necessarily result in improved block success rates. This suggests that in many instances stimulation is unnecessary. In addition to lack of benefit, a combined approach is also potentially detrimental, as it can increase procedure time (and associated patient discomfort) and potentially increases the likelihood of mechanical trauma to the nerve from multiple needle passes if a motor response is not initially obtained despite needle/nerve contact.

With regard to hydro-localization, we recommend against using large volumes of dextrose or saline as this can dilute the local anaesthetic, potentially decreasing the ‘density’ of a block, which is especially important if the block is to be used for surgical anaesthesia.

We agree that the use of US does not eliminate the potential for complications, and emphasize that all practitioners of regional anaesthesia use established safety precautions regardless of modality used for nerve localization. The most important safety precaution will always be the presence of a knowledgeable, appropriately trained, and experienced anaesthetist during the performance of the block. Although he or she may choose to omit steps described by Bouaziz and colleagues (or even to add additional steps), he or she will be the one who decides what information could be possibly useful and how to obtain it without exposing the patient to excessive risk or discomfort.

M. Abrahams*
M. Aziz
J.-L. Horn
Portland, USA

*E-mail: abrahama@ohsu.edu

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Anaesthetist’s opinions on simulator-based training in continuing education

Editor—With the increasing interest in simulator-based training, the number of simulator centres has grown markedly over recent years. In these centres, simulators are used for education, research, or for evaluating anaesthetic standards. They offer a large variety of education including different scenarios, such as simulated cases of anaphylaxis, arrhythmias, difficult airway, or malignant hyperthermia. However, not every institution has its own simulation centre, and travelling is time-consuming and expensive. Furthermore, the requirements of simulator-based training related to frequency, topics, and fees reduce the possibility of large group teaching. We have tried to establish such training as part of the continuing anaesthetic education curriculum at our university hospital, and offered a free-of-charge training session to all anaesthetists at our institution to be taken during their spare time. This training module included sessions on the treatment of intraoperative cardiac arrhythmia, airway management, and bronchoscopy. Surprisingly, the training was poorly attended, and we used a questionnaire to retrospectively evaluate the general interest in continuing medical education, the interest in simulator-based training, and possible reasons for non-attendance at the simulator-based training. The participants rated the general and special questions about continuing anaesthetic education and simulator-based training using a six-point Likert scale with 1, completely agree; 2, agree; 3, mainly agree; 4, mainly disagree; 5, disagree; and 6, completely disagree. All data in the text and figures are presented as mean values (SD).

The return rate of the questionnaire was only 37%, which means that 31 participants’ opinions could be evaluated. The anaesthetists rated their main topics of interest in continuing anaesthetic education and crisis management as shown in Figure 1. They rated internal and external...
options of continuing anaesthetic education as being optimal with average score of 3 (mainly agree, range 1–5) and 2 (agree, 1–5), respectively. All participants agreed that simulator-based training should be offered, and mainly during the week in the working time. Frequently marked reasons for non-attendance at the simulator-based training were: being on duty/call, lack of spare time, vacation, and personal time.

The interests in continuing anaesthetic education at our institution is similar to those identified by others. At our institution, monitoring, physiology, and pharmacology are the most commonly taught topics in the undergraduate programme. In contrast, postgraduate participants are more involved in crisis management, rare events, and airway management.\(^1\) Our anaesthetists emphasize the importance of simulator-based training and would like to implement training sessions during regular working hours. Otherwise clinical workload or personal needs will reduce the attendance at such training programmes, as shown in this study.

However, the implementation of simulator-based training is particularly difficult. Although there has been a national initiative by the German Society of Anaesthesiologists and Intensive Care (DGAI) to improve simulator-based education, this training is primarily designed for anaesthetic students.\(^2\)\(^3\)\(^4\)\(^5\)\(^6\) The main problems are the organization and financing of simulator centres and therefore the continuing availability of simulator-based training. The costs and benefits of simulation are difficult to determine, especially for the most challenging applications, where long-term use may be required.\(^7\) At this time in Germany, it is not clear who should bear financial responsibility for the procedure. However, because the complexity, workload, and psychomotor stress of anaesthesia-related jobs have increased over recent years, it is necessary to implement such trainings in the context of everyday clinical work and education.\(^8\) As the response rate was low, the evaluated data cannot easily be extrapolated to anaesthetists at other institutions and in other countries, especially as there are worldwide differences with regard to continuing anaesthetic education, training programmes, and daily workload.\(^1\)

The goal of the present study was to evaluate the interest of anaesthetists in continuing anaesthetic education and simulator-based training and to identify possible reasons for non-attendance at a simulator-based training session conducted at our institution. Participants described their high interest in simulator-based training with notable interest in crisis management. Personal affairs and increase of work load were the most frequently cited reasons for non-attendance, and participants suggested offering such trainings within regular working hours for 2 h per week.

| Educational interest of anaesthetists. Likert scale with 1, completely agree; 2, agree; 3, mainly agree; 4, mainly disagree; 5, disagree; and 6, completely disagree. |
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| Pharmacology | Pathophysiology | Monitoring | Standard anaesthetic proceedings | New anaesthetic proceedings | Crisis management |
| Emergency medicine | Intensive care medicine | Pain medicine | Judicial aspects |

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*Declaration of interest.* Y.A.Z. is a member of the executive committee of the Society in Europe for Simulation Applied to Medicine, SESAM. The corresponding author and co-authors confirm that they have no connections to any of the companies whose products are mentioned in this article. The data have not been presented at any meeting thus far.