



# Lecturers' experiences and perspectives of using an objective structured clinical examination

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Accepted 15 October 2007

## KEYWORDS

OSCE;  
Skill mix;  
Skills checklist;  
Reflective practice

**Summary** The purpose of this paper is to present the findings that emerged from a qualitative study which explored nurse educators' experiences and perspectives of assessing students' clinical competence using an objective structured clinical examination (OSCE), and to address the challenges pertaining to the assessment. OSCEs have been researched internationally; however, exploration within an Irish context is limited. The current study is timely as the findings are relevant in light of the ongoing debate about OSCEs. The data for this study was collected using two focus groups in one institution in the Republic of Ireland. Two main themes emerged: OSCE preparation and assessment process. It is envisaged that the outcome of this study will enable nurse educators to recognise both the potential and the contribution of OSCEs to the curriculum and motivate nurse educators to increase students' exposure to this assessment strategy. The need to adapt and become cognisant of the major changes in the 'real' healthcare world will continue to challenge nurse educators.

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## Introduction

Assessing learning is an integral component of the teaching and learning process and a contentious topic amongst educationalists (Wellard et al., 2007). Students are assessed in an effort to measure their learning, to provide constructive feedback for further development, to measure the quality of edu-

cation and ascertain eligibility for registration. Assessment greatly influences learning (Nicol and Freeth, 1998); consequently, students match their learning behaviour to assessment methods (Alinier, 2003) and not to what educators declare is important (Brown et al., 1997). Assessing clinical skills is complex and presents numerous challenges for nurse educators (Rennie and Main, 2006; Anderson and Stickley, 2002). As various methods are employed to assess students' performance, the method nurse educators select must be appropriate to the learning outcomes.

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## Background

Objective structured clinical examinations (OSCEs) are an effective assessment strategy for assessing clinical skills (Alinier et al., 2006) and for highlighting curriculum problem areas (Major, 2005). Their popularity has increased amongst nurse educators over the last decade (Walters and Adams, 2002) despite the extensive preparation involved in executing them (Rennie and Main, 2006; Major, 2005). OSCEs have been modified in numerous ways since their inception. Traditionally, students rotate through a series of stations during a 30–90 min period (Pender and de Looy, 2004) which involves 1–8 stations and consists of test-stations and rest-stations (Schoonheim-Klein et al., 2005; Pender and de Looy, 2004; Anderson and Stickley, 2002). The 'Bart's Nursing OSCE' (Nicol and Freeth, 1998) constitutes an assessment of students at one station in congruence with holistic client care philosophy. Major (2005) concurs with this viewpoint.

Students are assessed performing the same skills within a predetermined time frame during an OSCE. Observation of students by an assessor runs the risk of observer bias (Calman et al., 2002); consequently, results are open to interpretation and examination error (Pender and de Looy, 2004). An examiner assigned to one station measures students' performance using a predetermined checklist developed by a panel of experts. Appropriate preparation of the environment, briefing of simulated clients, the use of well-designed marking sheets, preparation of assessors, and 'dummy runs' are essential as they reduce assessors' 'role-strain' and promote inter-rater reliability (Major, 2005). Furthermore, preparation increases assessors' confidence in the assessment tools (Pender and de Looy, 2004), enhances objective judgements and increases overall reliability of OSCEs (Alinier et al., 2006; Boursicot and Roberts, 2005).

While OSCEs are an effective method of assessing clinical competence (Schoonheim-Klein et al., 2005), they are costly to execute in terms of manpower, resources and time elements and require careful planning to be successful (Alinier, 2003). Skills laboratories provide a suitable setting for OSCEs as they mirror the clinical setting and minimise artificiality during the assessment (Nicol and Freeth, 1998). OSCEs are not suitable for testing all aspects of clinical competence (Boursicot and Roberts, 2005); however, the opportunity to identify weaknesses in students' performance exists (Pender and de Looy, 2004). Students who fail skills under test conditions perform similarly during clinical placement (Pender and de Looy, 2004; Walters

and Adams, 2002). In light of these views, an OSCE was used to assess first year students' clinical competence following completion of a nursing module and students' first clinical placement.

This paper presents nurse educators' experiences and perspectives of assessing students' clinical competence using an OSCE and addresses the challenges associated with the assessment. It is anticipated that the findings will produce strong evidence for utilising OSCEs as an assessment strategy in an undergraduate nursing programme and provide theoretical guidance for nurse educators interested in implementing OSCEs.

## Educational context

First year students consisting of general and mental health undergraduates were informed at the beginning of term that their clinical competence would be assessed using an OSCE upon completion of a nursing module and their first clinical placement. Examination schedule plus marking criteria for the skills were devised and posted on the Intranet a week before the examination, and students were encouraged to view them (Anderson and Stickley, 2002). Skills stations were prepared and students were invited to familiarise themselves with them the day before the examination. It was envisaged that these measures would motivate students to practice all skills under review, to become familiar with the environment and to minimise students' anxiety (Boursicot and Roberts, 2005; Furlong et al., 2005).

The skills chosen for the OSCE were mapped with the learning outcomes and the students' level of clinical exposure (Boursicot and Roberts, 2005). Eight skills (Table 1) were selected, four skills stations were setup in two laboratories and clearly labelled to avoid confusion. Students were assessed performing one skill (Major, 2005; Nicol and Freeth, 1998) within a 30 min period (Anderson and

**Table 1** Skill stations

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| <ul style="list-style-type: none"> <li>● Measuring vital signs using a tympanic thermometer</li> <li>● Measuring vital signs using an electronic thermometer</li> <li>● Hand washing, donning and removing sterile gloves</li> <li>● Hand washing and preparing a sterile field</li> <li>● Administering oral medication</li> <li>● Administering an intramuscular injection</li> <li>● Communicating with a simulated client</li> <li>● Performing adult CPR</li> </ul> |
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Stickley, 2002). Four facilitators co-ordinated the examination process and rotated on a two hourly basis. On arrival for the examination, the students waited in an adjacent classroom whereby the facilitator greeted them and provided reassurance. Using the examination schedule, facilitators checked students' identity in accordance with the university's policy, ushered them to the laboratory and randomly assigned station, attended to simulated clients before and after the OSCE and responded to examiners' issues (Boursicot and Roberts, 2005; Walters and Adams, 2002).

Examiners and simulated clients were recruited in advance and briefed on their role (Rennie and Main, 2006). Simulated clients were encouraged to give feedback to the assessor (Boursicot and Roberts, 2005) as they add objectivity to OSCEs (Major, 2005). To overcome boredom, simulated clients' role was limited to 2 h. Each examiner assessed four students within a 2-h period to prevent examiner fatigue (Major, 2005). The majority of examiners assessed a skill of their choice. Skills checklists were developed, the format of each checklist was similar which included a reflective practice component and 20% of marks were allotted to the reflection. Checklists are beneficial as they enable assessors with less experience with the skills to reliability test students' performance (Alinier et al., 2006).

## Method

The aim of the study was to analyse nurse educators' experiences and perspectives of assessing students' clinical competence using an OSCE and to address the challenges of executing the examination. Focus group interviews were the method chosen to collect the data. Morgan (1988) maintains that group interaction produces data and insights that would be less accessible without the interaction found in a group. Permission to undertake the study was granted by the School's Director, and written consent was obtained from participants prior to the interview (Polit et al., 2004). When the study was conducted, the University's Research Ethics Committee was not in operation. However, the study was conducted inline with the ethical standards currently required by the committee.

The population for the study consisted of 11 nurse educators ( $N = 11$ ) in one nursing school who were involved in the OSCE, they were randomly divided into two focus groups. Two internal interviewers with extensive focus group experience facilitated the groups, their function being to guide the group

rather than ask questions (Kreuger, 1994). Two moderators recorded field notes. Bias was reduced during the data collection process by utilising interviewers and moderators not involved in the OSCE (Macleod Clarke et al., 1996). Interview data was recorded using an audiotape. A semi-structured approach guided the discussion. To facilitate systematic analysis, the content and sequence of questions were identical for both groups. Participant verification occurred at the end of each interview whereby, moderators summarised key points and participants responded to the summary. Following the interviews, the data was transcribed verbatim and analysed manually by the researchers to heighten their familiarity with the content.

## Data analysis

Colaizzi's (1978) framework formed the basis for data analyses, this facilitated flexibility within the stages. Coding discrepancies were considered through discussion between the authors. Final stage of analyses involved the reduction of all data sources into final coding categories, the development of major themes and identification of exemplar quotes to illustrate each theme. The process involved the researchers becoming immersed in each of the descriptions, thereby, successfully extracting the themes. Original descriptions of themes formulated were returned to one participant in each focus group for validation. In addition, an external expert in qualitative research and with extensive OSCE experience validated the process and this confirmed that elements of phenomena were not overlooked.

## Findings and discussion

Nurse educators' experiences and perspectives of assessing students' clinical competence using an OSCE will be addressed in this section and the challenges posed by the findings. The responses will be discussed as a whole rather than the responses from each group. Considering that this was nurse educators' first involvement in an OSCE, overall, their experiences and perspectives were very positive. Two main themes (Table 2) emerged in response to the questions and are identified below.

## OSCE preparation

Preparation for the assessment began well in advance; this was strongly influenced by the literature (Boursicot and Roberts, 2005) and positively

**Table 2** Main themes

Themes	Sub-themes
• OSCE preparation	<ul style="list-style-type: none"> <li>• Skill mix</li> <li>• Students' preparation</li> <li>• Nurse educators' preparation</li> <li>• Environment preparation</li> </ul>
• Assessment process	<ul style="list-style-type: none"> <li>• Mock run</li> <li>• Assessment duration</li> <li>• Reflective practice</li> </ul>

received by the participants. The OSCE preparation theme encompassed four sub themes that of skill mix and preparation of students, nurse educators and environment, these will be discussed separately.

### Skill mix

The findings indicated that every student should be assessed performing a range of skills and the skills assessed should be the same for every student. This ensures equitability and provides assessors with greater confidence in the OSCE process. Nicol and Freeth's (1998) view contradicts these findings. They believed the assessment of several skills fosters a task orientated approach to nursing and instead advocated a holistic approach to skills assessment.

Some skills such as vital signs, handwashing, donning and removing sterile gloves were considered appropriate skills for the assessment as all students had received instruction on the skills and practiced them in the clinical setting.

'Vital sign station ... was a very appropriate skill'.  
'Washing and donning of gloves ... are appropriate to be examined'.

Participants maintained that the administration of intramuscular injection and adult CPR were inappropriate skills to assess due to their complexity and students' infrequent exposure to them.

'The skills are all very different and they're at very different levels and the expertise the student would need would be very different from for example hand washing to basic life support'.

The findings are incongruent with Brosnan et al. (2006) in relation to CPR skills, assessment. Clinical opportunities for students vary across healthcare settings; therefore, equitability can be achieved during an OSCE by assessing all students performing the same skills (Rennie and Main, 2006).

'A concern I would have is around equity across the students and my suggestion would be that students would do 2 or 3 skills as opposed to 1 skill'.

'It would have been better if there was a mix of skills ... common skills and less common skills'.

'To be fair, every student should get the same range of skills'.

When students are presented with one client scenario and a number of stations pertaining to the scenario, it facilitates integration and contextualisation of skills (Nicol and Freeth, 1998). Despite this concept, participants strongly advocated that students should be assessed performing several skills.

The findings also demonstrated that some nurse educators believed that communication is a key skill and should be assessed while others did not hold this view. Comments made by the participants included;

'Communication is an integral component ... I just don't agree with the way it's currently being assessed'.

'I can understand why a psychiatric student might need it as a stand alone assessment; I'm not convinced that a general student in first year needs it as a stand alone'.

'I'd differ with you on that, ... being able to converse with people is actually a key skill in general as well as psych'.

The literature alludes to communication being the most vital practitioner skill (Roberts et al., 2003) and worthy of assessment prior to students' clinical placement (Pender and de Looy, 2004). Furthermore, poor communication skills have been linked with poor clinical performance (Roberts et al., 2003). In light of the findings, communication should be assessed in an integrated fashion.

### Students' preparation

The findings indicated that the students were appropriately prepared for the OSCE in light of the measures that were put in place prior to the examination such as, awareness of the skills under review, access to the marking criteria, opportunities to view skill stations, and reassurance from the facilitator.

'I think that some of the things that were put in place for the students were very helpful. They all knew the skills that were going to be assessed in advance ... they had opportunities to come to the skills lab and to read the tick lists beforehand'.

'Students were well chaperoned and well directed'.

Students' access to the marking criteria is supported by [Anderson and Stickley \(2002\)](#). The findings illustrated that the facilitator had an important role to play in the smooth running of the OSCE ([Boursicot and Roberts, 2005](#)). Furthermore, the reassurance extended to the students was positively received and congruent with the work reported by [Brosnan et al., 2006](#) who found that the corridor facilitator was 'calming' and 'reassuring'.

Concerns regarding students' level of anxiety during the examination and the impact this had on their overall performance were echoed.

'The level of anxiety was so high that they couldn't actually do what they knew they had to do'.

However, participants emphasised that students' exposure to stress in the examination setting may reduce anxiety prior to their clinical placement and have an overall positive impact on their performance. [Alinier \(2003\)](#) concurs with this view. Students' anxiety reduces after the assessment begins ([Brosnan et al., 2006](#)) and they generally perform well ([Nicol and Freeth, 1998](#)). Despite the stressful experience, students still view OSCEs as a valuable learning tool ([Rennie and Main, 2006](#); [Furlong et al., 2005](#)).

### Nurse educators' preparation

Conflicting views emerged regarding participants' perceptions about their level of preparation for the OSCE.

'Really there was very little anyone else could do to prepare me more'.

'I wasn't part of the team that taught the fundamentals, I felt I wasn't that well prepared for the assessment'.

Participants voiced concerns about their non-involvement in teaching the skill and in developing the assessment tool; consequently, this created an element of discomfort. Some maintained that they received the marking criteria well in advance of the OSCE while others did not convey this view.

'We were given the assessment sheets quite a bit in advance so it gave us... a chance to look over them because I'd never done anything like that before'. 'I wasn't part of the team that taught the fundamentals, I felt I wasn't that well prepared for the assessment'.

Resistance may develop when changes are introduced into an organisation ([Schoonheim-Klein et al., 2005](#)). Therefore, a change in assessment methods (e.g. an OSCE) must be carefully imple-

mented to gain familiarity and acceptance and to minimise the occurrence of defensive behaviour ([Manogue and Brown, 1998](#)). Preparation of teaching staff is crucial to the success of OSCEs ([Rennie and Main, 2006](#)) as effective planning contributes to students' learning experience ([Walters and Adams, 2002](#)). According to [Alinier \(2003\)](#), the role of examiners is to observe and record students' performance without helping them; therefore, preparation of nurse educators is essential.

A briefing session with participants prior to the OSCE clarified all issues for some assessors and not for others.

'I think I looked for a meeting to be called to prepare and to inform us beforehand because I wasn't aware of the format of what was going to take place'.

'I thought they were (the students) being examined in four skills, and it was only at the meeting... that I realised that it would be one'.

Despite the conflicting views, this study highlighted that the educators are on 'the right road' and should continue developing OSCEs as an assessment strategy across the undergraduate programme but stressed the 'need to fine tune it a bit'.

### Environment preparation

One educator prepared the environment and co-ordinated the OSCE. Participants' views of the examination environment were mostly positive. They believed the skills laboratories provided an ideal setting for the examination, stations were adequately spaced and resourced, and privacy around the stations enhanced the assessment process.

'Practices that were put in place are excellent and I would suggest that they continue'.

Similar studies concur with the findings in that a co-ordinator enhanced the success of the examination environment and had a positive impact on the OSCE process ([Brosnan et al., 2006](#); [Major, 2005](#)).

### Assessment process

This major theme encompasses the sub themes of mock run, assessment duration and reflective practice.

#### Mock run

There was a general consensus among participants that each team of assessors should assess one skill

and perform a 'mock run' of their skill in advance in order to identify potential problems with the assessment tool and the station.

'actually having a mock run to see ... it's only when you actually start to do this for real you think, oh, there's a bit of a problem here because we didn't see this coming'.

The study highlights the need for a 'mock run' before the OSCE (Rennie and Main, 2006). According to Major (2005), the 'dummy run' prepares assessors for the OSCE and reduces assessors' 'role-strain' while Schoonheim-Klein et al., 2005, suggests that 'mock runs' illustrate if the skill stations are in alignment with the received education.

### Assessment duration

There were mixed views about the time allotted to each station. Some participants felt 30 min per station was excessive, while others felt they required the allocated time to observe students' perform the skill and to complete the checklist. As the concept of duration was buried deep within the focus groups, there is scope for reviewing this.

'They probably could have done it a bit tighter ... or maybe used the time to actually assess students ... on two skills as opposed to just one'.

The duration of each station was 30 min irrespective of the skill being examined. Although, assessment period varies (Pender and de Looy, 2004), the duration of a station should depend on the nature of the skill (Alinier, 2003).

### Reflective practice

This sub theme stemmed from incorporating a reflective component and a mark allocation of 20% into the assessment. The rationale for this approach was to enable students to reflect and redeem on their performance. Stockhausen (2006) maintains that reflection is a thinking back, like a 'post-mortem' on a lived experience, while Alinier (2003) claims that reflection enables students to think deeply about the skill and encourages a dialogue about their performance and best practice. Overall, it was felt that reflection is an integral part of the OSCE and should be retained; however, the weighting of 20% was excessive and should be reviewed.

While the study highlights many interesting findings, the authors acknowledge the limitations. A small sample size was selected from one academic institution which restricts generalization of the re-

sults; however, generalization in a qualitative study is not expected (Polit et al., 2004). The researchers believe the study identified critical issues for nurse educators. Assessors should be involved in teaching a skill prior to assessing the skill thereby, enhancing the quality of the OSCE. Training of assessors is crucial to ensure reliability and consistency in the marking criteria (Rennie and Main, 2006). The authors recommend the formulation of a panel of nurse educators to validate the stations both for content and accuracy. OSCEs should be introduced as an assessment strategy for measuring clinical skills throughout the undergraduate curriculum. Further studies using a larger sample size and a collaborative study with other institutions would compliment this study.

### Conclusion

The study has highlighted many interesting findings, some of which concur with the literature. The use of OSCEs throughout the undergraduate nursing programme is recommended. All students should be assessed performing the same skill mix during one examination period. Students' familiarity with the marking criteria in advance of the OSCE was viewed in a positive light. Nurse educators should be involved in teaching and assessing the skills. In particular, participants maintained that the anxiety students' experience in an examination situation may benefit students' overall performance in clinical settings. It is envisaged that this study will continue to inspire and motivate nurse educators to implement OSCEs more widely. As facilitators of learning, there is a need for nurse educators to utilise innovative methods of assessments for the graduates of the future, thereby, enhancing and nurturing life long learning. It is envisaged that this article will contribute toward the development of OSCEs.

### Acknowledgements

The authors gratefully acknowledge the School of Nursing and Midwifery for the scholarship awarded for the study and to the nurse educators for their participation in this research.

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