



Contents lists available at ScienceDirect

Trends in Anaesthesia and Critical Care

journal homepage: www.elsevier.com/locate/tacc

The main concerns of European anaesthesiology postgraduate trainees: A European survey

Diogo Sobreira Fernandes ^{a, *}, Laetitia Teixeira ^b, Dan Longrois ^c, Bazil Ateleanu ^d,
Helmar Bornemann-Ciment ^e, Paula Sá Couto ^f, Janez Kompan ^g, Michela Rausedo ^h,
Mihai Stefan ⁱ, Liana Valeanu ⁱ, Bernardo Matias ^j, Robert Greif ^k,
Andreas Sandner-Kiesling ^l

^a Centro Hospitalar do Porto, Largo do Prof. Abel Salazar, 4099-001, Porto, Portugal

^b Institute of Biomedical Sciences of Abel Salazar, R. Jorge de Viterbo Ferreira 228, Porto, Portugal

^c Department of Anaesthesia and Intensive Care, Hôpital Bichat-Claude Bernard, Assistance Publique Hôpitaux de Paris, 46 Rue Henri Huchard, 75018 Paris, France

^d University Hospital of Wales, Heath Park, Cardiff CF14 4XW, UK

^e Department of Anaesthesiology and Intensive Care Medicine, Medical University of Graz, Auenbruggerpl. 2, 8036 Graz, Austria

^f Centro Hospitalar do Porto, Largo do Prof. Abel Salazar, 4099-001 Porto, Portugal

^g Department of Anaesthesiology and Perioperative Intensive Care Medicine, General Hospital Slovenj Gradec, Slovenia

^h Department of Anaesthesiology and Intensive Care Medicine, University Hospital of Foggia, Viale Pinto, 1,71100 Foggia, Italy

ⁱ Department of Anaesthesiology and Intensive Care Medicine, Emergency Institute for Cardiovascular Diseases "C.C.Iliecu", Șoseaua Fundeni 258, 022328 Bucharest, Romania

^j Department of Anaesthesiology, Centro Hospitalar de Setúbal, R. Camilo Castelo Branco, Setúbal, Portugal

^k Department of Anesthesiology and Pain Therapy, Bern University Hospital, University of Bern, Freiburgstrasse 8, 3010 Bern, Switzerland

^l Department of Anaesthesiology and Intensive Care Medicine, Medical University of Graz, Auenbruggerpl. 2, 8036 Graz, Austria

ARTICLE INFO

Article history:

Received 19 May 2017

Received in revised form

7 November 2017

Accepted 3 January 2018

Keywords:

Humans

Internship and residency

Medical

Anaesthesiology/education

Cross-sectional studies

Surveys and questionnaires

ABSTRACT

This is the first study intended to identify the European anaesthesiology trainees' main concerns, to initiate a process of improvement of the training in anaesthesiology by the European Society of Anaesthesiology (ESA). The authors developed an electronic survey which addressed seven different concerns: autonomy transition, technical skills, exchange programs, residency costs, residency workload, employment prospects and educational contents/preparation for the European Diploma in Anaesthesiology and Intensive Care (EDAIC). The survey was disseminated by email to all anaesthesiology trainees registered in ESA and all European National Societies were asked to distribute the survey to their graduating trainees. 665 trainees initiated the survey with a completion rate of 54.6%. The trainees' main concerns were in descending order: educational contents, residency costs, employment prospects, residency workload, exchange programs, technical skills and autonomy transition. This report analyzes the three main concerns in more detail. 68% of respondents were unaware of the existence of the ESA e-learning platform. Other means to improve the preparation for the EDAIC such as a multiple-choice questions book should be developed. The main reason for not becoming an ESA Trainee member was the associated cost and 68% of respondents gave up activities or opportunities during their residency due to economic constraints; 56% of respondents considered emigrating for economic reasons and 28% elected Northern/Central Europe. The results of the present survey may provide additional background information for the development of specific improvements in strategies for training in anaesthesiology.

© 2018 Elsevier Ltd. All rights reserved.

1. Introduction

Anaesthesiology has significantly changed over the last decades. New drugs, monitoring devices and techniques have been developed and a major outcome has been a marked increase in patient

* Corresponding author.

E-mail address: sobreirafernandes@gmail.com (D. Sobreira Fernandes).

safety [1]. Consequently, the scope of anaesthesiology has expanded into multiple subspecialties. Its activity has increased in both inpatient and outpatient settings [1–3]. To confront the evolving challenges of patients and the health systems, educational changes and improvements in the postgraduate training programs must follow [1,2]. Effective implementation of educational changes mandates adequate communication between all educational stakeholders and postgraduate trainees [4].

Surveys are important tools to uncover needed improvements for medical training [4]. However, only a few published surveys addressed the anaesthesiology postgraduate trainees' concerns [4–7] and none looked at the European level.

Since 2006, the United Kingdom (UK) based General Medical Council (GMC), has been running an annual comprehensive survey asking all trainees for their views on the training. This aims to ensure that general medical education and training meets the high quality standards set to support medical care and patient safety across the UK [4,5].

Another link between anaesthesia training programme stakeholders and their trainees are national and international trainee organisations. The UK "Group of Anaesthetists in Training" (GAT), initiated in 1967 now with more than 3500 members, represents the anaesthesiology trainees' views among the decision-makers [8]. Similarly, the American Society of Anaesthesiology Resident Component (ASA-RC) was initiated in the USA in 1988 to encourage anaesthesiology trainees' participation in ASA activities [9].

In 2014, the European Society of Anaesthesiology's (ESA) Trainee Committee (ESATC) founded the ESA Trainee Network (ESATN) to facilitate communication and exchange of information between European anaesthesiology trainees and the ESA Council and Board of Directors. This network aims to promote training and education for anaesthesiology trainees throughout Europe. Another very important aim is to receive feedback from European anaesthesiology trainees about their needs and expectations from ESA [10].

A first initiative of the ESATC was to identify the main concerns of European anaesthesiology trainees through this European wide cross-sectional survey in order to initiate improvement of anaesthesia education by the ESA.

2. Methods

This study was approved by the Ethics Committee and the Research Board of the Department of Education, Training and Investigation of Centro Hospitalar do Porto, Portugal.

Searching the available literature, seven different items were identified and addressed in the survey [4–7,11–15]: autonomy transition, technical skills, exchange programmes, residency costs, residency workload, employment prospects and educational contents/European Diploma in Anaesthesiology and Intensive Care Medicine (EDAIC).

This cross-sectional survey was designed by the authors (DSF, ASK, DL, BA and HBC) using close-ended questions with the help of commercially available software (Survey Monkey Inc., Palo Alto, California, USA, www.surveymonkey.com). The survey was divided into ten parts. The first part comprised questions about demographic aspects. The following seven parts corresponded with the seven identified concerns, each with specific questions selected using a pragmatic approach. The anaesthesiology trainees' opinion and satisfaction were assessed using a Likert scale from 1 to 10 with descriptors. In the ninth part, trainees were asked to sort each concern in terms of priority to improve using another Likert scale rating between 1 and 7, where 1 was "less important" and 7 "most important". The last part was designated as "networking" and included three questions regarding the best means to improve networking among trainees. The entire questionnaire is provided as

supplementary material available online ([appendix 1](#)).

Prior to its official submission, our survey was piloted for comprehensibility by a group of twenty European trainees. After the final post-pilot adjustments, the invitation to the survey was disseminated via email from the ESA secretariat.

We included in the survey and sent out mails to: 1) all ESA trainee members (an anaesthesiology trainee was defined as any medical doctor who was trained in a specific anaesthesiology programme which is approved by the respective country). 2) All abstract presenters from the ESA Annual Meetings 2014 and 2015. 3) An email asking for the dissemination of the survey link to their respective anaesthesiology trainees was sent to all presidents of each European National Society of Anaesthesiology, to each member of the National Anaesthesiologists Societies Committee (NASC) of the ESA and to each member of the ESA Council. 4) Additionally, the anaesthesiology trainee could answer the survey at the ESA trainees' booth at the 2015 ESA annual meeting. All non-anaesthesiology trainees were excluded from the analysis.

The survey was sent out in mid-May of 2015, and the link to access it was made available for four months, until mid-September 2015. After completion of the survey, the link could not be reopened. The survey link was resent to all recipients in July and September two more times.

According to the absolute number of trainees in each European country [16], the authors considered that if a country had more than thirty anaesthesiology trainees that initiated the survey, these results could be representative of the trainees from that country.

Descriptive statistics characterise qualitative results with absolute and relative frequencies (n and %), and normally distributed quantitative results with mean and standard deviation (SD). The median (P50) and interquartile range (IQR) were used to describe ordinal results [17].

The sample was divided according to the status of the participant (have completed the questionnaire or not). Demographic characteristics between these two groups were compared using the Chi-square test for dichotomous data, Student's T-test test for normally distributed data or the Mann-Whitney test for non-parametric data. The significance level was determined as 0.05.

First, the main concerns of the seven topics asked were ranked according to the respective Likert scale, as described above. Then, an in-depth analysis of the three main concerns was performed.

In order to perform a sub-analysis, the sample was divided into four groups. The authors grouped the non-European countries and divided Europe into three regions (Southern, Eastern and Northern/Central Europe), according to the geographic and economic distribution of the countries that participated in the survey [18] (Table 5, supplementary material). Differences between regions were tested using the Chi-square test, ANOVA or Kruskal-Wallis test, according to the nature of the results.

Statistical analyses were performed using IBM SPSS Statistics 21.0 (IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.) [19].

3. Results

A total of 1210 individuals opened the link to the survey, but only 852 initiated it. Of these, 665 were anaesthesiology trainees, the final sample. From the final sample, 54.6% (n = 363) of the anaesthesiology trainees completed the survey (Fig. 1). Due to the decreasing answer rate along the survey, for each question was mentioned the absolute number of respondents (n).

Trainees from 45 countries participated in this survey: 13 countries from a non-European Region and 6, 10 and 16 countries from Southern, Northern and Eastern European Regions, respectively (Table 5, supplementary material). Only 7 out of 45 countries

Download English Version:

<https://daneshyari.com/en/article/8623911>

Download Persian Version:

<https://daneshyari.com/article/8623911>

[Daneshyari.com](https://daneshyari.com)