European Federation of Societies for Ultrasound in Medicine and Biology

Game Changer?
Handheld Devices

EFSUMB is producing a position paper on the role of handheld ultrasound devices which will be presented in part at the ESR/EFSUMB Session at EUROSON 2017 Ljubljana, Slovenia together with an overview of the commercially available devices on the market. These miniature sized ultrasound equipment are the result of the rapid development of technology. It is now possible to use portable handheld scanners that can be operated on battery power and even transducers connected to a mobile phone, yet include conventional and often Doppler ultrasound features. EFSUMB will be looking at the strengths and the weaknesses of these devices and the common areas where they can achieve specific diagnosis and procedural aims to answer focused questions (e.g., does my patient have ascites?). The position paper will be based on literature reviews. The attractiveness of handheld devices use in paediatric ultrasound is considered as well as its benefits for medical students. The benefits of the handheld devices in point of care ultrasound for use by e.g. GPs on home visits, ambulance staff, nurses and physiotherapists as well as the current users of ultrasound scanners are discussed. Education and practical training will be considered, as well as the issues of documentation, image storage and data safety surrounding the handheld devices.

WFUMB CoE Project

The WFUMB Center of Education in Nairobi, Kenya completed the following project under the leadership of Dr. Sudhir Vinayak, Chairman, Department of Radiology, Aga Khan University Hospital. It has been recently published in the UMB. This was a project to train 3 midwives who had never used ultrasound to identify high-risk pregnancies. Unique software was used to send lossless images by mobile phone using a modem. Transmission times were short and the quality of images transmitted was excellent. All reports were validated by two experienced radiologists at the main hospital. The individual midwives were 20 km, 120 km and 400 km away from the main study centre at the hospital. It shows with the proper education, oversight and mentoring a succesful programme can be created to improve healthcare. Hopefully, using this as a template, it can be shown that it will work on a larger scale.


This study can be reviewed: http://dx.doi.org/10.1016/j.ultrasmedbio.2017.05.024

Odd Helge Gilja (EFSUMB President and WFUMB Collaboration Committee) visiting Sudhir Vinayak in Nairobi with a trained sonographer present.

An example of a handheld device from GE.