Cardiac surgery training in the present era: Does the emperor have new clothes?

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Disclosures: Authors have nothing to disclose with regard to commercial support.

Received for publication April 18, 2017; accepted for publication April 22, 2017; available ahead of print June 20, 2017.

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J Thorac Cardiovasc Surg 2017;154:1017-8

0022-5223/\$36.00

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<http://dx.doi.org/10.1016/j.jtcvs.2017.04.065>

We commend Dr Robich for his report summarizing his personal experience, which may be of interest to young and not-so-young readers alike.¹ We believe in the value of constructive criticism and recognize that there is always room for improvement in every field. Frankly, if we were young surgeons approaching the specialty of cardiothoracic surgery, we would be interested in reading about the realistic limitations (if there are any) of the present training system, or at least in learning about how the system could be optimized. We understand that the author has had very positive experiences, and his efforts as a trainee have been translated into an almost smooth transition into the “attending world.” Is this the norm? Is there any proposal to make the “machine more efficient”? Are we really preparing our next generation of surgeons to approach the increasing plethora of highly comorbid patients in a truly minimally invasive and maximally effective fashion?

Let's examine, in an unbiased fashion, the status quo of the average cardiothoracic surgery training program. Is the training system moving at the same speed as cardiovascular technological innovation and patients' expectations? Perhaps the trainee emerging from a typical cardiothoracic surgery training program should ask some more personal questions: “Are the skills I have acquired, with such a personal sacrifice, enough to keep me in the business for the next 30 to 35 years of practice? Are those skills appropriate to satisfy the necessities of my present and perspective patients?” It would be very sad indeed to hear a cardiothoracic surgeon saying, “The most important lesson, which unfortunately I learned only after training, is that I need to acquire further skills and knowledge to be competitive, to be effective, and to respond to the drastically changing referral pattern for invasive treatment.”

“Kejserens nye Klæder” (“The Emperor's New Clothes”) is a short tale written by Hans Christian Andersen and published in 1837. As many readers know, it is the story of two cunning tailors who weave a new suit for a narcissistic emperor. The new clothes are said to be invisible to those who

“The Emperor's New Clothes,” by Keld Moseholm Jorgensen.

Central Message

For many trainees coming out from the average cardiac surgery training programs, the most important lesson learned after training could be that their acquired skills are not sufficient to allow them to respond to the rapidly changing requirements of the profession. Is the present training system moving at the same speed as cardiovascular technological innovation? Is it responding to the ever-increasing complexity of our patients' clinical profiles?

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are ignorant, incompetent, or unfit for their position. Thus, no one has the courage to point out that the emperor is in fact wearing no clothes at all. Finally, a child cries out “But the emperor is naked indeed!,” exposing the fallacy. We have chosen this tale to be intentionally provocative. In reality, we are well aware of the fact that the tale does not necessarily represent the totality of cardiac surgery training programs. In this context, there is already evidence of forward-thinking centers investing time and resources to develop innovative and contemporary education, for example, catheter-based cross-training programs for surgical trainees. Although this is not the norm, we should be inspired by the vision of these pioneering training institutions.

In fact, patient profiles and treatment options are, for good reason, changing dramatically, and a surgeon's expectation to “incorporate one to two new technologies into practice over the year, and look for support from partners, mentors, and colleagues...”¹ may be unrealistic and might not always work. We need the courage to admit that boundaries between “knives and catheters” have been irreversibly broken and to admit that the emperor now is maybe indeed naked.

From an evolutionary perspective, intelligence is reflected in the ability to adapt to changes. As mature cardiac surgeons and cardiologists, we must think intelligently and put our egos aside to reshape the training of our future cardiac specialists. (Note that we have intentionally omitted the terms “surgeons” and “cardiologists” here.) We owe it

not only to the brilliant young doctors that we train, but also to the sickest of our patients.

Reference

1. Robich MP. The most important lessons I learned in training. *J Thorac Cardiovasc Surg.* 2017;154:1015-6.