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Development of an instrument to assess professional behaviour of foreign medical graduates

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ABSTRACT

Background: Foreign medical graduates have to overcome challenges such as language proficiency and cultural differences. Several studies indicate that foreign medical graduates show deficiencies in professional behaviour. For the assessment of foreign medical graduates' professional behaviour, a more specific and sensitive instrument was needed. The aim of this study was to develop such an instrument. The starting point was the Amsterdam Attitudes and Communications Scale (AACS). Two research questions were addressed: (a) What adaptations of the AACS are needed in order to assess foreign medical graduates' professional behaviour adequately? (b) Is the developed instrument reliable, valid and feasible?

Methods: Our study consisted of 4 phases: (1) a brief literature search; (2) consulting a panel of experts; (3) establishing the content-validity of the instrument; and (4) establishing the feasibility of the instrument as an assessment tool.

Results: From the literature and experts in the field we learned that deficiencies in professional behaviour of foreign medical graduates concern mainly language skills and culture related issues. In the instrument we developed special attention was given to these deficiencies. Sub-items were added to every dimension. These sub-items are behavioural descriptions of the respective dimension and serve as a basis for feedback.

Conclusions: The sub-items should enhance constructive feedback, not only focussing on inappropriate behaviour but also by emphasizing adequate behaviours. The validity and reliability of the instrument has to be investigated further and confirmed along the way.

INTRODUCTION

The past decades there has been a steady flow of foreign doctors coming to the Netherlands (Herfs et al. 2001). Many of them come to the Netherlands to seek asylum or to join their families. Doctors migrating to the Netherlands are generally willing to continue performing their profession. European guideline 93/16 enables free passage of doctors and mutual recognition of certificates between the member states of the European Union/European Economic Area (EEA). However, if the medical diploma is acquired outside the EEA and it does not comply with the Dutch standards, foreign medical graduates have to acquire additional training.

Frequently, foreign medical graduates have received no formal training in communication skills. In the Netherlands, communication skills are regarded as an important competence for medical doctors in order to establish effective physician-patient relationships. A review of the literature confirms that patients and families expect physicians to provide reliable information in an effective and compassionate way (Ong et al. 1995). In combination with cultural differences, foreign medical graduates may in general experience problems in professional behaviour when working in the Dutch health care system. Studies in other western countries (Hall et al. 2004; Rolfe & Pearson 1994) have demonstrated that foreign medical graduates indeed have deficiencies in professional behaviour. Since appropriate professional attitudes are regarded as core clinical requirements (Epstein & Hundert 2002), this can be an important problem for foreign medical graduates in obtaining a Dutch license to practice.

Practice points

- An instrument to assess professional behaviour of foreign medical graduates has been developed.
- The instrument focuses on specific observable behaviour. This prevents the risk of subjective interpretations of graduates' motives. Observable behaviour is the appropriate basis of providing feedback.
- The reliability and generalizability of the instrument should be further investigated in a follow-up study.
- Professionalism is best tested during day-to-day clinical work. The appliance of a structured in-practice-assessment (IPA) procedure is recommended.
- Observations are to be made by a variety of health care personnel (supervisors, nursing personnel, students) in a 360° procedure.

Assessment of professional behaviour, however, is a complex task that requires a clear definition of focus, method and systematic procedures to optimize its validity, reliability and feasibility (Crossley et al. 2002). For the assessment of professionalism of foreign graduates, to date, no appropriate sensitive and specific tool exists.

In an effort to improve the national screening procedure for foreign medical graduates, as recommended by the Educational Council of the Gathered Dutch Medical Disciplines (Ten Cate et al. 2005), the Ministry of Health, Welfare and Sports installed a special taskforce: 'Assessment of foreign medical graduates in health care'. The taskforce was asked to advise on policies of assessment of knowledge of basic science, clinical knowledge and clinical skills. One of the recommendations of this taskforce was to assess professional behaviour during the rotation (12 weeks or more) that is required before a Dutch license is attainable. Observations were to be made by a variety of health care personnel, supervisors, nursing staff and students in a 360° assessment procedure. The project described in this article, in which such an instrument was developed and tested, resulted from this recommendation and was commissioned to the Center for Research and Development of Education in Utrecht to be used on a national level.

The starting point was the Amsterdam Attitudes and Communications Scale (AACS). The AACS was chosen for several reasons. First, it meets the standards as described in the Dutch

Blueprint of Objectives of medical training (Metz et al. 2001). The areas in the assessment relate to: (a) the patient (communication skills); (b) other health care professionals (cooperation); (c) the profession (duty, clinical reasoning); and (d) oneself (recognize personal biases, willingness to acknowledge and correct errors). Figure 1 shows the observation categories of the AACS.

Second, the AACS assesses observable behaviours instead of convictions. Inappropriate attitudes (due to cultural differences) can only serve as a bias for exclusion from the profession if they become visible in the graduates' relationship with patients or colleagues (De Haes et al. 2005). The focus on specific observable behaviour prevents the risk of subjective interpretations of graduates' motives. Observable behaviour is the appropriate basis of providing feedback (Branch & Paranjape 2002).

[FIGURE 1]

PROJECT AIM

For the assessment of foreign medical graduates' professional behaviour, a more specific and sensitive instrument to assess professional behaviour of foreign medical graduates is needed. The aim of this study was to develop such an instrument. Two research questions were addressed:

What adaptations of the AACS are needed in order to assess foreign medical graduates' professional behaviour adequately?

Does the developed instrument reliable have a reasonable content validity and is the assessment procedure feasible?

METHODS

Our study consisted of four phases: (1) a brief literature search; (2) consulting a panel of experts; (3) establishing the content-validity of the instrument; and (4) establishing the feasibility of the instrument as an assessment tool.

Phase 1: literature search

The selection of articles for formulating the deficiencies in professional behaviour was phase 1 of the study. First, literature published in English was identified, describing or analysing professional behaviour of foreign graduates. We used MEDLINE, searching with the key terms 'professional attitudes', 'professional behaviour', 'personal qualities', 'personal characteristics', 'foreign graduates' and 'international graduates' for all relevant articles published.

Phase 2: consulting a panel of experts

Seven experts were selected on the basis of their expertise and experience in the field of assessment of professional behaviour of foreign graduates. The panellists were a multidisciplinary group, composed of three physicians, three psychologists and one study advisor. The members of the panel have contributed substantially to the research areas of attitude and the assessment of professional behaviour of Dutch medical students and of foreign medical graduates in the past. Their expertise provided additional insight in the adaptation of the AACS.

Phase 3: establishing content-validity of the instrument

The panel of experts examined the instrument for important omissions or inappropriate choice of items to establish the content-validity and face-validity of the newly developed instrument.

Phase 4: Establishing the feasibility of the instrument as an assessment tool

To assess the feasibility of the instrument as an assessment tool, the instrument was piloted in three medical schools in the Netherlands. This pilot took place in September, October and November 2005 in the medical schools of Utrecht, Rotterdam and Nijmegen. Supervisors of 28 foreign medical graduates were asked to complete the instrument twice during the clinical rotation, the first time after two weeks and the second time after the rotation was completed. This assessment did not replace the assessment procedure normally applied by the medical schools in question. The supervisors were asked to inform the graduates and to explain to them the aim of the pilot study. Finally, we requested that the supervisors inform nursing staff and residents about the pilot study and ask them to cooperate with the assessment of foreign medical graduates.

RESULTS

Literature search

Studies to determine deficiencies in professionalism of foreign medical graduates have not taken place in the Netherlands. Literature from outside the Netherlands provides more information (Friedman et al. 1993; Kidd & Zulman 1994; Friedman Ben-David et al. 1999; Fiscella & Frankel 2000; Hall et al. 2004).

The deficiencies most mentioned are:

- Language skills: poor understanding of the language, particularly the use of idioms, nuances and vernacular terms.
- Patient-centred interview skills.
- Culture-related issues: differences in gender roles and interactions peers and staff, attitudes towards other religions or convictions.
- Difficulty in giving and accepting feedback.
- Knowledge of the organization of the health care system.

Consulting a panel of experts

The panellists reported more or less the same deficiencies in professionalism we found in our literature search. The following additional problematic situations were described:

- Foreign medical graduates often become confused by the use of unfamiliar terms and phrases. One member of the panel specified that foreign graduates often show different non-verbal communication (e.g. body language and eye-gaze).
- The way doctors break bad news to patients in the Netherlands is considered difficult and insensitive by many foreign graduates. The patient-centred model of care, considered a standard of practice in the Netherlands is often unfamiliar to the foreign medical graduates. It is more common in their experience to discuss diagnosis, treatment and care plans with families, particularly male family members, than directly with the patient. In many cultures, people usually do not want to know a lot about their health problems, especially if they are dying, so doctors inform the family instead of the patient.
- In the Netherlands the health care system is often less hierarchical than the system where the foreign graduates were trained. Issues related to gender, hierarchy and power were mentioned to be important factors contributing to foreign graduates' challenges in teamwork. For example, a woman is expected to be quiet and shy in her own culture. This can be misinterpreted as lacking confidence by her Dutch colleagues.
- The panel of experts considered insufficient language skills and culture-related issues to be the most recurrent problems.

Adaptations of the AACCS

From the literature and the panel of experts it became clear that special attention is needed in the assessment of language skills. Culture-related problems (e.g. gender roles, attitudes towards other religions or convictions) influence the interaction with patients and colleagues.

Therefore, assessing competencies concerning communication with patients and colleagues is also of great importance.

The following premises also guided the selection of the dimensions. First, the assessment will be given in practice. The assessor has to judge the communication skills of the graduate within a limited time span. Therefore, we chose for a somewhat more global and feasible assessment of communication skills.

Second, since the evaluation should be based on observable behaviour, item 6 of the AACSB—'Insight to one's own emotions, norms, values and prejudices'—was incorporated in the sub-items added to every dimension. These sub-items are behavioural descriptions of the respective dimension and serve as a basis for feedback. They are not scored.

On the form, each item goes with a response scale and space for the judges to write down their observations. Such notes substantiate the judgements given and support the feedback process.

Finally, it was decided to change the item response scale. The items of the AACSB are scored on a five-point rating scale. The scores often show little variance (De Haes et al. 2005). For this reason we introduced a 4-to-10-expected-level scale for individual assessments (Ten Cate et al. 2006), a scale with scores ranging from 4 to 10. A score of 7 is considered to be the starting point, being the expected level of performance. A performance less than expected is marked a 6, 5 or 4. A performance better than the expected level is rewarded with an 8, 9 or 10. This scale follows the common Dutch 10-point system. Scores 1-3 were excluded as options, as they are extremely unlikely to be chosen in individual assessments in clinical situations (Norcini 2005; Ten Cate et al. 2006). Further clarification of this scale can be obtained from the authors upon request.

On account of the premise that the instrument should be based on observable behaviour, the instrument is accompanied by a list of examples of appropriate and inappropriate behaviours indicating the presence or absence of the skill under consideration.

Establishing content-validity of the instrument

To establish the content validity of the instrument the panel members were invited to judge the completeness of the list, to indicate whether they felt items or elements were missing and to share additional comments on other issues concerning the instrument they considered important.

After a few minor revisions the experts considered the instrument a valid tool to assess the professional behaviour of foreign medical graduates. The Appendix shows the translated instrument in its final form.

Establishing the feasibility of the instrument as an assessment tool

Foreign graduates were assessed during the rotation they attended when the investigation was carried out. This was a variety of departments, specifically gynaecology, psychiatry, general practice, internal medicine, paediatrics, neurology, ophthalmology and surgery.

Twenty-eight supervisors, eight nurses and nine residents judged the professional behaviour of 28 foreign medical graduates. We received 54 completed forms.

Table 1 shows percentages of scores given for each of the items. Four of the seven ratings were used more frequently: a 4 or a 10 was never scored and a 5 in only two cases. Owing to too few completed forms, especially by nurses and residents, it was not possible to establish inter-rater reliabilities.

All assessors were invited to comment on the instrument. All evaluators found the instrument unproblematic to use and the sub-items were regarded as an excellent support since they are behavioural descriptions of the particular dimension to be assessed.

[TABLE 1 AND 2]

DISCUSSION AND CONCLUSION

In this paper the development and content validation of an instrument to assess professional behaviour of foreign medical graduates was reported. From the literature and experts in the field it became clear that deficiencies in professional behaviour of foreign medical graduates concern mainly language skills and culture-related issues. In the instrument, special attention was given to these deficiencies. Sub-items were added to every dimension. These sub-items are behavioural descriptions of the respective dimension and serve as a basis for feedback. The sub-items should enhance constructive feedback, not only focussing on inappropriate behaviour but also by emphasizing adequate behaviours. Assessment should foster future learning (Branch & Paranjape 2002; Epstein & Hundert 2002). Therefore, professional behaviour of foreign medical graduates should be observed from the start of the clerkship. Feedback in an early stage makes it possible for the candidate to remedy his/her lack of professionalism.

Professional behaviour is an important part of medical performance. Our criteria for assessment were gathered by consulting a panel of experts. These criteria fit with other criteria in the literature of assessment instruments. We therefore believe that the instrument has an acceptable content validity. However, it could be useful to ask foreign graduates' own opinions about the content of the instrument since they are in the unique position to add both the student and the (cultural) outsider perspective.

In this pilot study, we have established the feasibility of the assessment procedure. A next step is to establish the reliability and generalizability of the final score. This must be investigated further and confirmed along the way. In that follow-up study nurses and residents, who were underrepresented in our pilot project, should be included to a larger extent. Research indicates that different assessors of professional behaviour offer different perspectives, thus enhancing the breadth of assessment (Van Luijk et al. 2000) and that multiple assessors improve reliability (De Haes et al. 2005).

An interesting finding is that assessors hardly ever rated foreign graduates' behaviour as unsatisfactory. Regarding the small number of foreign graduates in our pilot study, it is uncertain whether this reflects the reality, but it has been suggested that foreign graduates are judged with charity, because raters are uncertain about their judgement (De Haes et al. 2005) or are afraid to take responsibility for any negative consequences, as several members of the panel mentioned. However, this score distribution does not differ much from those with regular medical students (Ten Cate et al. 2006). A follow-up study should be conducted to see whether these ratings generalize to a larger sample of foreign graduates.

Most raters did not write down their observations. They should be made aware of their responsibility to judge foreign graduates on their professional behaviour. It is important that raters argue their judgements concerning professional behaviour, because foreign medical graduates face additional challenges, as they must learn quickly to work with patients, families and colleagues in the Netherlands. Additional instruction of the raters may therefore be appropriate.

Professionalism is best tested during day-to-day clinical work. We propose to apply a structured in-practice-assessment (IPA) procedure. The miniCEX procedure (Norcini et al. 2003) has been introduced in the Netherlands and will be applied in most undergraduate and postgraduate training programs in the near future. This procedure consists of multiple short observations in clinical practice. This will produce adequate documentation for judgement. Professional behaviour is to be observed during the clinical rotation in which the foreign medical graduate will be working under supervision. Observations are to be made by a variety of health care personnel (supervisors, nursing personnel, students) in a 360° procedure. Four satisfactory observations in a row will be required to establish a satisfactory overall score.

Foreign medical graduates encounter a local medical culture that poses them many challenges. They should be offered sufficient opportunity to make their transition into the Dutch health care system possible. This pilot study demonstrates how cultural sensitivity can be integrated in assessment procedures, both for formative and for summative purposes. It also provides an example with respect to the content and use of such an instrument.

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REFERENCES

1. Branch, WT and Paranjape, A. (2002) Feedback and reflection: teaching methods for clinical settings. *Acad Med* 77 , pp. 1185-1188.
2. Crossley, J., Humphris, GM and Jolly, B. (2002) Assessing health professionals. *Med Educ* 36 , pp. 183-204.
3. Epstein, RM and Hundert, EM (2002) Defining and assessing professional competence. *JAMA* 287 , pp. 226-235.
4. Fiscella, K. and Frankel, R. (2000) Overcoming cultural barriers: International medical graduates in the United States. *JAMA* 283 , p. 1751.
5. Friedman, M., Sutnick, AI, Stillman, PL, Regan, MB and Norcini, JJ (1993) The relationship of spoken-English proficiencies of foreign medical graduates to their clinical competence. *Acad Med* 68:Suppl. 10 , pp. 1-3.
6. Ben-David, M Friedman, Klass, DJ, Boulet, J., De Champlain, A., King, AM, Pohl, HS and Gary, NE (1999) The performance of foreign medical graduates on the National Board Of Medical Examiners (NBME) standardized patient examination prototype: a collaborative study of the NBME and the Educational Commission for Foreign Medical Graduates (ECFMG). *Med Educ* 33 , pp. 439-446.
7. De Haes, JCJM, Oort, FJ and Hulsman, RL (2005) 27 , pp. 583-589
8. Hall, P., Keely, E., Dojeiji, S., Byszewski, A. and Marks, M. (2004) 26 , pp. 120-125.
9. Herfs, PGP, Yari, P., Haalboom, JRE and Kruijshoop, MA (2001) Onderzoek naar de loopbaan van 'CIBA-artsen'. (Study of the careers of foreign medical graduates) Utrecht University
10. Kidd, MR and Zulman, A. (1994) Educational support for overseas-trained doctors. *Med J Aust* 160 , pp. 73-75.
11. Metz, JCM, Verbeek-Wheel, AMM and Huisjes, MJ (2001) Blueprint 2001: training of doctors in the Netherlands. Adjusted objectives of undergraduate medical education in the Netherlands. Disciplinary Board of Medical Sciences of the Association of Universities in the Netherlands
12. Norcini, JJ (2005) The mini clinical evaluation exercise (mini-CEX). *Clin Teach* 2 , pp. 25-30.
13. Norcini, JJ, Blank, LL, Duffy, GD and Fortuna, GS (2003) The mini-CEX: A method for assessing clinical skills. *Ann Intern Med* 138 , pp. 476-481.
14. Ong, LML, De Haes, JCJM, Hoos, AM and Lammes, FB (1995) Doctor-patient communication: a review of the literature. *Soc Sci Med* 40 , pp. 903-918
15. Rolfe, IE and Pearson, SA (1994) Communication skills of interns in New South Wales. *Med J Aust* 161 , pp. 667-670.
16. Van Luijk, SJ, Smeets, JGE, Smits, J., Wolfhagen, I. and Perquin, MLF (2000) 22 , pp. 168-172.
17. Cate, OTHJ Ten, Brook, EWTM Ter, Frenkel, J. and Van de Pol, A. (2006) The 4-to-10 expected-level scale for individual assessments. *Dutch Journal of Medical Education* 25:4 , pp. 157-163. — (in Dutch)
18. Cate, TJ Ten, Scherpbier, AJJA, Postma, CT and Peters, EEM (2005) Proposal for the assessment of medical knowledge and skills of foreign medical graduates asking for recognition of their professional qualifications in the Netherlands. *Dutch Assessment of*

Medical Competence of Foreign Medical Graduates (DAMCFG) UMCU Centre of Research and Development of Education, Utrecht
 19. Cate, OTJ Ten, Braak, EWTM Ter, Frenkel, J. and Van de Pol, A. Submitted. The 4-to-10-expected-level scale for individual assessments [in Dutch] UMCU Centre of Research and Development of Education, Utrecht

FIGURES AND TABLES

1. Courteousness and respect
2. Information gathering
3. Information giving
4. Handling emotions
5. Structuring the communication
6. Insight to one's own emotions, norms, values and prejudices
7. Collaboration with nurses and colleagues
8. Knowing one's own limits, readiness for critical self-assessment and receptiveness for feedback
9. Dedication and sense of responsibility

Figure 1. Observation categories of the AACSB.

Table 1. Distribution of item scores.								
Item*	No. observations	Scores						
		4 (%)	5 (%)	6 (%)	7 (%)	8 (%)	9 (%)	10 (%)
Courteousness	54	0	0	3.7	22.2	44.4	29.6	0
Communication	54	0	3.7	7.4	20.4	37.0	31.5	0
Collaboration	54	0	0	3.7	20.4	33.3	42.6	0
Dedication	54	0	0	7.4	20.4	24.1	48.1	0
Self-appraisal	54	0	0	0	31.5	37.0	31.5	0
Overall score	54	0	0	3.7	16.7	37.0	42.6	0

*The item wordings are abbreviations: see Appendix for full item content.

Table 2. Number of sub-items ticked ($n = 54$).

Item*	Ticked
Courteousness	
Polite	4
Respect	4
Carefulness	0
Conflicts	0
Precision	2
Communication	
Dutch language	4
Gives information	6
Asks information	6
Emotional responses	0
Nonverbal behaviour	2
Collaboration	
Interaction medical staff	4
Handling hierarchical relations	2
Handling of conflicts	0
Colegiality, loyalty and asseriveness	4
Cooperation, intervision	2
Dedication	
Presence	4
Questions, interest	4
Tasks	2
Confidence	0
Meticulous	4
Self-appraisal	
Competences interns	4
Feedback and self-assessment	2
Limits	2
Readiness to change	0
Handling one's own emotions	0

*The item wordings are abbreviations: see Appendix for full item content.

Appendix

Assessment form Professional Behaviour Foreign Medical Graduates

Graduate:	date*:	<i>encircle</i>		
Evaluator:		<i>Please first read commentary!</i>		
Position:				
Department:				
*The assessment concerns a period of two weeks preceding the assigned date		Below expected standard	Expected standard	Above expected standard
1. Courteousness and respect in interaction with patients		4 5	6 7 8	9 10
2. Communication with patients		4 5	6 7 8	9 10
3. Collaboration with nurses and colleagues		4 5	6 7 8	9 10
4. Dedication and sense of responsibility		4 5	6 7 8	9 10
5. Knowing one's own limits and receptiveness for feedback		4 5	6 7 8	9 10
6. Overall judgement professional behaviour		4 5	6 7 8	9 10

Tick special items and motivate. Always motivate scores outside expected standard.

Courteousness and respect in interaction with patients (and family)

- Polite, open, empathic (introduces oneself, addresses patient, is interested)
- Respect for the patient in gender, religion, origin and sexual inclination
- Carefulness in medical exam (explanation, distance and respect)
- Handling conflicts
- Precision in privacy, professional secrecy and medical dossier

Communication with patients

- Command of Dutch language; active and passive
- Gives clearly information
- Asks clearly information
- Takes notice of emotional responses; reflects feelings at the right moment
- Nonverbal behaviour: posture, eye contact, sufficient distance

Collaboration with nurses and colleagues

- Respectful in interaction with medical staff, nursing staff and other colleagues
- Handling of social and hierarchical relations on the job
- Handling of conflicts
- Balance in collegiality, loyalty and assertiveness
- Willingness and initiative in cooperation, consultation and intervision

Dedication and sense of responsibility

- Presence, arriving on time, keeping appointments
- Ask questions, showing interest, taking initiative, participate in consultations
- Prepare and conclude tasks (status, labresults, reports)
- Confident during discussions, patient reviews, speeches
- Meticulous, accurate, efficient, working independent

Knowing one's own limits and receptiveness for feedback

- No exceeding competences interns
- Receptiveness for feedback and readiness for critical self-assessment
- Acknowledging limits of knowledge and skills and live up to it
- Readiness to change one's own behaviour and attitudes if needed
- Handling one's own emotions in interactions with patients

comments
