

Keeping calm with cadaveric dissection in medical curricula

We read with interest the recently published article by Zubair et al. that studied the psychological impact of cadaveric dissection on first-year medical students at two teaching hospitals in Lahore, Pakistan.¹ Anatomy is considered a cornerstone of basic sciences in medicine and, as a result, incorporated in the foundation years of medical curricula. As the authors rightfully indicated, cadaveric dissection provides a unique role in learning about the human structure and function. The authors concluded that symptoms of acute stress disorder (ASD) were present in the cohort involved with first-time dissection and this was particularly more apparent in female students. We agree that the presence of ASD symptoms may lead to detrimental effects in learning among the cohort of junior medical students and support the notion that preparedness and possible desensitisation may help reduce these symptoms.

Figure 1 *Dr Nicolaes Tulp's Anatomy Lesson*, Rembrandt van Rijn, 1632



Image source: <https://www.mauritshuis.nl/en/explore/the-collection/artworks/the-anatomy-lesson-of-dr-nicolaes-tulp-146>

While we acknowledge the unique value of this study, we would like to share our previous findings on the role of cadaveric dissection in a modern medical curriculum in Australia.² This study involved 133 second-year students in a graduate-entry medical programme. Our results indicated the majority of students (75.4%) had a positive perception about learning anatomy through cadaveric dissections. We found that students who had a positive perception felt dissection made learning more interesting and that they would be disadvantaged if they did not engage in the activity. Opposed to the findings of Zubair et al., only a minority of students (15.8%) in our study considered cadaveric dissection as stressful. A subsequent study at our institution explored the utility of a novel adaptation where dissection protocols were crafted in the form of procedure-based dissections replicating surgical procedures, and found that medical students perceived this to be a more thorough, enduring and contextual learning experience that could be translated and applied into clinical practice.³

We recognise that other factors such as differences in study methodology, medical curriculum and teaching environment as well as participant demographics may result in unique challenges and differences in study findings. For instance, in contrast to the mean age of 19 in the study by Zubair et al., our graduate-entry medical school enrolls students with a mean age of 21.3 years (based on 2011–2013 cohort data).

The evolution of technology has also enhanced teaching mediums via audiovisual and interactive platforms, which inevitably have led to a growing number of potential alternatives to cadaveric dissection. Despite this, we feel that cadaveric dissection in this discipline should be maintained. The preparation and timing of introducing this activity to students may be crucial in maximising its value and minimising untoward experiences.

As medical educators, we agree that there is a need to improve student preparedness and resilience when faced with potentially challenging learning environments and adversity. Teachings of anatomy through cadaveric dissection have stood the test of time, as evidenced by its embellishment by famed artists but more importantly its teachers.

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doi: 10.4997/JRCPE.2021.327

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