

Improving medical students' participation in research

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Dear editor

We read with great interest the review by Siddaiah-Subramanya et al¹ regarding the difficulty for medical students to participate in research, in developing countries. From our own experience as medical students, we agree that organizational factors, adequacy of knowledge, and variability in “attitudes” may all contribute to difficulty in participating in research. Nevertheless, we propose that the introduction of research projects, which may be part of an intercalated degree, could help improve medical students' involvement in research.

The authors have suggested that inadequate knowledge of research principles is one of the main barriers for students participating in research. One strategy to encourage research is to provide medical students research fellowships in the first or second year of medical school.² Further to this, many UK universities are now advocating the integration of an intercalated degree as a part of their undergraduate curriculum.³ During this research-intensive year, students are taught how to adequately appraise scientific literature.³ The program also develops a structured approach to undertaking research as well as promoting deep and strategic learning.³

Medical institutions are eager to promote research in order to prepare students for a career in evidence-based medicine.⁴ Studies have identified other reasons to engage in research such as the ability to appraise clinical evidence and the development of analytical skills which are required in medical practice.^{1,4}

There are also several significant barriers to research, which affect Asia specifically. These include a lack of funds, a “brain drain” of health care professionals, and no regional medical education journal.⁵ Whilst there is not a simple solution to solve the underrepresentation of medical students in research, strategies such as holding more student-led conferences, promoting student journals, and holding research workshops will help in achieving this goal.⁴

A grounding in the principles of scientific research is vital for all medical students regardless of whether they want to pursue a career in academia or not.⁴ We agree with the authors regarding the discrepancies in conducting research between developed and developing countries. However, there is merit in acknowledging that dedicated research projects could be the answer to equip medical students with scientific rigor.

Disclosure

The authors report no conflicts of interest in this communication.

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Authors' reply

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Dear editor

We would like to thank Menon et al for the letter in response to our article.¹ We note that an overarching theme in the letter is the situation in countries where research at medical school could be improved. In the letter, Menon et al have brought out a couple of important issues: one is that the problem is multifactorial, and the other is the fact that opportunities and encouragement need to be provided to the students so that they could get more involved in research. Intercalated degrees are becoming more popular, and they are one of the

ways to improve the situation. They allow the medical students to dedicate an entire year or 2 to learn and participate in quality research. As mentioned by Menon et al, they have already been accepted in the UK medical education system. Here in Australia, various medical universities have adopted this system, and the medical students get an MD instead of an MBBS at the end. Furthermore, some are even encouraged to complete a PhD during the research break prior to continuing with the rest of the medical degree.

On the note of "brain drain", it is indeed a sad state in some underprivileged countries where potentially a lot of talent is wasted due to, mainly, lack of opportunities. Additionally, the priorities of most students from these regions are different, and many cannot afford to spend extra years in medical schools instead of earning for their families.

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