Reviewer's report

Title: Predicting Residents' Performance: A Prospective Study

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Reviewer: Dr Ed Peile

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Accept after discretionary revisions

This paper addresses an important topic: that of predicting Residents' ETM performance in their training posts at the time of selection. There is already an extensive literature on the topic, but the importance of this paper is that it reports a prospective study. It is a well-written, well-presented paper, succinct and well-argued.

Some specific comments.

Methodology

The methodology deserves careful consideration in an area where Hojat et al (1993) found, that the associations varied for different measures, at different levels of performance, and in different specialties.

I applaud the fact that the author has chosen to relate the global Intern Selection Committee ratings against both assessment of performance by Chief Residents and board assessment of cognitive performance. The finding that there is an increasingly strong correlation with performance on both these measures as training proceeds, goes a long way to validate the selection system of global subjective assessments by experienced medical educators. Before this practice can be recommended more widely, there is scope for a head-to-head controlled trial of subjective global assessments against pre-determined objective criteria, to see which best predicts the sort of outcome measures used here.

As the study hinges around the subjective global assessments, I would have liked more detail on the system adopted by the ISC. The full ISC determined the final score for each applicant. Was this done by a process of negotiation? Or did each of the 20 committee members contribute independently to the final committee score? These are two completely different processes; in the former, it is possible for strong personalities to hold sway, whereas the latter system improves reliability of the rating. If this was adopted, it would be good to know the levels of inter-rater agreement at the time of selection.

Inter-rater reliability

Each of the 277 residents was assessed independently by 4 chief residents on 3 occasions. We are given a single hierarchical kappa score for the agreement between raters of 0.75 (p References.
The author has selected appropriate references in a well-researched field. Of necessity, the vast majority are North American, because the North American system of Residency selection and training does not correspond with that in many other parts of the Western World. There are a few other recent references that support the premise that there are some pre-Residency features (academic performance at Medical School, or performance on clerkships) which are predictive of Residents' performance in different specialities. (Dirschl et al (2002); Boyse et al (2002); Calhoun et al (1997)) Supporting literature notwithstanding, we do well to bear in mind the findings of Brown et al (1993) in their well-dichotomised study:

"As indicated by residency directors' ratings and comments, most of the poorly received graduates' problems during residency appear to have been personal and motivational rather than skills- or knowledge-related. With but few exceptions, the medical school records contained little evidence that might have predicted the graduates' poor reception as residents."

Conclusion.

The present paper goes a long way towards validating the author's local practice of selecting paediatric Residents on the basis of global assessments by members of the Intern Selection Committee. I believe this paper makes a worthwhile contribution to the literature on the topic of Residency selection.

Additional References


Hojat M, Gonnella JS, Veloski JJ, Erdmann JB. Is the glass half full or half empty? A reexamination of the associations between assessment measures during medical school and clinical competence after graduation. Acad Med 1993 Feb;68(2 Suppl):S69-76

Competing interests:

None declared.