Letters to the Editor

# In Reply

#### To the Editor,

Thank you indeed for your important comments concerning our article "Impact of simulator-based training on acquisition of transthoracic echocardiography skills in medical students".<sup>[1]</sup>

We fully agree that well-trained, experienced patients as educators can bridge the gap between examining simulators and patients with cardiac disease, especially when teaching goals in patient encounters include "telling their story", stimulating reflection, sharing perspectives or problem-solving, as suggested by Cheng *et al.*<sup>[2]</sup> Reviews have been published highlighting not only the benefits, but

Annals of Cardiac Anaesthesia | Volume 24 | Issue 1 | January-March 2021

also the challenges of patient educators involved in clinical teaching.<sup>[3]</sup> One central issue of involving patient educators in medical education is the principle that "what is taught should be what the patient educators want students to learn, in the way they want to teach it, and at the location of their choosing".<sup>[4]</sup>

In our study, the students involved in the case-control study were students with no prior experience in echocardiography techniques, with the aim of comparing simulator-based TTE teaching with live-human-model-teaching to elucidate which teaching method accomplishes the learning goal

#### Letters to the Editor

of achieving maximum points in all FATE examination standard views. We feel that high accomplishment in standard echocardiography examination techniques should be prerequisite before exposing students to patient educators or patients with chronic heart disease. As a further measure, it would indeed be interesting to proceed in a comparative study focusing on the examination of patient educators as opposed to hybrid simulation (combining simulated patients without chronic heart disease with simulators in one and the same teaching session) to focus on communicative interaction and reflection with the patient.

We also fully agree that repetitive practice is necessary for students to maximize the learning experience in TTE. This would also be another interesting study to elucidate the impact of repetitive practice on TTE skills in students.

### Acknowledgements

We would like to thank the Institute for Medical Informatics, Statistics and Epidemiology (IMISE) of the Medical Faculty of the Universität Leipzig for the statistical consultation.

**Financial support and sponsorship** Nil.

### Conflicts of interest

There are no conflicts of interest.

Conrad Hempel<sup>1,#</sup>, Edwin Turton<sup>2,3,#</sup>, Elham Hasheminejad<sup>2</sup>, Carmine Bevilacqua<sup>2</sup>, Gunther Hempel<sup>4</sup>, Jörg Ender<sup>2</sup>, Daisy Rotzoll<sup>1</sup>

 <sup>1</sup>Skills Centre, University of Leipzig, <sup>2</sup>Department of Anaesthesiology and Intensive Care, Heart Center Leipzig,
<sup>4</sup>Department of Anaesthesiology and Intensive Care, University of Leipzig Medical Center, Leipzig, Germany, <sup>3</sup>Department of Anaesthesiology, University of the Free State, Bloemfontein, South Africa <sup>#</sup>C. Hempel and E. Turton, both have contributed equally to the manuscript.

Address for correspondence: Dr. Jörg Ender,

Department of Anaesthesiology and Intensive Care Medicine, Heart Center Leipzig, Struempellstr 39, Leipzig - 04289, Germany. E-mail: Jörg.ender@medizin.uni-leipzig.de

> Submitted: 23-Aug-2020 Accepted: 29-Aug-2020 Published: 22-Jan-2021

# REFERENCES

- 1. Patterson B, Antram E. Impact of simulator based training on acquisition of transthoracic echocardiography skills in medical students Medical students' perspective. Annals Card Anesth.2021;24:116-7.
- Cheng PTM, Towle A. How patient educators help students to learn: An exploratory study. Med Teach 2017;39:308-314.
- 3. Jha V, Quinton ND, Bekker HL, Roberts TE. Strategies and interventions for the involvement of real patients in medical education: A systematic review. Med Educ 2009;43:10-20.
- 4. Towle A, Godolphin W. Patients as educators: Interprofessional learning for patient-centred care. Med Teach 2013;35:219-25.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code:	Website:
	DOI: 10.4103/aca.ACA_204_20

How to cite this article: Hempel C, Turton E, Hasheminejad E, Bevilacqua C, Hempel G, Ender J, *et al.* In Reply. Ann Card Anaesth 2021;24:117-8. © 2021 Annals of Cardiac Anaesthesia | Published by Wolters Kluwer - Medknow