

What is the EPSC?

Jan Tuma, Chairman of Education and Professional Standards Committee

"Naděje není přesvědčení, že něco dopadne dobře, nýbrž jistota, že něco má smysl, lhostejno jak to dopadne,"

Václav Havel

"Hope is not the conviction that something will turn out well, but the certainty that something is meaningful, no matter how it turns out. "

Václav Havel

Introduction

EPSC: what lies beneath this lovely-sounding acronym? What is the context of this education and professional standards committee (EPSC), what methods of teaching ultrasound does it support, and what role is it playing and should it play in the future? I think that most colleagues in the practice have very little idea about the answers to these questions. But topics of teaching ultrasound or emergency ultrasound are highly relevant. So I've decided to expand on these topics in the context of our educational committees more broadly.

Prof. Rettenmaier in the late 1970's spoke of sonography as an abdominal stethoscope. The ultrasound examination room was in the centre of his clinic in Böblingen where all new patients were admitted. Here, young doctors, under the supervision of experienced ultrasound staff, investigated the abdomen, chest including the heart, and neck including the thyroid and carotid vessels. After determining the approximate diagnosis, the patient was transferred to different departments, internal medicine, surgery, gynecology ... This holistic, problem-oriented or multiorgan principle remained and was preserved (or was re-discovered in the USA and re-imported to Europe?) in some larger hospitals with a central emergency department. Also these principles are now applied in the teaching of emergency ultrasound that we learned long ago from the great pioneers of sonography.

Ultrasound diagnostics expanded exponentially in the following decades. Prof. Otto said that practically no clinician, perhaps with exception of psychiatrists, is not using this problem-oriented, multiorgan method that ultrasound affords. Various disciplines sometimes regrettably tried to empower their organ, fortunately, almost no one could. From the very beginning, rather atypical radiologists, cardiologists, gynecologists, internists and urologists and all others who had an interest in interdisciplinary cooperation and integration have become a force by the establishing of ultrasound societies. It is this interdisciplinarity that has engendered the unusual holistic dynamics in ultrasound diagnostics.

Throughout these decades, specialist and ultrasound societies of various countries gradually created more and more sophisticated teaching systems for ultrasound diagnostics. It was not always so. The quality of diagnostics was sometimes beyond little regional or specialist attempts to maintain a given region or organ in a monopoly position.

After the expansion of ultrasound diagnostics came the rapid development of other imaging methods, especially CT and MRI, which quickly flooded the United States and became popular in all major hospitals. This occurred perhaps because of easier readability for surgeons, better financial benefits for economic directors of hospitals and greater convenience for radiologists. With the CT or MRI, the clinician must not even touch the patient or contaminate herself with ultrasound gel. Ultrasound, particularly in the U.S., was left in the hands of radiological ancillary staff. They were unable to compete diagnostically with the clinician's CT. In Europe, clinicians carry out ultrasound and integrate it into all the patients' examinations and use it to complete

their own clinical knowledge. In the 1990's in Europe ultrasound spread into many clinical fields, but it was said that this method is subjective and dependent on the examiner. Of course, as with the CT or MRI, ultrasound also depends on the quality of education of the person who interprets the examination. The method of ultrasound was not at fault but rather the insufficient systematic postgraduate training, the lack of standardised courses, the investigations without tutor control and the absence of a finalised and proper practical exam. In this time, there were really large differences between examiners.

I have always promoted the idea of pioneers of sonography, that ultrasound should be done by those that have learnt it properly. Adding this obligation of assessing training to the duties of our ultrasound society will enable everyone to be trained in our methods, regardless of his clinical specialty. For further development, ultrasound must remain an interdisciplinary method, and must not be split into individual organs. It seems that, at least in some parts of Europe, this idea has taken root.

The 36th "Dreiländertreffen" in Davos will be held this year between the 26th and 29th of September. Why do I mention it? These Congresses were created during the years when close interdisciplinary and international cooperation had an impact of fostering more sophisticated and uniformly applied ultrasound diagnostics in Austria, Germany and Switzerland. For many years, ultrasound societies - Austrian OEGUM, German DEGUM and Swiss SGUM-have mutually recognized their continued harmony of education. 3 years ago we reached consensus on our first post-graduate training course and in 2010 we established a common curriculum for abdominal courses. <http://www.efsumb.org/euroson-sch/curriculum.pdf>
Basic and advanced courses in these countries are also mutually recognized. We expect that in other areas, such as vascular or musculoskeletal ultrasound, a common curriculum will be developed.

EFSUMB

EFSUMB (European Federation of Societies of Ultrasound in Medicine and Biology) in the last decade moved from the fringe of rather few fanatics to something that is heard and seen and what is listened to.

Thanks to prof. Jäger and others, the journal "Ultraschall in der Medizin", originally produced by OEGUM, DEGUM and SGUM, became our European journal, which aptly describes its English name, "European Journal of Ultrasound." The magazine is now read throughout Europe and is an interdisciplinary platform for all clinical disciplines involved in ultrasound diagnostics. It is the official journal of societies OEGUM, DEGUM and SGUM, but also of the European Federation EFSUMB and ultrasound societies of Denmark (DUDS), Norway (NFUD), Latvia (LUSA), Belgium (VVE), Croatia (HDUMB), Slovenia (SSU), Romania (SRUMB) and Greece (HSUMB).

"The Scientific Glory" as measured by the so-called "Impact Factor" increased the journals circulation from 1,144 in 2001 to 2,389 in 2009 primarily due to the scientifically interesting and essential guidelines for Contrast Enhanced Ultrasound (CEUS). The number of sophisticated institutions using CEUS is still expanding but it is rather a marginal topic for most colleagues in the practice. The Journal gained a wide readership largely because of its clear and useful CME articles. You can read them, download them and use them the next day in your everyday practice.

Prof. Dietrich is the initiator and editor of the first pan-European ultrasound textbook "EFSUMB European Course Book," with important co-authors from across Europe. This book has already been published on the Internet for free and is accessible to everyone, world-wide.

<http://www.efsumb.org/ecb/ecb-01.asp>

My colleagues from Africa, South America and Asia appreciate it and say that it is a very praiseworthy resource. In the next few days, this text will be published in book form as well.

Education and Professional Standards Committee (EPSC)

I've been a member of this honourable committee for several years and I believe we have done a lot of good work, though I'm not sure how extensively the work has been realised and implemented by the general ultrasound public.

EPSC has been published since 2006 together with other authorities of EFSUMB including a number of recommendations and guidelines

<http://www.efsumb.org/guidelines/guidelines01.asp>

of which "Minimum Training Recommendations for the Practice of Medical Ultrasound in Europe" has 15 chapters.

Many of the recommendations and guidelines are reflective of our general professional level but still have not become part of the daily routines of most teachers and trainers of ultrasound in Europe. In practice, only a few teachers use these guidelines. Even a high EFSUMB official said that he had just seen these recommendations and was surprised at how many of them already exist ... A little rigid bylaw affecting "Euroson School" was recently modified and thus allowed significant expansion of quality educational ultrasound programs into many countries. Euroson Schools have already been organised and carried to completion in Germany, England, France, Italy, Austria, Denmark, and Norway, as well as in Romania, Slovak and Czech Republic, Croatia, Slovenia and Latvia. This year we are planning our first school in Greece and also in Switzerland. I think that EPSC and even EFSUMB are facing decisive steps. Either we popularize learning initiatives across Europe so that they gradually become an integral part of education in each country, or remain a "paper tiger" or rather an "electronic tiger", which hangs in the Internet sic, but otherwise is actually useless ...

In my opinion, it is necessary to carry out the following steps in the near future:

1. Integration of European sonographic courses

In the same way that the "Ultraschall in der Medizin" became the basis of the "European Journal of Ultrasound," the "Course Curriculum" of abdominal ultrasound courses OEGUM, DEGUM and SGUM <http://www.efsumb.org/euroson-sch/es-home.asp> should become the basis for the common European platform of ultrasound courses. The Harmonisation Commission of OEGUM, DEGUM and SGUM agreed to this curriculum in 2010 and decided that it would be supplemented and improved every 3 years. It is now possible to offer this curriculum to other European ultrasound societies and invite delegates of these societies to participate in and extend the harmonisation commission, to introduce this course curriculum in their countries and to actively take part in its continuous improvement. This will lay the foundation for a pan-European ultrasound educational system that will continue to expand and adapt to the needs of practices and not become a sterile intellectual figment of several EFSUMB officials' imaginations.

Each national society that has adopted this curriculum will be able to organize basic, advanced and final abdominal courses in the form of an accredited "Ultrasound Endorsed Course" (EFSUMB BYLAW No. 11) in the national language. These courses should then be marked with a label of official accreditation, the "Ultrasound Endorsed Course" so that when the trainee pays a set fee for this accredited course, a certain amount of the fee (similar to the accreditation fees in Germany, Austria and Switzerland) will be received by a national ultrasound society and a part by the EFSUMB, thereby financially providing for further integration, harmonisation and development of European ultrasound education. In the same way that OEGUM, DEGUM and SGUM mutually recognize certain courses, it must be obvious that harmonised courses in other European countries would have mutual recognition. The common textbook for these courses "EFSUMB European Course Book" is available on the Internet <http://www.efsumb.org/ecb/ecb-01.asp> and in the coming days will see the light of day in printed form.

I know that not only the Swiss are convinced of the impeccable perfection of its own courses and possibly 'look down their noses' at courses in Slovakia or Romania. That is why harmonisation of content and form of these courses is vital because it will be difficult indeed if coursework from other countries is looked down upon.

2. European Centres of Excellence

In addition to common courses, we need to do more to integrate ultrasound training in Europe. Every beginner learns to investigate not only within the courses, but also during a systematic practical training. And no matter whether you've confirmed that you've completed the required number of investigations under didactically experienced teachers, additional controlling of your investigations in the department where you practice are rarely possible. No one can check since the boss himself doesn't perform ultrasound investigation. It is therefore essential to define and establish learning "European Centres of Excellence" (ECE), able to ensure quality in practical training. The ECE should be defined by a minimum frequency of annual investigations as well as a guarantee of expert quality at the centre. In practice, the ECE could be gradually recognised by local societies, medical chambers, or state authorities; in short, those who are responsible for overseeing the teaching of ultrasound in the country. Even though I know it will not be easy to introduce this educational system in Europe, the ramifications will be meaningful and extensive. Courses in countries that accede to this model will be recognised in all other countries of this model. Ultrasound training will gradually become so transparent that each candidate will be able to attend courses and practical training in all countries of the model. I know it probably won't happen today or tomorrow but it could set some horizons for the day after tomorrow because we should know where we want to go and how best to get there.

3. Teaching ultrasound at the University

Ultrasound diagnosis has become a modern stethoscope for each clinician. The function of the stethoscope is to equip a medical student with a device for learning during the first clinical semester. Although both the U.S. and Europe have included ultrasound diagnostics in the teaching curriculum of medical students at universities, it has been implemented with timid steps. Medical students at European universities first learn the function of ultrasound devices at the time of studying for the state exams. Occasionally, students may attempt to take an ultrasound probe into their own hands. But the training of ultrasound as an integral part of the curriculum is wanted. Students are not taught how to make detailed ultrasound diagnosis in various diseases until it is time for postgraduate training. But the point of the use of the ultrasound device should be as obvious as a stethoscope. It could thus be considerably more enjoyable teaching anatomy and physiology with this device so that the student would not have to learn on corpses and frog legs, but rather with their living classmates using ultrasonic devices. Students should already have learned to use the device during their studies of knobology and be motivated to use this technique throughout their studies and even more intensively during their practice.

Instead of leaving the advancement of ultrasound teaching to specialist societies we need to promote practical and theoretical ultrasound education at the university level, preferably in support of interdisciplinary ultrasound societies and their Federation EFSUMB. This would also partially reduce the exclusive use of the ultrasound method within this or that field, toward the more preferable technique, for example, of all students training in heart auscultation, which is not just for future cardiologists ...

Ultrasound would thus be able to be, a few million years after the bat and dolphin, quite commonplace for man as well.

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