Editorial ® Thieme

## Training endoscopy in Europe: an urgent call to action





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#### **Bibliography**

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Education and training are key for quality and patient safety. Serious issues regarding gastrointestinal endoscopy quality have been demonstrated in several studies, mainly related to missed lesions, adverse events (AEs), and poor patient experiences [1,2]. To improve the quality of endoscopy procedures, the European Society of Gastrointestinal Endoscopy (ESGE) has during the last decade developed recommendations for quality targets and quality performance indicators (KPI) [3].

Educational efforts are urgently needed to achieve these goals as implemented by the well-established Joint Advisor Group Endoscopy Training System (JETS) in the United Kingdom(UK) [4]. There are strong indications that their system based on "train the trainer" programs and formal training courses for junior doctors have had an important positive impact on the quality of endoscopic procedures in the UK [5].

In this issue of Endoscopy International Open, Maida et al. present a comprehensive survey including 16 European countries. In several of the countries there are fundamental weaknesses in the current training of junior doctors [6]. Unfortunately, with a study response rate of less than 30% combined with few respondents from each country, there exists a notable risk of bias in the reported results. Nevertheless, the authors' findings raise serious concerns regarding the quality of training, and emphasize the need to increase focus, and improve gastrointestinal endoscopy training to ensure patient safety. The study results most likely reveal the consequence of longlasting ignorance by many organizations and leadership of the importance of training, despite ESGE's efforts and recommended targets for the services [7]. The focus on training is of particular importance to ensure that existing or planned expensive colorectal cancer screening programs in European countries will not be compromised.

The questions in the survey by Maida et al are based on the curriculum recommended by The European Section and Board

of Gastroenterology and Hepatology stated in the "the Blue book," for which the main goal is to define, secure and assess the standards of training in gastroenterology and hepatology. It covers the core elements of competence-based medical education; theoretical knowledge, practical and clinical skills, communication and interpersonal skills, ethics, professionalism, patient safety, and quality improvement. The recommended curriculum also involves training in complex high-risk endoscopic procedures such as endoscopic submucosal dissection, endoscopic retrograde cholangiopancreatography (ERCP), and endoscopic ultrasound (EUS).

The survey reveals important gaps between countries in endoscopy training and shows that some countries are successful in achieving the training goals. Detailed knowledge about the success factors in the latter countries would probably be helpful for less successful countries. However, one should keep in mind that the survey assessed targets limited to numbers of procedures and not acquired competency. More details regarding achieved KPIs is necessary to assess the effectiveness of the training system.

Well-structured training frameworks and high-quality supervision of trainees are vital to achieve the required competencies for gastroenterologists. In the current survey, such variables are not evaluated but need to be included in the future. They include trainer curriculum and competency, the existence of continuous workplace assessments with objective tools, and the existence of training lists under direct observation. These variables might also be helpful in revealing root causes for suboptimal training that can be acted upon.

Supervision and direct observation are key to assess an endoscopists' skills and provide relevant feedback to enhance learning to achieve the required KPIs. These assessments need to be documented by each trainee in conjunction with his/her trainer. It is encouraging that three out of four trainees record-

ed their activities, although aiming for a goal of 100% is important. However, the details of these recordings and whether they included assessments is unclear. Consequently, in the future, surveys need to assess the content and quality of these recordings.

Basic skills in endoscopy include polypectomy and endoscopic mucosal resection of lesions less than 20 mm and the competency to treat subsequent AEs like bleeding and small perforations. These skills are also essential to achieve before undertaking training on more complex procedures. In the survey, most of the trainees had performed too few basic interventions to achieve full competency and it is alarming that nevertheless, most of them perceive themselves as very or fully competent in endoscopy, confirming the limited value of self-assessment.

The survey demonstrates a very low adherence to recommended training in advanced procedures like ERCP and EUS. That might be related to the demography of countries in which these procedures are performed only in a limited number of hospitals, and not necessarily indicative of a limitation in training, but could rather be based on a conscious decision to prevent harm to patients. Hence, non-adherence to the Blue book's recommendations needs to be interpreted in accordance with the individual countries' requirements to provide good health services.

In conclusion the survey, although suffering validity issues, has important results that call for an urgent initiative to improve training in Europe.

To increase the impact and validity of future surveys, limiting the survey to one core topic at a time (e.g. training in endoscopy combined with a substantial effort via the national gastroenterology associations to recruit relevant trainees) could increase the response rate. That would also make it possible to compare and suggest interventions to improve training in specific countries.

One should also bear in mind that important endoscopy educational initiatives are launched in several countries frequently related to implementation of colorectal cancer screening programs. More knowledge about how to perform highquality endoscopy training to obtain quality targets might be helpful in garnering sufficient funding for sustainable existing and new endoscopy training systems.

I would encourage the authors to continue their important effort in improving gastrointestinal training and repeat surveys related to training in the future to get more valid results that will make it possible to push the leadership and organizations to improve their training facilities.

### Competing interests

Chief Medical scientist (20% position) Augere Medical a stratup for artificial intelligence in EndoscopyShareholder Augere Medical

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