

## Research output of Arab students.

*The way forward*

*To the Editor*

We have read, with interest the recently published remarks by Aboshady and Gouda<sup>1</sup> in this journal. Worldwide trends of research conducted and articles authored by medical students, reveal a slight increase in output, although there has been a diminution in the number of physician-scientists.<sup>2</sup> However, most of the pertinent literature on medical student research comes from developed countries. Medical students from developing countries, including Arab students, have consistently displayed a keen interest in research. From example, a recent study<sup>3</sup> found strong enthusiasm for undergraduate research by medical students in 3 Arab universities.

Students from developing countries are thought to display such eagerness due to anxieties pertaining to future career prospects; involvement in research is generally positively looked upon when students/interns apply for competitive post-graduate training positions.<sup>3</sup>

Students' interest, however, is not being met with adequate guidance or supervision in order to foster such energy. Arab students often cite the lack of research infrastructure (namely, inadequate mentorship and facilities)<sup>1</sup> as one of the main obstacles to student-led research.<sup>3</sup> In countries where financial constraints are not immediate barriers, it is disheartening to witness such waste of youthful and energetic talent.

Calls for the introduction of Medical/PhD programs in the Arab world have been previously and continue to be made.<sup>4</sup> Indeed, such dual degrees (namely, a research degree combined with the medical degree) afford excellent chances to provide in-depth research experience to keen medical students.<sup>5</sup> Sadly, such programs are currently offered by almost none of the Arab universities.

We, therefore, affirm Aboshady and Gouda's call for the intensification and collaboration of efforts to encourage student research in the Arab world. We also support the introduction of dual medical/research programs, the inception of which may be the first step of igniting research interest among medical students in the region.

*Yassar Alamri*  
*Department of Medicine*  
*University of Otago*  
*Christchurch, New Zealand*

*Reply from the Author*

We would like to thank Dr. Yassar Alamri for his interest and comments on our paper.<sup>1</sup> We agree with him that there is a real discrepancy between the interest and research output from undergraduate students in the developing world, including Arab countries. This has been shown in the recent systematic review performed by Amgad et al,<sup>6</sup> which confirmed the high interest and the low publication outcomes.

The introduction of the medical/research programs can be a successful initial step to overcome some challenges facing students, and to have secured time for research. These programs are present worldwide especially in the US<sup>3</sup> and UK,<sup>4</sup> and several studies<sup>9-11</sup> have shown its real impact in providing future physician-scientists. Therefore, we support this call and encourage the Arab institutions to provide such dual degrees to cover the unmet need to increase the number of physician-scientists in the Arab world.

*Omar A. Aboshady*  
*Department of Clinical Pharmacology*  
*Mohamed A. Gouda*  
*Department of Oncology, Faculty of Medicine*  
*Menoufia University, Menoufia, Egypt*

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