Can ultrasound lumbar spine be taught in an hour?

Quality improvement project to teach ultrasound of lumbar spine for neuraxial anaesthesia

Dr.S Sundaram, Dr V Venkatesh
Department of anaesthesia , Heartlands hospital , University hospital Birmingham

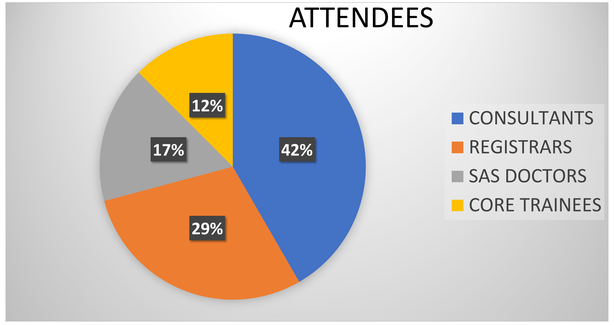
University Hospitals Birmingham NHS
NHS Foundation Trust

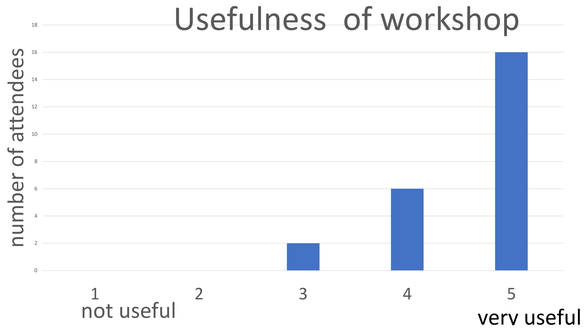
AIM:

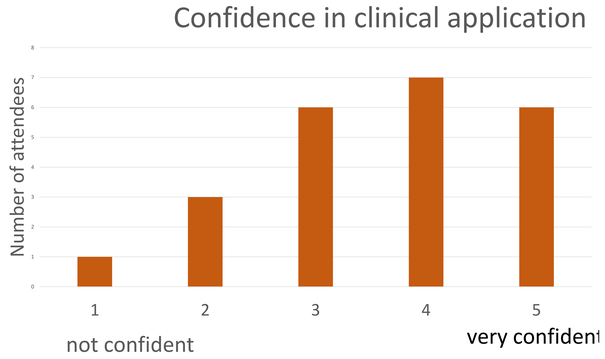
Ultrasound for neuraxial anaesthesia has been part of NICE guidelines since 2008 .However it is still not widely used among anaesthetists as routine practice. We aimed to teach and thus improve ultrasound use in neuraxial block including lumbar epidurals and spinal blocks in our Trust

METHODS:

We conducted a baseline survey among trainees to identify interest in attending a hands on workshop. Following an overwhelming positive response, we conducted three walk in sessions across the three working sites of our Trust . The sessions were conducted in theatre recovery and included a 10 min lecture to explain sonoanatomy of lumbar spine using posters, model spine and a power point presentation. This was followed by hands on scanning practice on a medical student volunteer. We collected feedback at the end of the sessions







RESULTS:

Only four of the 30 people that attended had used ultrasound for back scanning in their practice. The commonly used sonographic signs were demonstrated along with common pitfalls. Most attendees felt confident of using USG in their practice .Following the feedback received our next steps would be to make a video available, that can be watched to refresh memory of the landmarks and images on ultrasound

DISCUSSION:

Ultrasound has proven to be a useful tool especially in challenging cases[1].Poor uptake in the use of ultrasound may be due to unfamiliarity with sonographic anatomy. Our model of conducting a workshop with targeted teaching of a skillset with hands on practice will increase ultrasound use.

References
1. Perlas A,Chapparro L,Chin KJ.Lumbar neuraxial ultrasound for spinal and epidural anaesthesia:a systematic review and meta-analysis Reg Anesth Pain Med 2015;40:2015