LETTER

# Cognition Admission Test as Selection Method for Students' Entry in a PBL Medical Curriculum [Letter]

This article was published in the following Dove Press journal: Advances in Medical Education and Practice

Reinaldo B Bestetti () Lucélio B Couto () Marina T Durand ()

Department of Medicine, University of Ribeirão Preto, Ribeirão Preto, Brazil

Correspondence: Reinaldo B Bestetti Department of Medicine, University of Ribeirão Preto, Avenida Costábile Romano, 2201, Ribeirão Preto 14096-900, Brazil Email rbestetti44@gmail.com



## Dear editor

We have read with great interest the paper by Kötter et al<sup>1</sup> The authors compared academic performance in the general practice of students in the fifth year of the medical course who were selected to entry the medical school based on preuniversity grade point average (pu-GPA) with those who were selected based on pu-GPA and a 30-min panel interview. They observed that the former was considered more suitable for general practice than the latter by the supervising general practitioner. However, because of the small sample size, they correctly stated that the results should be received with caution. Furthermore, because the study was carried in a single center, they conceded that the generalizability of the study to other medical schools was limited.

The selection process for students to entry a medical course is still debatable. In other contexts, pu-GPA appears to be associated with outcome prediction<sup>2</sup> low rate of students dropout during medical course.<sup>3</sup> Pu-GPA has been associated with a successful career following graduation as well.<sup>2</sup> Traditional interviews have been considered to have a poor outcome prediction in comparison with pu-GPA in the students' selection process.<sup>2</sup> Therefore, the findings of Kotter et al<sup>1</sup> are somewhat surprising.

Cognitive admission tests (CAT) are another selection method for students to entry a medical school, which reliably predicts academic performance. At our university, we run a medical course based on a Problem-Based Learning (PBL) teaching approach.<sup>4</sup> A preliminary study from our institution clearly shows that marks in the CAT are associated with academic performance at the end of medical course in terms of abilities and attitudes, as assessed by the Objective Structured Clinical Examination (OSCE). Furthermore, marks in the CAT are also associated with academic achievement in terms of cognition, as assessed by the Progress Testing (PT) and end-unit tests of the disciplines of the clerkship (Pediatrics, Internal Medicine, Surgery, Gynecology and Obstetrics, Family Medicine, and Urgency Medicine).<sup>5</sup>

Kötter et al<sup>1</sup> assessed students apparently formed in a Lecture-Based Learning (LBL) medical course using a Likert scale regarding suitability to work as a general practitioner by one general practitioner supervisors. This is simpler than to assess attitude, ability, and cognition by different methods of assessment as the OSCE and the PT, as recommended in the PBL approach. Therefore, we congratulate Kötter et colleagues<sup>1</sup> for their challenging work. Nevertheless, for medical courses running a PBL curriculum, we think that CAT is a preferable method for students' selection

287

© 2020 Bestetti et al. This work is published and licensed by Dove Medical Press Limited. The full terms of this license are available at https://www.dovepress.com/terms. work you hereby accept the Terms. Non-commercial uses of the work are permitted without any further permission form Dove Medical Press Limited, provided the work is properly attributed. For permission for commercial use of this work, please esp aragraphs 4.2 and 5 of our Terms (http://www.dovepress.com/twws.dovepress.com/terms.php). to entry a medical course. Nonetheless, we concede that a randomized trial comparing different selection methods is needed in order that we can select students who might ultimately be a good doctor.

## Disclosure

The authors report no conflicts of interest in this communication.

## References

 Kötter T, Rose SI, Waldmann A, Steinhäuser J. Do medical students in their fifth year of undergraduate training differ in their suitability to become a good doctor depending on their admission criteria? A pilot study. *Adv Med Educ Pract.* 2020;11:109–112. doi:10.2147/AMEP. S235529

- Patterson F, Knight A, Dowel J, Nicholson S, Cousans F, Cleland J. How effective are selection methods in medical education? A systematic review. *Med Educ.* 2016;50(1):36–60. doi:10.1111/ medu.2016.50.issue-1
- Urlings-Strop L, Stegers-Jager K, Stijnen T, Themmen APN. Academic and non-academic selection criteria in predicting medical school performance. *Med Teach.* 2013;35(6):497–502. doi:10.3109/ 0142159X.2013.774333
- 4. Bestetti RB, Couto LB, Romão GS, Araújo GT, Restini CBA. Contextual considerations in implementing problem-based learning approaches in a Brazilian medical curriculum: the UNAERP experience. *Med Educ Online*. 2014;19(1):24366. doi:10.3402/meo. v19.24366
- Couto LB, Faria-Jr M, Brigato RR, Daniel-Furlan R, Garcia ME, Bestetti RB. Association of marks in entrance examination test with academic achievement at the end of medical course in a PBL hybrid curriculum. *Proc AMEE Congr.* 2017;4II07:1065.

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Advances in Medical Education and Practice 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Advances in Medical Education and Practice editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

#### **Advances in Medical Education and Practice**

### **Dove**press

#### Publish your work in this journal

Advances in Medical Education and Practice is an international, peerreviewed, open access journal that aims to present and publish research on Medical Education covering medical, dental, nursing and allied health care professional education. The journal covers undergraduate education, postgraduate training and continuing medical education including emerging trends and innovative models linking education, research, and health care services. The manuscript management system is completely online and includes a very quick and fair peer-review system. Visit http://www.dovepress.com/testimonials.php to read real quotes from published authors.

Submit your manuscript here: http://www.dovepress.com/advances-in-medical-education-and-practice-journal