Inspiring careers through medical simulation: reasons for caution

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TO THE EDITOR: Berk et al. (1) have presented the results of a fascinating survey exploring the effects of a medical simulation program embedded in high school science education. And at first glance the results appear positive: very many of the students said that the program had an enduring impact on their interest in pursuing a career in science. However, there are a number of reasons to interpret their findings with caution.

The authors stated that “30 students consented and completed the telephone survey (65%)”; however, this is 30 of 46 students who were contactable and who were not in high school. The total number of students who took part in the course was 155: with this value as the denominator, the response rate was 19%. Such a response rate leaves far greater room for responder bias. Another problem with the analysis is that responders are heterogeneous in terms of the lengths of time since finishing the course. For some students, it would have been 4 or 5 yr since they completed the course; however, for others, it would have been a far shorter period of time. This heterogeneity inevitably affects the reliability of the findings. Finally, the mean age of responders was still only 19 yr. This age is still probably far too young to judge the long-term impact of the course. It is undoubtedly good news that the participants are still interested in science-related careers, but the authors are surely correct that further prospective and longer-term studies are needed.

There has been a long history of initiatives that have been designed to generate interest in science-related careers. The problem with many of them is that they add another component to a curriculum that is usually already full. This inevitably raises questions as to the costs and sustainability of the new programs. Perhaps another way to look at the problem would be to think through the extent to which new programs could be integrated within existing programs or to which new programs could be integrated into the actual school lives of students. Could unrehearsed emergency simulations take place in the school grounds during breaks, for example? Could simulations be incorporated into that part of the existing curriculum that deals with the students’ own health? Such initiatives might be more sustainable and indeed more time and cost efficient. The program created by Berk et al. could stay largely the same, but the way that it is presented could be adjusted.

DISCLOSURES
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REFERENCE