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

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References


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 stu-
dents 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 encour-
aged 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. Addition-
ally, 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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Reference
1. Siddaiah-Subramanya M, Singh H, Tiang KW. Research during medical
school: is it particularly difficult in developing countries compared to