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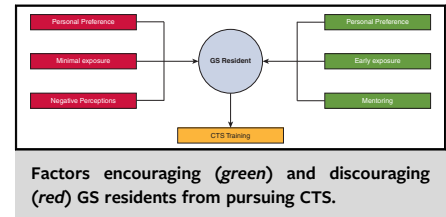
Commentary: If you can't do it, simulate it!

Danial Ahmad, MD, and
Vakhtang Tchantchaleishvili, MD

In this study, the authors¹ have tried to demonstrate how simulation can foster interest in cardiothoracic surgery (CTS). They report positive subjective feedback from participating residents who felt that such exercises enhanced their skills and understanding of CTS. The simulation program involved 6 sessions (5 porcine and 1 computer-based), each lasting 2 to 3 hours, over a period of 1.5 years. Skills pertaining to common cardiac procedures such as aortic and mitral valve replacement, coronary artery bypass grafting, etc, were taught. The need for this, as alluded to by the authors, rose in face of the reduced interest in CTS found in general surgery (GS) residents.

Exposure to CTS is decreasing in GS programs.² The American Board of Surgery requires no cardiac cases and only 20 thoracic cases for GS certification.¹ This lack of exposure to cardiac surgery may be the reason for the decreased interest in those GS residents who previously may have been undecided with respect to their choice of subspecialty. It would be wise to take advantage of the flexible rotation option, provided by the American Board of Surgery, which allows program directors to customize 12 months (≤ 6 months/year) in the last 3 years of GS training to allow for “early tracking” into the resident’s subspecialty of choice.³

It has been reported that CTS trainees who preferred adult or congenital cardiac surgery generally made their choices early on in medical school or in residency. In comparison, trainees who preferred general thoracic surgery made their choices usually in the later years of



CENTRAL MESSAGE

Early exposure and mentoring of general surgery residents are needed to increase their interest in cardiothoracic surgery.

GS residency.⁴ It has also been reported that GS residents try to log more cases in their subspecialty of interest, especially in postgraduate year 3.⁵ This implies that their minds are usually made up before this and any particular “intervention” to increase their interest in CTS should probably be done before this. Therefore, simulation exercises, as demonstrated by the authors, could perhaps be more beneficial if they were targeted at junior residents.

In a survey of GS residents, where subspecialties were stratified by burnout and quality of life, only 7.5% expressed the desire to pursue CTS, considered to be a low-burnout but low quality of life specialty.⁶ Leaders in CTS should thus also work on addressing the negative perceptions associated with the field in order to ensure a continuous supply of motivated cardiac surgeons.

This effort by the authors highlights both GS residents’ lack of exposure to cardiac surgery as well as an excellent way to increase their interest in a stress-free environment with impressive access to mentors. This effort would be more informative with the inclusion of objective markers, assessed before and after participation, compared with either nonparticipants or residents at centers without such simulation training. Markers may include fellowship application rates, seeking CTS research opportunities and mentors, and so on. With early exposure and mentoring, GS residents may just come to appreciate the brighter facets of CTS.

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From the Division of Cardiac Surgery, Thomas Jefferson University, Philadelphia, Pa. Disclosures: The authors reported no conflicts of interest.

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Address for reprints: Vakhtang Tchantchaleishvili, MD, Division of Cardiac Surgery, Department of Surgery, Thomas Jefferson University, 1025 Walnut St, Suite 607, Philadelphia, PA 19107 (E-mail: Vakhtang.Tchantchaleishvili@jefferson.edu).

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