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Students today … Educators tomorrow

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Abstract:

Background

The article describes the use of the mini clinical examination (mini-CEX) in a pilot study to introduce peer assessment in one allied health programme to explore students' capacity as clinical educators. Preparing today's pre-professional health students to be clinical educators by engaging them in peer teaching, learning and assessment may encourage them to become tomorrow's clinical educators.

Context

Peer assessment is common among many undergraduate medical and allied health programmes, and is typically used as means of providing students with feedback on their clinical skill development. We argue that peer assessment ought to be focused

not only on the development of learners' clinical skills and knowledge, but also on preparing learners for their responsibilities as clinical educators.

Innovation

Final year Australian osteopathy students in our on-campus university clinic undertook, without training, peer assessment and provision of feedback related to clinical performance using a discipline specific adaptation of the mini-CEX. The current study suggests students are able to judge another's consultation skills and case management in that they identify what we know are common learning issues for students at this level.

Implication

Students may be willing to engage in peer assessment if they see the exercise as a way to improve patient care and develop their skills as educators – potentially encouraging them to become clinical educators in the future.

INTRODUCTION

The process by which learners in the same stage of their training are asked to make judgement on the work of one of their peers is termed peer assessment. From that activity, among other outcomes, the peer assessor learns to make judgements and provide feedback to their peers. In the peer assessors' future role as a health care professional, teaching and assessing peers is an expected competency (1). Learning to be a peer assessor in the workplace arguably helps health care students develop skills that contribute to patient care, and possibly motivates them to consider becoming engaged in clinical education – becoming a member of tomorrow's academic faculty (2).

Peer assessment has educational value yet we know that in many instances students are reluctant to be assessed by a peer (3), particularly in summative

assessments. Peer assessors also don't like to think they affect another student's progress in a negative way (4). Further, peer assessors feel uncomfortable reporting observed clinical weaknesses or unprofessional behaviour to a peer, and would rather present such information to a third party to pass on (4). Only one study demonstrated that students can assess dispassionately (5). The aim of the current study was to ascertain if students, not specifically trained to use the mini-Clinical Examination (mini-CEX) as peer assessors, could engage in peer assessment, make performance judgements and provide useful feedback. The mini-CEX tool was used as it provides a snapshot of a student's clinical performance and has previously been used in osteopathy clinical education.

METHODS

The osteopathy programme at Victoria University (VU, Melbourne, Australia) is a 5-year pre-professional programme with clinical education undertaken in on-campus clinics. In this environment it is expected the year 4 and year 5 students will develop and consolidate their clinical and professional skills and knowledge prior to registration. The student is expected to take a clinical history, undertake an examination, and develop/implement a management plan for patients, all under the supervision of registered osteopaths (6). Students manage members of the general public with a range of acute and chronic musculoskeletal complaints. As part of a workplace-based assessment programme, the mini-CEX is used to assess a student's progress (7). The mini-CEX is an assessment tool that can be used to provide a snapshot of student performance whilst managing a patient in a workplace setting. The tool captures performance across six domains: information gathering; clinical examination; communication & counselling skills; clinical judgement; organisation & efficiency; and, professionalism. The students' overall performance managing the patient during the consultation is also assessed. The domains and overall performance are assessed on a scale from 1 (well below expectation) to 6 (well above expectation). Not all domains may be observed during a patient consultation and the examiner can mark 'not observed' for a particular domain(s). Multiple mini-CEX assessments with different examiners and different patients are required to make a reliable judgement about competency. The present study explored aspects of the utility of the mini-CEX as a peer assessment tool with a view

to a) providing students with peer feedback on their clinical work; and b) exploring if student peer assessors were able to make judgements and provide useful feedback.

The study was approved by the VU Human Research Ethics Committee. All 52 students enrolled in year 5 (final year) of the osteopathy programme at VU were required to complete a minimum of two mini-CEX assessments on a year 5 peer as a hurdle requirement. The assessment was not summative and did not contribute to the grade for their clinical subjects. These students had already undertaken approximately 500 hours of clinical training prior to this point including the management of approximately 100 patients under supervision. The peer assessor selected the aspect of the consultation to be assessed as we expected this to provide him/her an opportunity to select an area he/she felt comfortable assessing. Students were able to choose their peer assessor. The assessment was completed during allocated clinical time.

Quantitative results from each mini-CEX were extracted and analysed. Qualitative comments were independently classified by the authors using an adaptation of a tier feedback taxonomy (8) (Table 1). The authors met several times to discuss interpretations, differences and to form a consensus.

INSERT TABLE 1

RESULTS

One hundred and eighteen assessments were completed during semesters 1 and 2, 2014. Fourteen students had three assessments completed on them. The presenting complaints are in Figure 1. Peer assessors conducted assessments across three aspects of the osteopathy consultation: Clinical History (31.4%), Examination (35.6%) and Management (33.1%)

INSERT FIGURE 1

Descriptive statistics for the mini-CEX are presented in Table 2. The high number of *NO/Missing* is related to the aspect of the consultation observed as some domains were not relevant in every instance (i.e. clinical examination domain is not relevant when assessing history taking). The time taken with the assessment and to provide feedback was acceptable to both parties. Anecdotal reports indicate both students and peer assessors felt the process had some educational value and were keen to participate in similar activities again.

INSERT TABLE 2

Peer assessors were asked to provide students with written comments on the aspects of the consultation that a) performed well; b) needed development and improvement; and c) agreed to action items. Qualitative comments from the 118 assessments fell into the two central tiers: *global statements* and, *clear comments* (Table 3).

INSERT TABLE 3

Examples of written comments include:

- An example of a global statement, an area performed well was *'Very friendly and relaxed'* (Student No 7).
- An example of a clear point, an area for improvement was *'[seek] more patient feedback on comfort/pain levels'* (Student No. 6).
- An example of a clear point with consequences, an area for improvement was *'Address fears of running due to previous injury – relationship to presenting complaint'* (Student No 5).

The comments suggested peer assessors were able to identify:

- The questioning techniques used during patient interviews;
- If rapport had been established and when communication had gone astray;

- Which clinical tests and techniques were omitted or not performed properly;
- Postural errors that could cause the student to suffer an injury – an important consideration in manual therapy; and
- The thoroughness of the consultation relative to the patient's health concern.

Taken on face value, this suggested that the peer assessors could assess the appropriateness of the osteopathy consultation for the presenting health concern and the typical events expected during the consultation.

DISCUSSION

From the snapshot presented here, it appears the peer assessors had a clear model of what constitutes an appropriate osteopathy consultation for a given health concern, were able to make judgements about a peer's performance, and provide feedback (9). The median mini-CEX domain values were in the mid-range – no student 'failed' a mini-CEX and, taken on face value, it seems peer assessors were reluctant to use the full scale range on each domain. This may possibly be due to student/peer assessor familiarity or reluctance to find fault (4, 5).

Ostensibly it appears this cohort have the baseline skills to be peer assessors and perhaps clinical educators in the future, that is, to complete assessments and provide feedback. The ability to provide feedback to peers is encouraged by the patient safety and quality care agendas, engenders collaboration (9), and creates an environment which has sense of a community of practice. The feedback – short written statements – did not suggest the possible consequences of the omissions or errors observed for the patient personally or the patient's health concern. We also think the brevity of the written feedback is likely due to time constraints; or, it may reflect a misunderstanding of the value of providing meaningful, constructive feedback in written form for accountability and audit purposes. Peer assessors in the present study did identify learning issues for students at this level of their pre-

professional programme. Anecdotally, these are consistent with those identified by clinical educators in the VU programme.

Students likely require training in how to give useful feedback (3, 10). The present study was opportunistic given the previous successful implementation of the mini-CEX, therefore it was not possible to provide training for peer assessors. Future studies will provide training for students in the peer assessment process and provide feedback as it has the potential to help students learn to think as clinical educators in the hope of moving beyond the notion of a peer appraising the work of a classmate.

Beyond the training issues, there are a number of limitations in the present study. There was no way to confirm the accuracy of the student peer assessor's observations and comments. This would only be possible if the consultation was video-taped, or if both a clinical educator and peer assessor were present at the same time. Students could select who assessed them therefore leniency could have played a part in the results. Allocating the student a peer assessor may help resolve this to some extent but given the small cohort size it is unlikely to have a significant influence. Peer assessors were untrained but had experience being assessed by a clinical educator using the mini-CEX during their clinical training.

CONCLUSION

Our snapshot exploration of the peer assessment skills of pre-professional osteopathy students who received no training as educators or assessors, suggests they have some capability to judge the work of others and provide written feedback. Embedding peer assessment activities in the pre-professional clinical curriculum is potentially a way to motivate today's students to become tomorrow's clinical educators – developing the future health workforce. This is critical given all health professions struggle to find willing practitioners to become clinical educators. Future studies need to explore the perceived educational value of the peer assessment

process in this context, the actual practice of pre-professional peer assessors in relation to other assessments, and the legal aspects of peer assessment in clinical education.

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