

due to lack of opportunity due to reduction in hours or other factors is uncertain. This may represent a significant risk for patients presenting out of hours who require an emergency pleural procedure.

P33 THORACIC ULTRASOUND TRAINING: HOW ARE WE DOING?—A NATIONAL WEB-BASED SURVEY

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Introduction The 2010 British Thoracic Society guidelines strongly recommend the use of thoracic ultrasound for the investigation and management of pleural disease. Respiratory specialty trainees are expected to achieve level 1 competency in ultrasound by completion of training. There is a paucity of data on the current level of training, availability of teaching and achievement of competency in thoracic ultrasound. We conducted a national web-based survey among respiratory trainees to assess the current availability of training and competency in thoracic ultrasound.

Method A web-based survey was designed using the Kwik Surveys tool. The survey link was emailed to speciality trainees across all 16 deaneries in the UK. Data were collected on year of training, current placement, availability of ultrasound on the ward, dedicated training sessions and training mentors, current competency level, maintenance of a log book and the frequency of complications encountered despite using ultrasound.

Results A total of 170 trainees from all deaneries responded. The level of specialty training was equivalent when stratified by year of training and around half of responders were in teaching hospitals. Nearly three-quarters had access to ultrasound on the ward: there was no difference when stratified by teaching hospital. Three-quarters had attended an ultrasound course. Only 16% of trainees have regular dedicated training sessions, with significantly more in teaching hospitals ($p=0.04$). Nearly 60% did not have a training mentor. Overall 29% of responders have achieved level 1 competency but 11% stated they were unable to use ultrasound at all (there was no difference when stratified by grade). Over a third of trainees do not maintain a logbook. The complication rate despite using ultrasound was $<10\%$.

Conclusions The majority of specialty trainees have access to ultrasound on the ward and have attended a thoracic ultrasound training course. However, it is concerning that very few trainees have a regular dedicated ultrasound training session or a training mentor. If all trainees are to achieve level one competency by the completion of specialty training, there needs to be more importance placed on practical training and the maintenance of a log book.

Abstract P33 Table 1

	District General (n = 69)		Teaching Hospital (n = 83)		
	Yes	No	Yes	No	
Access to ultrasound on the ward	59 (73%)	22 (27%)	67 (75%)	22 (25%)	$\chi^2=0.13$ $p=0.72$
Regular dedicated ultrasound training session	8 (10%)	73 (90%)	19 (21%)	70 (79%)	$\chi^2=4.18$ $p=0.04$
Ultrasound training mentor	27 (33%)	54 (67%)	39 (46%)	50 (56%)	$\chi^2=1.96$ $p=0.16$

P34 ARE NURSING STAFF SUFFICIENTLY EDUCATED AND COMPETENT IN MANAGING PATIENTS WITH A CHEST DRAIN?

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Background The British Thoracic Society recommends that patients with chest drains should be nursed on a ward familiar with their care. Instruction from doctors and appropriate training of nursing staff is imperative to minimise complications associated with chest drains. Our audit aimed to determine the nurses' level of knowledge regarding chest drain management and the support and direction provided by doctors following drain insertion.

Methods We undertook a prospective case-note audit of chest drain insertion, management and complication rates. In addition we interviewed 100 nurses across medical wards familiar with chest drains, and they undertook a structured questionnaire about training, knowledge and confidence in chest drain care.

Results 29 chest drains were inserted. 65% patients suffered no complications but 25% patients reported pain during or following drain insertion. Potential for serious incidents was high; 20% of effusions drained $>2l$ within the first hour and 10% of pneumothoraces were clamped following insertion. Although all nurses reported to have managed a drain only 12% had received formal training and only 34% felt confident in managing a drain. Complication rates correlated with nurses' responses; 34% believed pain-relief was only indicated following insertion; 8% would clamp a drain inserted for a pneumothorax, while 20% were unsure whether a pneumothorax drain should be clamped; 16% believed pleural effusion drains should never be clamped, while 28% were unsure. Of those who believed an effusion drain should be clamped, 29% felt this was indicated after $>2l$ was drained within the first hour. Of concern, nurses on respiratory wards appeared to have limited knowledge of drain management. 78% of nurses felt poor instruction was provided by ward doctors with regard to chest drain management.

Conclusions Lack of evidence-based nursing care and insufficient training has resulted in uncertainty and knowledge deficit in important aspects of chest drain care, exposing patients to avoidable complications. Poor instructions to nurses from doctors following drain insertion further compromises patient care. A carefully designed and implemented care bundle to guide nurses through drain management could significantly lower post-insertion complications; an example has been rolled out and is illustrated.

P35 PRIMARY SPONTANEOUS PNEUMOTHORAX: ADHERENCE TO GUIDELINES AND HEALTHCARE ECONOMIC IMPLICATIONS

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Introduction International guidelines for the management Primary spontaneous pneumothorax (PSP) vary on the definition of size, and treatment of PSP. The American consensus based ACCP guidelines recommend removal of air via an intercostal drain (ICD) in large PSP, and the BTS guidance suggest needle aspiration (NA) first, with quoted success rates of 30%–80%.¹ In 2005/6 there were 5954 finished consultant episodes for PSP in England.²

Methods We performed a retrospective audit of PSP presenting to the Emergency Department (ED) over a 24-month period. Electronic