, students are evaluated by mentors by observing, asking questions, self-assessment and written exercises. Also staff or patient feedback given to students can be used (Cotter et al., 2009; Gorman et al., 2009).

Some student nurses think that evaluation of their practice is based too extensively on written assignments that do not reflect well enough on their expertise in practice. However, some students think that those written exercises are very good for learning even though some of the mentors read students’ written assignments rather quickly and then put their name on them (Dolan, 2003). There is disagreement among mentors as to whether writing tasks necessarily guarantee that a student nurse is competent to practice. According to Calman et al. (2002) written assignments may have the ability to describe the student’s theoretical rather than practical skills whereas in Dolan’s (2003) study mentors considered the tasks of writing a very necessary part of the connection of theory to practice, yet some of the written exercises were not done well by student nurses. Calman et al. (2002) find that the portfolio is a very commonly used writing task for students in clinical practice. In the portfolio, students may reflect on their actions and knowledge.

4.1.5. Mentors’ attitudes and qualifications

The mentors do not always have enough common working time with the students during the training period, which may affect the accuracy of their evaluation (Butler et al., 2011; Fahy et al., 2011). The mentor can often have too many students, or employees may change several times (Dolan, 2003; Duffy, 2003; Watson et al., 2002) so that timing of the assessment is very challenging (Cassidy et al., 2012; Wells and Mcloughlin, 2014).

According to Dolan (2003) mentor education increases interest in student nurse mentoring. Calman et al. (2002) have found some preparation is organized in a 2–3 day training session for mentors. These training sessions are about the curriculum, the assessment forms and evaluation criteria. Some schools define the supervisor's training and/or experience level, which must be achieved prior to undertaking student assessment (Calman et al., 2002). Hallin and Danielson’s (2010) study found that if the mentors have a more positive attitude to mentoring and guiding, they are likely to grade the skills of student nurse higher.

4.2. The actual situation of final assessment of student nurses’ clinical practice

4.2.1. Providing for proper assessment situation

According to Levett-Jones et al. (2011) and Seldomridge and Walsh (2006), in the final assessment situation there should ideally be a teacher, mentor and student. The final interview situation is meant to be a reciprocal discussion, during which student mentors and faculty discuss the achieved competencies of students. The students describe their clinical assessment as a very stressful event (Levett-Jones et al., 2011). The role of the teacher is to support the mentor and the student in appropriate assessment (Dolan, 2003; Duffy, 2003). Cotter et al.’s (2009) study in the United States and Fahy et al.’s (2011) study in Ireland found that at the final interview students normally self-assess their performance, the mentor assesses by interview and written assignments whether the student has achieved the criteria.

4.2.2. Assuring relevant criteria for assessment

There are different interpretations of competence and competence assessment (Bradyshaw et al., 2012; Cassidy, 2009; Fotheringham, 2010). Mentors can have very different criteria for the assessment and what is and is not acceptable (Dolan, 2003). Also there can be inconsistency in the teachers’ evaluations of competence (Oermann et al., 2009). Student nurses sometimes experience a dichotomy between evidence-based teaching in schools and what mentors say is relevant to the ‘real world’ (Calman et al., 2002; Seldomridge and Walsh, 2006). According to Brown (2000) and Webb and Shakespeare (2008) the personal characteristics (e.g., ‘helpful,’ ‘pleasant,’ ‘self-confident’) of students considerably influence assessment.

4.2.3. Assigning the grade

If faculty and the mentor differ regarding what grade to give a student nurse, it is common for them to mutually decide to give a lower grade (Seldomridge and Walsh, 2006). Mentors want clinical practice to be a positive experience for student nurses, which might lead mentors to give higher grades than what nurse students deserve (Wells and Mcloughlin, 2014). Mentors tend to avoid commenting on the more difficult areas of student nurses’ clinical practice actions and focus their feedback on the students’ strong points (Miller, 2010).

There might be inconsistencies between mentors’ feedback given to students and feedback given to the teacher in a confidential manner: the mentor might tell the teacher that the student is not competent but in the final interview situation the mentor gives a passing grade (Fitzgerald et al., 2010).

4.2.4. Failing students

Some mentors even emphasize that it is not their role to fail students, merely to give feedback (Yonge et al., 2011). Often mentors do not have enough courage to fail students who have not demonstrated sufficient competence (Duffy, 2003; Seldomridge and Walsh, 2006). According to Calman et al. (2002) and Fitzgerald et al. (2010) it is very rare that students fail their clinical practice.

4.3. Acts after the assessment situation of student nurse clinical practice

4.3.1. Assuring relevant documentation

Clinical practice requirements should be documented and an assessment task is to ensure that a certain level is
reached. In some cases the mentor did not wish to sign off the assessment form because of the short time spent with the student nurse (O’Connor et al., 2009).

4.3.2. Organizing extra time for failing students
If the student does not achieve the clinical competencies they are usually allowed to have extra time in clinical areas until they are assessed as competent. Student nurses can be discontinued in their studies for academic failure but much less commonly because of clinical incompetence (Calman et al., 2002).

4.3.3. Ensuring support for mentors
The mentors often feel that they do not sufficiently understand methods to counsel students and assess their professional growth (Levett-Jones et al., 2011; McCarthy and Murphy, 2008). Mentors need support from teachers especially in assessing the student nurse’s practical skills and in written documentation (Bradshaw et al., 2012; Cassidy et al., 2012). Mentors may feel they have failed in their role if the student nurse fails (Dolan, 2003; Duffy, 2003; Webb and Shakespeare, 2008).

5. Discussion
This narrative review described the assessment of student nurses in clinical practice. It was found that students, mentors and teachers suggested that the main problem of the evaluation process was that it is inconsistent and uncertain, which is consistent with the findings of Karayurt et al. (2008). Assessment was characterized by substantial variation, which was dependent on the mentors’ knowledge and assessment skills, as well as teachers’, higher educational institutes’ and international educational assessment practices. Inconsistency in assessment practices was reported in several studies (Bradshaw et al., 2012; Cassidy, 2009; Cassidy et al., 2012; Dolan, 2003; Fitzgerald et al., 2010; Miller, 2010; Watson et al., 2002), but a detailed description of the processes utilized was not available through these studies. This draws attention to the importance of discussion of competencies. Bradshaw et al. (2012) and Cassidy et al. (2012) studied both students’ and mentors’ perspective through focus groups and surveys, which makes their findings more useful from this point of view while Dolan’s (2003) perspective was based on a qualitative small focus group approach.

Understandably and typically, students focus their learning on the aspects that will be assessed; therefore, assessment forms should focus on the issues that are really capable of being measured. Two Irish studies that used a sequential exploratory mixed methods design; i.e., focus groups and survey (Cassidy et al., 2012; Fahy et al., 2011), found difficulties in understanding the language of assessment forms. These problems with the language in assessment forms can be international, but evidence of the same was not found in this review. Nevertheless, it is still possible that findings of inconsistency in the assessment process may also include problem with the language used for the assessment forms. The findings of this narrative review showed that the teacher’s role in the beginning of a student nurse’s clinical practice period is to explain what the relevant criteria are and how to use this particular assessment tool, which agrees with the findings of several studies (e.g., Klein, 2006). This kind of integration of learning in universities and practice settings is important to developing the quality of assessment.

It should be noted that although many studies (e.g., Bradshaw et al., 2012; Dolan, 2003) have previously shown that mentors need support and training for final assessment from the school and its teachers, this process is not yet systematically organized in every nursing educational institution. The results showed that mentors’ training has a great impact on both student nurses’ and mentors’ satisfaction with the clinical practice period (Jokelainen et al., 2011) as well as with the final assessment process. Mentors who describe the language of assessment forms as difficult to understand may not have enough competence to assess student nurses’ behavior in clinical situations. Nevertheless, a mentor training program gives practitioners a chance to improve their knowledge of nursing curricula and increase their awareness of modern learning processes. Better training in assessing skills for mentors would help solve the problem. For example, Brown (2000) noted that some students feel that they are still assessed according to their personal characteristics rather than through actual professional expertise.

Furthermore, this review showed that a wide variety of patient treatment environments in which student nurses complete their clinical practice periods are also challenging for the assessment. There might be, for example, nursing homes where student nurses have no chance to show their expertise of, for example, medication knowledge. Educators and mentors of student nurses must make sure that student nurses have enough competence for medication knowledge and that assessment is possible for mentors. Mentors also have problems finding enough time to work with a particular student nurse to know how this student is coping in the field of nursing. Despite this, it is important that the mentor also has enough time to fill out the assessment documents and to sit down for the final assessment situation.

Failure to fail is a matter of concern because the relevant assessment is an important instrument for student nurses’ professional growth and for public protection. Self-assessment is an important part of assessment of student nurses’ clinical practice; however, Cole (2009) argued that students may overestimate their skills. Nevertheless, in this review we found little evidence for strategies to overcome this. For example Cotter et al. (2009) and Fahy et al. (2011) found that, in the final assessment situation, student nurses self-assessed their skills but the accuracy of their assessment was not reported.

It is important that the mentor has enough time to spend with the student but the close relationship between an individual mentor and the student can also be harmful for objective assessment. Mentors might like the student nurse and prefer not to give honest feedback so as to not upset the student. Furthermore, mentors might feel that they have guided the student poorly and that is why the student’s performance in clinical practice is not acceptable.
(Webb and Shakespeare, 2008). In these kinds of cases the university teacher has an important role to encourage mentors to assess student nurses’ competencies rather than the personality or social demeanor of the student. The teacher should highlight the importance of both negative and positive feedback in the interests of quality patient care, even when this can be challenging to give. Students find it useful to receive feedback in a timely manner so that they are able to improve their quality of work during their placements.

Several researchers (Calman et al., 2002; Cassidy, 2009) have argued that reliable and comparable assessment of student nurses’ knowledge would require at least the preparation of national assessment methods. Moreover, the assessment of student nurses’ clinical practice varies internationally and needs to be reviewed in further studies (e.g., Calman et al., 2002).

5.1. Methodological strengths and limitations

The main strength of this review is its rigor in the literature search and evaluation of the articles (Finfgeld-Connett, 2014). The literature for this paper was identified through a variety of sources accurately, critically and systematically with the support of an information service specialist. Peer reviewers were used to increase the validity of the content: all authors have expertise in nursing education and they read the text carefully and suggested their corrections to statements of the review results. Specific inclusion and evaluation criteria enabled the elicitation of relevant articles for this review, which were reviewed by two reviewers. The independent screening process led reassuringly to consensus. None of the authors had financial or other relationships that might have an interest in the submitted work.

The review has a number of limitations. The included studies varied in their methods of data collection and analysis. No standardized tool for quality assessment was used for the screening process. This was because the studies varied in their research approaches (qualitative, quantitative, mixed method, review), and these assessment tools have limitations in their ability to handle different methodological approaches. A limitation of this narrative review was the small sample size in most of the quantitative studies, which were chosen for this review. Furthermore, the review excluded articles focused on student nurses’ patient assessment; had they been included, they could have given some overview of the student nurses’ assessment by receivers of care.

The studies that were included in this review were performed in different kinds of settings. For example, Yonge et al. (2011) were interested in rural nurse mentors, while Brown (2000) explored mental health nurses and Hallin and Danielson (2010) investigated hospital nurses as mentors.

There were no country-related differences derived from the analysis. All of the included studies were conducted in Western countries, and none explored other educational perspectives. Therefore, the worldwide overview is not represented in this review.

None of the included studies offered a clear definition of final assessment and therefore it was necessary to widen the search strategy for the whole assessment process. Furthermore, the validity of the analysis of the data was ensured by a careful process of content analysis.

5.2. Implications for clinical practice and research

From this discussion, it is concluded that there is a need for further study to increase awareness of the final assessment of student nurses’ clinical practice. According to Cassidy (2009), it would be important to have large enough quantitative studies in order to have wider knowledge about assessing clinical practice of student nurses. There is a need for a broader perspective, as such information could enable educational institutes improve assessment practices. Intervention studies would also be an appropriate way to develop the quality of the assessment process.

6. Conclusion

This review provides a description of challenges in assessment of student nurses in clinical settings. This narrative review of international literature revealed that few studies have specifically explored the phenomenon of summative assessment; instead, there has been more interest in mentoring student nurses during their clinical practice. The 23 papers included in this review have highlighted inconsistencies in student nurses’ assessment processes; therefore, proper assessments must be developed to ensure patient safety in nursing care.

In addition, mentors described themselves as expecting to be more knowledgeable about assessing student nurses’ competencies, but even the opinions of nursing professionals related to core competencies are not clear. Student nurses should achieve required competencies during their nursing education program, and it requires that the mentor has adequate professional nursing skills and skills for mentoring the student nurse and the skills of assessment.

Mentors’ responsibility in ensuring high quality in assessment of student nurses’ skills in clinical practice is considerable. Educational institutes and clinical practice organizations should bear their responsibility to enable and require the appropriate education for mentors to improve and ensure their competence in the assessment of student nurses.

The student nurses must be allowed to do their training in an environment where they can acquire the required knowledge, skills, and competencies to the expected level; meanwhile evaluation forms must be developed to help with assessment in different learning environments. The results showed that the evaluation forms are not always suitable in all training environments; therefore, these kinds of environments might not be places that enable student nurses to practice high quality nursing competencies. In the future, we educators should take a more critical look at the clinical practice situations where student nurses are performing their clinical practice.

Further research needs to be carried out to improve knowledge, focusing on a final assessment at the end of
clinical practice. Through further research it will be possible to have better methods for high quality assessment processes and feedback to student nurses. Quality in assessment provides better nurses and therefore better patient safety.

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