Teaching and assessing consultation skills: an evaluation of a South African workshop on using the Leicester Assessment Package

Hastings A, MBChB
Senior lecturer, Department of Medical and Social Care Education, University of Leicester
Cameron D, MBChB, MPrax Med, MPhil (Palliative Medicine)
Associate Professor, Department of Family Medicine, University of Pretoria
Preston-Whyte E, MB BCh (Wales), DA (London), FRCGP
Senior lecturer, retired, Department of General Practice and Primary Health Care, University of Leicester

Correspondence:
Dr Adrian Hastings, E-mail: amh5@le.ac.uk

Abstract

Background

The consultation is at the very centre of clinical practice. It is in the meeting between doctor and patient that the story is told (and in good practice properly heeded) and decisions are made about the cause and treatment of the patient's problem. Following one year of supervised internship, South African doctors are required to do a year of community service and these doctors mostly work in understaffed peripheral hospitals. A substantial component of this work is unsupervised consultations with patients suffering from new or complex continuing diseases. On graduation, these doctors therefore require a high level of consultation competence. They must be able to make accurate diagnoses and manage patients' problems reliably and efficiently.

The Leicester Assessment Package (LAP) was originally developed to assess the consultation competence of general practitioners in the UK. It was subsequently adapted for use in undergraduate teaching. In 2002, the LAP was presented at a medical education conference in South Africa. As a result, the Department of Family Medicine at Pretoria University began using the LAP in the teaching and formative assessment of the consultation skills of senior students in outpatient clinics. In 2003, the University of the Witwatersrand introduced a four-year graduate entry medical curriculum. The Centre for Health Care Education was interested in assessing whether the LAP would be suitable for the summative assessment of the consultation performance of students during their third and four years of the new curriculum.

A workshop course was organised to train senior clinicians from the Universities of Pretoria and the Witwatersrand in the use of the LAP as a means of teaching and assessing the consultation performance of South African medical students.

Method

Twenty-two experienced South African medical educators participated in a three-day workshop. Their attitudes to the LAP and the forms of teaching that its use promotes were analysed by responses to pre- and post-workshop questionnaires with Likert-scale and free-text questions.

Results

The participants were positive about the LAP at the end of the workshop. They all believed that it was a useful instrument, and a majority would apply this method in their own departments. There were continuing reservations about the feasibility of the method and some respondents felt it would require some adaptation, particularly to the criteria for awarding grades.

Conclusions

The workshop participants learnt to use an instrument developed in the United Kingdom that encourages an analytical approach to the assessment and teaching of consultation skills. They believed it would be useful in the contexts in which they worked.

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Introduction

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The Leicester Assessment Package (LAP)[1,2] was originally developed to assess the consultation competence of general practitioners in the UK.[3,4] It was subsequently adapted for use in undergraduate teaching. In 2002, the LAP was presented at a medical education conference in South Africa. As a result, the Department of Family Medicine at Pretoria University began using the LAP in the teaching and formative assessment of the consultation skills of senior students in outpatient clinics. In 2003, the University of the Witwatersrand introduced a four-year graduate entry medical curriculum. The Centre for Health Care Education was interested in assessing whether the LAP would be suitable for the summative assessment of the consultation performance of students during their third and four years of the new curriculum.

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The aim of the workshop was to improve the teaching skills of clinical teachers, with particular reference to one-to-one teaching in the consultation.

The objectives were to equip the participants to:

- assess the consultation competence of medical students using a standardised method.
- select and implement specific strategies to improve the consultation performance of the individual students.
- provide appropriate feedback on a student's strengths and weaknesses.

Box One: Leicester Assessment Package

LEICESTER MEDICAL SCHOOL

ASSESSMENT AND ENHANCEMENT OF CONSULTATION COMPETENCE

LAP Categories and Component Competences

Interviewing/history taking
- Introduces self to patients
- Puts patient at ease
- Allows patients to elaborate presenting problem fully
- Listens attentively
- Seeks clarification of words used by patients as appropriate
- Phrases questions simply and clearly
- Uses silence appropriately
- Recognises patients' verbal and non-verbal cues
- Identifies patients' reasons for consultation
- Elicits relevant and specific information from patients and/or their records to help distinguish between working diagnoses
- Considers physical. social and psychological factors as appropriate
- Exhibits well-organised approach to information gathering

Physical examination
- Performs examination and elicits physical signs correctly and sensitively
- Uses the instruments commonly used in family practice in a competent and sensitive manner

Patient management
- Formulates management plans appropriate to findings and circumstances in collaboration with patients
- Makes discriminating use of investigations, referral and drug therapy
- Is prepared to use time appropriately
- Demonstrates understanding of the importance of reassurance and explanation
- Uses clear and understandable language
- Checks patients' level of understanding
- Arranges appropriate follow-up

Problem solving
- Generates appropriate working diagnoses or identifies problem(s) depending on circumstances
- Seeks relevant and discriminating physical signs to help confirm or refute working diagnoses
- Correctly interprets and applies information obtained from patient records, history, physical examination and investigations
- Is capable of applying knowledge of basic, behavioural and clinical sciences to the identification, management and solution of patients' problems
- Is capable of recognising limits of personal competence and acting accordingly

Behaviour/relationship with patients
- Maintains friendly but professional relationship with patients with due regard to the ethics of medical practice.
- Conveys sensitivity to the needs of patients
- Demonstrates awareness that the patient's attitude to the doctor (and vice versa) affects management and achievement of levels of co-operation and compliance.

Box One: Leicester Assessment Package (Continued)

LEICESTER MEDICAL SCHOOL

ASSESSMENT AND ENHANCEMENT OF CONSULTATION COMPETENCE

Criteria for the allocation of Grades and Marks

Descriptor	Grade	Mark %
Consistently demonstrates mastery of all components	A	80% or above
Consistently demonstrates mastery of most components and capability in all	B	70-79%
Consistently demonstrates capability in almost all components to a high standard and a satisfactory standard in all	C+	60-69%
Demonstrates capability in most components to a satisfactory standard: demonstrates minor omissions and/or defects in some components. Duration of most consultations appropriate	C	50-59%
Demonstrates inadequacies in several components but no major omissions or defects	D	40-49%
Demonstrates several major omissions and/or serious defects; clearly unacceptable standard overall	E	0 – 39%

The anticipated outcomes of the workshop were that the participants would be able to demonstrate the ability to use the LAP to assess undergraduate medical students reliably, to select appropriate feedback strategies, and to provide this feedback using a systematic approach.

Workshop Participants

There were 22 participants, of whom 11 were members of the Family Medicine Department, University of Pretoria and 11 were teachers at the University of the Witwatersrand. The latter included two family practitioners, seven hospital-based clinical teachers representing all the major specialist departments, a clinical member of the Centre for Health Science Education and an educationalist. Nine participants had less than six years of involvement in medical student teaching, six had between six and 10 years, three between 11 and 19 years and four more than 20 years. Before participating in the workshop, the participants had to read Chapter Three of Clinical Method,[5] which discusses the diagnostic process, and a paper by Kassirer on teaching the iterative-hypothesis approach to making a diagnosis.[6]

Teaching Methods

On the first day, the participants received presentations on the LAP, the curricula of the Universities of the Witwatersrand, Pretoria and Leicester, Clinical Problem Solving and the Assessment of Consultation Competence. In three small groups they observed a teaching session on the iterative-hypothesis testing approach to diagnostic reasoning. The workshop tutors demonstrated this process to small groups of sixth-year medical students from the University of Pretoria, whilst the participants observed and subsequently commented on the teaching. The rest of the day was spent in small-group work, grading and discussing the consultation performance of a fourth-year Leicester student with a simulated patient recorded on videotape. A modified version of the LAP was used for this purpose (see box one). The second day of the programme provided for further practise in making an educational diagnosis and determining the appropriate feedback to a fourth-year student using two videotaped consultations. The afternoon presentation introduced key concepts in giving feedback. These were demonstrated and practised in role-play in small groups. On the third day, the participants had further practise in analysing consultation performance and giving feedback. The workshop closed with a general discussion and review.

Results

The workshop was evaluated by pre- and post-workshop questionnaires using free-text and Likert-scale questions. The response rate for the pre-workshop questionnaire was 100% and for the post-workshop questionnaire 86%.

The pre-workshop questionnaire showed that all participants (22) recognised the need for skills in teaching and assessment, as well as the ability to help students to move from an unfocused inductive approach to one that is more selective. The difficulty of having too little time and too many students to teach was mentioned by five participants. Participants were motivated to attend the workshop to improve their teaching and assessment skills and to evaluate the LAP as an assessment for local use. Those who had had previous experience of the LAP commented that it was an efficient,

Table I: Responses to scale questions

Question	Pre workshop (n = 22) MEAN	Post workshop (n = 19) MEAN	DIFF	P Value
I do not need an assessment instrument to enable me to recognise the student with good consultation skills	3.0	1.9	-1.06	0.01
Assessing consultation competence is so complex that it is better to concentrate on reliable tests of knowledge	2.5	2.2	-0.39	0.5
Video taped consultations are an invaluable resource in teaching consultation skills to students	4.3	5.1	0.86	0.4
Teaching from video recording is too time-consuming to be feasible for me	3.3	3.5	0.25	0.6
Taking a comprehensive history and conducting a full physical examination are essential for medical students' solving of clinical problems	4.3	2.6	-1.75	0.02
Taking a focussed/selective history and examination is a postgraduate skill and should not be taught to medical students	2.0	2.1	0.05	0.9
I am confident I can identify the strengths and weaknesses of a student's consultation performance	3.8	4.7	0.85	0.01
I am able to provide effective feedback that facilitates improved consultation performance.	4.0	4.5	0.47	0.1
Good teachers provide effective feedback naturally and do not require models or systems to do this well	2.5	1.9	-0.56	0.20

logical, practical teaching tool, although some felt that using the LAP was time-consuming and that the grading system appeared harsh. Participants with no experience of the LAP felt it had potential as a structured tool for teaching and assessment.

Table I presents the results of the responses to the scale questions in the pre- and post-workshop questionnaires. After completing the workshop, the respondents were much less likely to agree that it was essential for students to do a full history and examination in order to solve clinical problems. Before the workshop, most of the respondents believed that taking a selective history and examination was a skill that medical students could learn, but the proportion of those disagreeing with this proposition did not change their opinion by the end of the workshop. Participants were more likely to recognise the need for an assessment instrument and felt more confident in judging consultation performance after the workshop. On completion of the workshop, there was an increase in the proportion of participants who regarded videotaping as an invaluable resource in teaching, but there was no significant change in their view of its feasibility in their own teaching settings. They expressed more confidence in their ability to provide effective feedback, and were less likely to see this as a natural attribute that did not require models or systems to perform well.

The mean score was derived by giving a value from 6 to SA to 1 to SD, and 0 to NR. Therefore, higher scores after the workshop signify that participants were in greater agreement with the statement than before, lower scores (and a negative value in the difference column) indicate greater disagreement with the statement after the workshop The significance of the difference in mean scores before and after the workshop was calculated using a Mann-Whitney-Wilcoxon test.

Free-text comments in the post-workshop questionnaire revealed that all the respondents (19) were positive about the LAP. Particular likes were its innovative, efficient, structured approach to teaching consultation skills and its provision of a reliable, appropriate assessment method (the gold standard). Six commented that it would require adaptation; single additional comments were that it contained *"too many descriptors"*, would be *"too labour intensive/time-consuming"* and *"the grading system was inappropriate"*.

In response to the question, *"Would you apply this method in your own Department?"*, ten participants replied that they would, while nine said they would do so, but in a modified form. Fourteen were in favour of its use throughout their medical school and four would approve its use with reservations.

The workshop itself was evaluated. Eight participants particularly liked the workshop format, which allowed interaction with colleagues; five liked practising skills in small groups; four valued the session on giving feedback; and three valued analysing video recordings of student consultations with simulated patients. What was liked least included the workshop being held

over a weekend (4) and that it was too long (3).

Suggestions for improvement for future workshops included more practise in giving feedback (4), another, shorter workshop (4) and more practise in assessment (3).

Discussion

Medical schools need to teach and assess the consultation skills of students to ensure that they are able to conduct consultations safely, efficiently and effectively. This requires an assessment method that tests the full range of skills required of a doctor during a consultation, including communication, the manual skills of physical examination and the cognitive skills of problem solving. Such a method must be valid, reliable, feasible and acceptable. The LAP meets these requirements.[1-4]

The experiences of the participants in this workshop were similar to those of participants attending workshops in the UK.[7-9] The structured, systematic approach of the LAP to the teaching and assessment of consultation performance was recognised as valuable. Participants demonstrated an ability to use the LAP consistently after a short interactive workshop. There were reservations, however, about the feasibility of using the LAP when there were many students to assess.

Observing students' history taking and examination, and exploring their clinical reasoning are essential aspects of this method of assessment. In the discussion of practical obstacles to the adoption of the LAP, many participants acknowledged that video-recordings of students consulting with patients are a useful teaching resource. Other teaching methods that allow for efficient teaching of consultation skills to groups of student include the analysis of student cases in seminars and bedside teaching.

The participants and tutors agreed that the version of the LAP competencies used in the workshop would only require minor revisions to suit the needs of medical students in South Africa. Each university has descriptors of performance particular to its needs, and the methods used in the Leicester version of the LAP to allocate grades were viewed by several participants as needing modification for use in their settings.

The workshop proved to be an effective opportunity for collaboration between three different medical schools. It facilitated exchanges of views between clinical teachers from different disciplines. The most positive outcome was in persuading all the participants that it would be possible to teach a more analytical approach to the consultation. Students can be encouraged to be appropriately selective in their information gathering whilst taking a history and performing a physical examination. A clinician who explores the patients' ideas, concerns and expectations improves patient satisfaction and compliance.[10,11] This clinical method contrasts with the inductive approach of routinely gathering a large amount of data from a full history and complete physical examination, much of which is irrelevant to the patients' problems. Such an approach can even interfere with understanding these problems. Whilst the inductive method has value as an aid to initial learning, it becomes an obstacle to effective and timely consultations as the students' skills develop.

Conclusion

By the end of the three-day workshop, which was developed to improve the teaching skills of clinical teachers at the Universities of Pretoria and the Witwatersrand, the participants were able to demonstrate their ability to use an instrument (the LAP) to assess the consultation skills of medical students. All the participants were of the opinion that, with some minor modification, the instrument would be applicable to the South African context.

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