Assessment

Patient safety and communication: A new assessment for doctors trained in countries where language differs from that of the host country: Results of a pilot using a domain-based assessment

Annie M. Cushing [a], Jean S. Ker [b], Paul Kinnersley [c], Pascal McKeown [d], Jonathan Silverman [e], John Patterson [a], Olwyn M.R. Westwood [a,*]

[a] Barts and The London School of Medicine and Dentistry, Queen Mary, University of London, London E1 2AD, UK
[b] Medical Education Institute, Dundee Medical School, University of Dundee, Dundee DD1 9SY, Scotland, UK
[c] Institute of Primary Care and Public Health, School of Medicine, Cardiff University, Cardiff CF14 4YS, Wales, UK
[d] Centre for Public Health, School of Medicine, Dentistry and Biomedical Sciences, Queen's University Belfast, BT9 7AB Northern Ireland, UK
[e] Cambridge University School of Clinical Medicine, Cambridge CB2 0SP UK

A B S T R A C T

Objective: Global migration of healthcare workers places responsibility on employers to comply with legal employment rights whilst ensuring patient safety remains the central goal. We describe the pilot of a communication assessment designed for doctors who trained and communicated with patients and colleagues in a different language from that of the host country. It is unique in assessing clinical communication without assessing knowledge.
Methods: A 14-station OSCE was developed using a domain-based marking scheme, covering professional communication and English language skills (speaking, listening, reading and writing) in routine, acute and emotionally challenging contexts, with patients, carers and healthcare teams. Candidates ($n = 43$), non-UK trained volunteers applying to the UK Foundation Programme, were provided with relevant station information prior to the exam.
Results: The criteria for passing the test included achieving the pass score and passing 10 or more of the 14 stations. Of the 43 candidates, nine failed on the station criteria. Two failed the pass score and also the station criteria. The Cronbach's alpha coefficient was 0.866.
Conclusion: This pilot tested 'proof of concept' of a new domain-based communication assessment for non-UK trained doctors.
Practice implications: The test would enable employers and regulators to verify communication competence and safety in clinical contexts, independent of clinical knowledge, for doctors who trained in a language different from that of the host country.

© 2014 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Healthcare professionals must be able to communicate effectively with colleagues, patients and carers to ensure confidence in their ability to attain reciprocal understanding, supportive relationships and involvement in care decisions [1,2]. In many countries communication competence is assessed as part of the graduating exams [2–4]. It is recognised that errors in communication are a significant cause of adverse events [5]. Communication is never straightforward, and more challenging when the language of common exchange differs from the one in which the healthcare professional was trained. This is a global issue and the responsibility of health services and professional regulators to ensure patient safety whilst complying with employment law [1].

Communication is not simply a matter of language alone, but encompasses cultural variations in interpersonal relationships, doctor–patient relationships, models of care, social norms and lifestyle behaviours, e.g. use of alcohol, sexual relationships. Having the language to communicate successfully in these areas, demonstrating mutual understanding and being sufficiently at ease, will affect diagnostic accuracy, counselling and safe management. The shift to a collaborative approach between patients and clinicians for managing illness requires healthcare professionals to be educators and supporters of patients' self-management endeavours, with associated consultation styles and skills [6,7].

* Corresponding author at: Queen Mary University of London, Barts and The London School of Medicine and Dentistry, Garrod Building, Turner Street, London E1 2AD, UK. Tel.: +44 207 882 2219.
E-mail address: o.westwood@qmul.ac.uk (Olwyn M.R. Westwood).

A further challenge is the variation in healthcare documentation and record systems, together with differences regarding diagnostic test requests, acronyms, IT systems and patient records. Health professionals are expected to modify their working practices and to clarify areas of ambiguity. Hence the nuances of social relationship, e.g. hierarchy, status, may require adjustment to facilitate open communication and so avoid risks that might arise from 'face saving' behaviour.

Much has been written about the need for language-testing to be within the professional context of the clinical setting, and the inadequacy of assessing language competence in social or academic contexts alone [8]. In the USA the Test of English as a Foreign Language was replaced in 2004 with 'Step 2 (clinical skills)' for both domestic and foreign graduates, which includes an integrated clinical encounter, communication and interpersonal skills and spoken English proficiency [9]. There is little relationship between knowledge and skills, and the majority of foreign graduate failures are due to language difficulties [10].

In the United Kingdom, the Departments of Health have announced a legal duty to ensure a doctor has the necessary level of English for safe practise [6]. The assessment of non-European Union (EU) international medical graduates includes the International English Language Testing System and General Medical Council's (GMC) clinical skills examination of knowledge and communication (Professional Linguistics Assessment Board Part 2). The latter would be unsuitable for European graduates because it tests knowledge. European legislation confirms that member states must recognise the equivalence of medical qualifications and the right to work across EU countries. It does however accept the pre-requisite evidence of language proficiency. With the GMC, Departments of Health and the EU essentially in agreement, it is appropriate for practitioners to verify language proficiency in a professional context, if they were either not educated in English, or have not interacted with patients in English, during their medical training.

The UK Medical Schools Council commissioned this study to develop a new assessment aimed at defining the minimum level of competence in English language skills within the work context of a newly qualified doctor. It included written and oral communication and the ability to read medical notes and charts, and to convey information orally and in written formats. The situations included routine and acute medical care, emotionally challenging encounters, and interactions with colleagues, carers and patients.

The pilot assessment reported here was designed in the context of legal requirements for EU member states, but has wider application to verifying language and professional communication proficiency of a migrating healthcare workforce.

2. Methods

2.1. Test development

An advisory group was established to review the latest developments in clinical communication assessment, with advice from national and international experts (in medical education, clinical practice and linguistics) and an EU junior doctor. For content validity, a blueprint was constructed, mapping the test items against the communication competences expected of newly qualified UK medical graduates, specified in the GMC's *Tomorrow Doctors* (2009) [2]. The OSCE (objective structured clinical examination) format was used and the final pilot comprised 14 stations, each of 10 min duration (140 min testing time). A range of contexts for communication in healthcare was incorporated to address issues of patient safety.

The advisory group discussed the blueprint to ensure that the test tasks achieved a balance between gaining and giving information and the ability to gain shared understanding. Table 1 shows the tasks and domains tested, with equal weighting between listening (A1) and speaking clearly (A2). There were 3 history-taking, 1 history-taking and examination, 1 examination, 4 explanation, 2 shared decision-making and 3 team communication stations. A full description of the tasks is listed in Table 1. The scale of the assessment was such as to provide adequate content validity and reliability for an OSCE test [11,12].

2.2. Marking scheme

A domain-based marking scheme was developed (Table 1) which covered English language skills (speaking, listening, reading and writing), clinical communication, and team communication. Examiners were also provided with items which were an elaboration of the descriptors (see Table 2) and instructed not to add up the items but rather to consider them in making an overall judgement (Likert) for each domain. The Likert scale grade was as follows: A, Very Good (5); B, Good (4); C, Satisfactory (3); D, Poor (2); E, Very Poor (1). Grades were then converted to the numerical score to calculate the individual station scores. In addition, upon completion of the task, examiners also provided their 'global judgement' on the overall safety of the candidate's communication (Table 3).

Examiners global judgement was needed to derive the pass score for the station using the Borderline Regression Method [13,14]. This categorical data was then given a numerical value in order to enable a regression calculation for deriving the pass score for the station. This global judgement 'value' did not contribute to the candidate's score.

The pass score for each station was taken as the midpoint where the 'borderline pass' and 'borderline fail' boundary intercepted the linear regression line. The overall pass mark was the sum of the 14 individual OSCE station pass scores. Candidates had to achieve the overall pass score and pass a minimum number of stations (i.e. 10 or more out of 14 stations) to be deemed competent in clinical communication. The Advisory Group judged that it would be unacceptable practice for candidates who failed more than a third of the assessment tasks to be deemed safe.

2.3. Controlling for medical knowledge

Candidates were given a 1-h invigilated preparation period prior to the OSCE to read information and supporting materials on the stations. They were then allowed to take this information pack and their notes into the exam. The preparation was designed to overcome the challenge of assessing clinical communication competence and not clinical knowledge.

2.4. Pre-pilot testing

The pre-pilot was conducted with final year undergraduates ($n = 58$) from four United Kingdom medical schools: London, Belfast, Dundee and Cardiff. The purpose was to trial the method, feasibility, reliability, and validity of the examination, and to enable benchmarking of the communication standard against UK candidate competence. No candidate failed the test on the pass score, but two failed more than five OSCE stations. There was a normal distribution of both station and total scores, with a Cronbach's alpha measurement of 0.78, indicating acceptable test reliability. Some stations needed clarification of instructions, but otherwise it was deemed appropriate and acceptable to candidates and examiners. The 'history write-up station' had only one domain and low reliability, therefore it was combined with 'history taking' in the subsequent pilot, reducing the OSCE from 15 to 14 stations without loss of assessment marks and tasks.