

Enhancing medical students' education and careers in global surgery

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SUMMARY

With surgical conditions being significant contributors to the global burden of disease, efforts aimed at increasing future practitioners' understanding, interest and participation in global surgery must be expanded. Unfortunately, despite the increasing popularity of global health among medical students, possibilities for exposure and involvement during medical school remain limited. By evaluating student participation in the 2011 Bethune Round Table, we explored the role that global surgery conferences can play in enhancing this neglected component of undergraduate medical education. Study results indicate high rates of student dissatisfaction with current global health teaching and opportunities, along with high indices of conference satisfaction and knowledge gain, suggesting that global health conferences can serve as important adjuncts to undergraduate medical education.

Despite the substantial contribution of surgical conditions to the global burden of disease, the field of global surgery remains severely under-resourced, especially when compared with the well-staffed and well-funded campaigns combatting communicable and other nonsurgical diseases. One important avenue toward meeting surgical workforce needs involves exposing, educating and motivating future surgeons to participate in global surgery initiatives. Over the past decade, global surgery has become increasingly popular among medical students, many of whom hope to translate their interest into active participation.¹

Despite these developments, current opportunities for medical student exposure and involvement in global surgery remain limited. In the absence of uniform guidelines regarding global health teaching, experiences vary significantly, and dissatisfaction rates remain high, with 41% of graduating American medical students finding their global health curriculum inadequate.^{1,2} There are also important limitations to global health electives as currently offered; these range from prohibitive cost to lack of organizational support from medical faculties.¹

In this context, it becomes important to seek complementary opportunities for student exposure to global health and surgery. Based on our experience with student participation in the 2011 Bethune Round Table, we suggest that global surgery conferences can serve as key adjuncts to undergraduate medical education, helping to inform, motivate and integrate students into the global surgery community.

The Bethune Round Table is an international conference dedicated to the surgical issues facing low- and middle-income countries. Organized by the Canadian Network for International Surgery (CNIS) and held annually in Canada, the conference features important participation of global surgery leaders from resource-limited settings in Africa, Eastern Europe and Asia; leaders from these settings accounted for more than half of the speakers at the 2011 conference.³ The conference, which was hosted in Montréal, Canada on June 3–5, featured an unprecedented level of student

involvement, with 35 first-year medical students from McGill University attending the proceedings, their registration having been waived in exchange for volunteering to help run the event.

We took advantage of this opportunity by constructing a 56-item questionnaire meant to gauge student experiences and attitudes toward global health and surgery as well as to assess the outcomes and educational value of such conferences. Administered electronically to all 173 first-year medical students from McGill University, the survey was completed by 102 students, including 31 of the 35 conference participants.

Survey results highlight substantial interest in the discipline among medical students, with 42% of the 102 respondents reporting involvement in global health research, volunteering or student initiatives and 55% intending to incorporate global health into their future careers. Concurrently, dissatisfaction with global health teaching as currently offered was reported by 55%, with 68% of these respondents desiring an expansion of its place in the curriculum, suggesting greater discontentment among this cohort than among American medical students, as stated previously. Although no similar information is available for medical students across Canada, these results should be of concern, given that McGill University stands slightly above the Canadian average in terms of global health training offered.¹ This unmet student demand illustrates the importance of supplementing available opportunities for global health exposure.

In terms of conference participation outcomes, major self-perceived global surgery knowledge gain was reported by 71% of the 31 attendees who completed the survey, while substantial increase in global health interest and in intentions to participate in global health activities was reported by 87% and 77%, respectively. Although student participants were self-selected by their pre-existing interests, 9 of the 31 respondents (31%) had no prior global health experience, as measured by past participation in global health conferences, research, volunteering or other initiatives. This diversity among attendees did not translate into differences in perceived outcomes, which remained highly positive regardless of previous exposure. Similarly, the Bethune Round Table attracted both surgically minded (15 of 31) and medically minded (16 of 31) students, appealing equally to both disciplines and leading 8 participants into newly considering surgical careers. These results indicate that events like the Bethune Round Table can be as beneficial to newcomers as they are to more experienced participants and that they are equally appreciated by both groups. This versatility suggests that global surgery conferences can be valuable and easily accessible complements to the limited options currently available to medical students, functioning both as entry points into the discipline and as opportunities to reinforce existing interest and participation.

Interestingly, despite high rates of involvement among medical students, only 12 of 102 respondents felt like legitimate members of the global health community. Considering the link established between students' sense of belonging to an academic community and the retention rate within that particular discipline, this finding has important implications.⁴ As previous studies on higher education have shown, academic conferences can be ideal forums for informal discussions between students and experienced practitioners, contributing to the enculturation process of the former.⁵ In this context, it is encouraging that, on average, 40% of medical students' interactions during the conference were with practising surgeons and that 55% of respondents reported an increased sense of community following the event. The fact that a now annual student-organized global surgery conference was held at McGill University less than 12 months after the 2011 Bethune Round Table, with more than 120 guests in attendance, serves to further illustrate this point. We would therefore argue that such conferences favour the continuation and intensification of student involvement in global health and surgery, helping to transform what is initially an interest among others into an issue seen as intrinsic to the practice of medicine.

If the rising interest in global health and surgery among future doctors is to be cultivated, we must become better at offering diverse and easily accessible opportunities for student exposure. This will require enhancing the global health curriculum and increasing faculty support for international electives as well as facilitating student participation in global surgery conferences like the Bethune Round Table. By stimulating global health involvement early on in medical education, such steps will help ensure that the current surge in interest translates into more students striving to become tomorrow's global health leaders.

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