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What influences assessors' internalised standards?

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ABSTRACT

Purpose: The meaning assessors attach to assessment criteria during clinical placement is under-researched. While personal beliefs, values or expectations may influence judgements, there is scant evidence of how this manifests in a clinical attachment setting. This research explored the concept and source of internalised standards and how these may influence judgements.

Methods: This study, within the constructivist paradigm, was informed by the principles of grounded theory. Seven radiation therapists, purposefully selected, were interviewed face-to-face using semi-structured interviews. The sample size allowed for the gathering of sufficient data for in-depth thematic analysis, using the functionality of CAQDAS (NVivo 9).

Results: Radiation therapists' judgements when assessing students were influenced by their previous experience. They had different expectations of the appropriate standard for each criterion on students' assessment forms – relating to technical ability, clinical knowledge and attitude. They had their own set of values, or expectations which informed 'internalised standards' which influenced their judgements about student performance. Prior experience – as students and as qualified professionals – influenced these decisions.

Conclusion: Assessment of students' performance may differ depending on the clinician conducting the assessment. Even where assessors are given the same criteria and training, this does not ensure reliability, as judgements are influenced by their internalised standards. This has implications for the design of more appropriate assessor training which recognises and addresses this phenomenon. These results will be of interest to radiation therapists, radiographers, medical educators, allied health professionals and any academic or professional body with responsibility for ensuring that we qualify competent practitioners.

Introduction

Clinical placement is a core component of undergraduate education in all medical/health science programmes. Clinical teachers have a pivotal role in facilitating learning. Effective clinical teaching and assessment, however, is a complex role that combines clinical obligations and teaching management. Some clinical practitioners teach, assess and supervise students, in addition to their clinical duties[1] and thereby become clinical teachers. Driving learning, assessment influences what students actually learn.[2] A well designed assessment can be a robust educational tool where the student can develop and learn by being aware and reflecting on their strength and weakness.[3] Observation of a professional's habitual behaviour at work is regarded as one of the only effective methods of accurately assessing the core traits of performance required to perform competently in the working environment.[4,5] Performance assessment relates to the uppermost domain of Miller's Pyramid (or Prism) of clinical competence.[3,4,6–8] The lower two levels relate to knowledge and application of knowledge. Level 3, coined 'shows how' can be assessed *in vitro* whereas level 4, or 'does' involves assessment of performance in the workplace.[6,7,9] In recent years, performance or work based assessment (WBA) is of growing importance for summative purposes within medical and health science education and training.[7,10,11] Therefore educational institutions must implement robust and reliable performance assessment training programmes for assessors.

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Background/literature review

Competency based education or training prevails in the design of programmes in healthcare, at undergraduate, postgraduate level and continuing professional development. When implementing this model, learners are expected to achieve defined competences to stated standards in order to successfully complete the programme.[12] Learning outcomes are then developed as part of the curriculum design process, based on the competency framework.[13] A 'holistic' or integrated approach to embedding competency is used by a growing number of institutions responsible for the design of professional and educational programmes.[14–20] Much of the critique of competency based education relates to the putative tendency towards behaviourism and a potential for instrumentalism. With a holistic approach to competency, it is no longer a single outcome but rather the result of a developmental process.[14,21] This movement from a behaviourist to holistic approach is evident in many professional curricula where competencies of 'skills, knowledge and attitude' are integrated into the overall learning outcomes.[13] In the implementation of the curriculum in practice, learners are required to develop and demonstrate interpersonal skills, professional practice inclusive of ethics, team skills, an ability to adapt to a changing environment as well as clinical competency.[12] This approach reflects a conception of clinical competence as the combination of 'theoretical knowledge, practical skill and humanistic endeavour'.[17] Thus clinical competence is the ability to perform in practice, integrate knowledge and apply it.[22]

Assessment of clinical competence should include the assessment of technical skill, problem solving abilities, decision making, clinical knowledge and attitudes. According to Miller's Pyramid,[3,4,6–8] WBA represents the most valid means to assess such competencies. Work based or performance based assessment refers to assessment of learners while working in their clinical placement with real patients.[23,24] This contrasts with the broader category of competency based assessment, which is generally carried out with learners in more 'controlled' environments with standardised patients and practical examinations (e.g. the Objective Structural Clinical Exam).[23] It is with the implementation of the former – WBA – that this study is concerned.

In assessment, five elements are critical to a quality system: validity, reliability, educational impact, acceptability and feasibility.[25] These elements are incorporated by the utility model designed by van der Vleuten.[26] The concept can be represented as a theoretical equation to determine the utility of any assessment method.[26] Components of the equation can be weighted differently, depending on the purpose of the assessment. There is no perfect assessment; instead assessment designs are a compromise between the five concepts and dependent on the purpose of the assessment.[27] Validity of assessment is of paramount importance. WBA, given its real life context, has the potential to optimise validity.[11,26] When assessing performance, however, concern about reliability – especially inter-rater reliability – is widely reported.[28,29] An investigation of physiotherapy clinical educators highlighted variation in their expectations of students, resulting in subjectivity of judgements and compromised reliability.[30] Studies conducted in physiotherapy and teacher education, suggest existence of both 'subjective' and 'objective' criteria.[31,32] Assessors are influenced by their own values, beliefs and expectations of how a student should perform, leading to an *internalisation* of criteria before a students' assessment. A 'real' set of criteria and standards can be identified, that, while related to the formal criterion-referenced assessments, are based on their own internal standards, of which the student is not aware.[31,32]

Context

The radiation therapy course in Ireland is a four year honour degree programme. Final year Radiation Therapy (RT) students are currently assessed in final year work placements by clinical RTs. They work in a range of hospitals and conduct assessments for the undergraduate programme in Ireland. Assessor training consists of workshops on the standards expected for each student group, access to a pre-determined list of criteria and associated grading standard expectation and open discussions of marking-related issues. The criteria relate to students' performance in clinical placement, professionalism, patient management skills and technical ability. The meaning, or relative importance assessors give to these criteria, however, has not yet been the subject of systematic scrutiny. The aim of this research study was to explore:

(i) RTs' understanding of the core competencies and minimum standards necessary for final year students
(ii) Factors that may influence their expectations or internalised standards
(iii) How judgements are made by the RTs during the assessment process

Methods

This research can be positioned within a qualitative constructivist paradigm and a social survey was chosen for the research design. This study received ethical approval from the relevant university research committee. In-depth interviews were carried out with RTs responsible for conduct of assessments for one undergraduate programme. RTs from both the public and private sector included in this study had a range of assessor experience, educational and training backgrounds, and clinical experience but all met the University minimum level of experience policy of 3 years. A purposive sampling approach was used to select trained assessors who were 'information rich' and could provide insight into the diversity of perspectives and attitudes towards student training and assessment.[33,34] Managers were given details of the proposed research and asked to circulate an invitation to RTs who met the inclusion criteria, explaining the focus of the research. Interested parties were asked to contact the researcher by e-mail, work phone or personal mobile after which a suitable time and date for interviews was arranged. Sufficient numbers from each category of assessor RTs volunteered which allowed for a 'maximum variation sample'; adopting this approach all volunteering participants were included in the study.[33,35] Participants were assured of confidentiality and anonymity and could withdraw at any time from the study without penalty.

Seven RTs participated in the study, two male and five female, three trained in Ireland and the remainder abroad. Five worked in the public sector and two in the private sector – their clinical experience ranged from 4 to 20 years. Two pilot interviews facilitated review and modification of the topic guide and interview style. The pilot interviews were conducted on one experienced assessor (25 years) and one newly trained assessor (3 years). Each interview was scheduled for 30 min however both ran over by 10–15 min. Each pilot had a topic guide and was recorded. This allowed adjustment of the sequence of questions and practice of interview skills. Participants were then interviewed face-to-face using semi-structured interviews lasting 45 min. These were conducted at their place of work, using a topic guide which was adapted where necessary. Written consent was obtained for audio recording.

Interviews were recorded and transcribed either by the researcher or by an external transcription service. Every participant was given a code (e.g. CRT1) and all data assigned a unique number