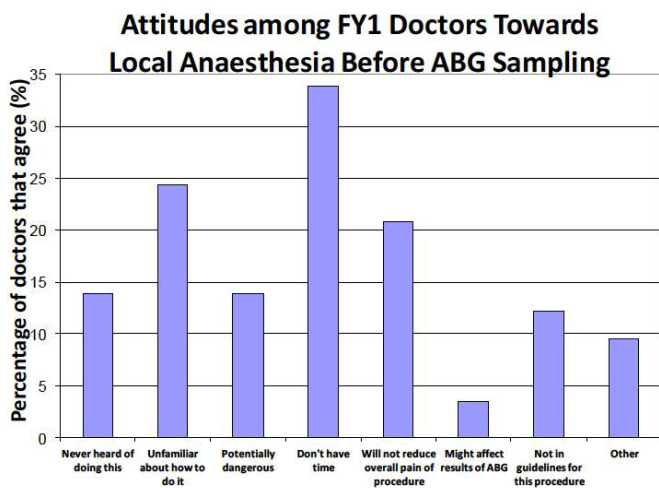


Only 30% of respondents believed using LA would lead to less repeated ABG sampling attempts.

93% of respondents had never personally been sampled for an ABG, although 44% would prefer LA to be used on them.

Conclusion The regular use of local anaesthesia before ABG sampling among FY1 doctors is rare. Awareness of the technique is poor, and education is needed. Prominence and promotion in teaching sessions and local guidelines, along with quick access to supplies is likely to help to prevent unnecessary pain in unwell patients.

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Abstract P236 Figure 1

P237 EMERGENCY OXYGEN THERAPY: DO MEDICAL STUDENTS KNOW MORE THAN DOCTORS?

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Background Oxygen therapy is a life saving drug which should be administered in accordance with British Thoracic Society Guidelines¹.

Objective To assess the knowledge of medical students, foundation doctors and specialist registrars on emergency oxygen therapy in a district general hospital.

Methods A questionnaire was sent to all medical students, foundation doctors and specialist registrars, studying or working at our hospital. Six clinical scenarios were given and the student or doctor was asked to indicate how much oxygen they would administer from a choice of five possible options.

Results Out of a total of 283 surveys sent, there were 129 responses which included responses from 18 specialist registrars 33 foundation doctors and 77 medical students. The medical students answered 54.5% correctly, foundation doctors 58% correctly and specialist registrars 47.5% correctly. Overall, across all grades, participants were aware of the indications for high flow oxygen. However there was a poor appreciation of the need for controlled oxygen in patients with certain comorbidities such as chronic obstructive pulmonary disease with acute coronary syndrome and morbid obesity.

Conclusions This survey has shown a poor understanding of oxygen therapy in many emergency situations. Of concern, the knowledge of our registrars dealing with medical emergencies was poorer than the foundation doctors and medical students. This may be a

reflection that since the BTS emergency oxygen guidelines production, teaching on emergency oxygen has now become an integral part of medical student teaching which more senior doctors will not have benefited from. Education on oxygen therapy should be mandatory in medical schools and also to doctors in all grades throughout the trust.

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P238 COMPETENCE IN, AND SAFETY OF, OXYGEN PRESCRIBING BY MEDICAL STUDENTS TAKING FINAL MBBS AS ASSESSED BY OBJECTIVE STRUCTURED CLINICAL EXAMINATION

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Introduction and Objectives National audits show oxygen prescribing is still not consistently safe and appropriate, despite the 2008 BTS Emergency Oxygen Guidelines. The aim of this study was to assess whether medical students taking Final MBBS examinations are able to prescribe oxygen safely and appropriately.

Methods A 2012 medical school Final MBBS Objective Structured Clinical Examination station assessed oxygen prescribing. Candidates were presented with one of two clinical scenarios requiring an oxygen prescription on a drug chart; Scenario 1: 72-year-old patient with COPD, and Scenario 2: 72-year-old hypoxic patient without respiratory disease. Prescriptions from 227 out of 363 students taking MBBS were retrospectively assessed against BTS standards using the criteria; correct target saturation range, oxygen flow, device and frequency of delivery. The remaining prescriptions were not available for analysis. Prescriptions were classified as 'safe/unsafe' and 'perfect (met all standards)/imperfect' by a respiratory nurse specialist.

Results 66/122 (54%) of candidates wrote the correct saturation range for the COPD scenario, compared with 42/105 (40%) for scenario 2. Oxygen flows were correct in 74/122 (60.6%) of COPD and 4/105 (3.8%) of scenario 2 prescriptions. The flow was appropriate for the device in 91.2% (207/227) and prescriptions specified 'continuous' oxygen in 60.8% (138/227). 59/122 (48.4%) prescriptions for COPD were safe and 26/122 (21.3%) 'perfect' compared with 19/105 (18.1%) safe and 0/105 (0%) perfect prescriptions for the hypoxic patient without respiratory disease. 185/363 (51%) students passed this station with overall year pass rate for finals 96% (349/363).

Conclusions This study demonstrates an important unmet need in undergraduate education as competence in, and safety of, oxygen prescribing by otherwise successful MBBS candidates was poor. Of the prescriptions available for analysis, only half used appropriate target saturations. Half of prescriptions for COPD scenario were safe but only one in five met all BTS standards. No prescriptions for hypoxia without respiratory disease met all standards and one in five was safe. We believe that this reflects the undergraduate teaching focus on oxygen in COPD. We recommend introducing a compulsory undergraduate e-learning module on oxygen delivery and prescribing as newly-qualified doctors need to be able to prescribe oxygen safely.

P239 JUNIOR DOCTORS PERFORMANCE AND INTERPRETATION OF SPIROMETRY

doi:10.1136/thoraxjnl-2012-202678.300

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Background Spirometry is a fundamental respiratory function assessment tool. A significant proportion of junior doctors have

great apprehension in performing and interpreting spirometry. The NICE (CG12) COPD guidelines state that all healthcare professionals managing patients with COPD should have access to spirometry and be competent in interpretation of results; and that it can be performed by any healthcare worker who has undergone appropriate training and keeps his/her skills up-to-date.

Aims We conducted an audit on junior doctors during their respiratory placement to establish whether hands-on skills training and teaching on spirometry in real-life may improve their understanding of the technique and reliability of interpreting spirometry.

Methods Doctors at different stages of training (foundation year (FY), core medical (CMT), GP vocational (GPVTS) and specialty trainees (ST)) participated in the audit. We used a pre-designed questionnaire containing a balanced mixture of questions testing procedural skill (maximum score 15) and interpretation (maximum score of 33) of different spirometry results. Confidence was assessed using a separate questionnaire of four domains. Baseline data was collected within the first month of joining the respiratory rotation, followed by training on technique and interpretation of results assisted by an accredited pulmonary physiologist (total time of 45 minutes). The same doctors were reassessed on the questionnaires in 12–16 weeks.

Results 25 doctors completed the audit assessment (10 FY1, 5 FY2, 4 CT1, 2 CT2, 2 GPVTS and 2 ST3). Significant improvements from baseline were noted in the median (IQR) scores of performance of spirometry technique (6 (4, 8) to 9 (8, 11); $p < 0.001$) and interpretation (11.5 (5, 15) to 18 (17, 24.5); $p < 0.001$). Moreover, there were marked improvements in total (performance and interpretation) and confidence scores from baseline.

Conclusion This audit demonstrates that spirometry is easily taught and its interpretation is a useful skill to acquire irrespective of a future career in respiratory medicine. We suggest that training for Foundation Year doctors is effective and feasible, and should be included in training programmes as spirometry is more reliable in the diagnosis and management of common respiratory conditions than PEFR testing mandated in the GMC core procedures.

P240 ASSESSING THE ACCURACY AND CONFIDENCE OF CHEST X-RAY REPORTING BY MEDICAL DOCTORS

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Introduction The reporting of CXRs for medical patients admitted to hospital vary across Europe. Our local policy is that all admission x-rays are reported but this may not be available at the time of senior medical review on the assessment unit. Comparison between physicians and radiology reporting has suggested radiologists provide improved quality (1) and accuracy (2) of reporting. There are no current curriculum competencies for trainees nor is CXR reporting formally assessed in undergraduate or post-graduate examinations.

Aim To assess the accuracy and confidence of CXR reporting by all grades within the medical division for common chest diagnoses presenting to the medical assessment unit.

Method 10 CXRs were presented to all grades within the medical division with a short clinical history and one digital CXR. Doctors were asked to give a pre-test confidence (out of 5) in reporting CXRs and then also give individual confidence levels for each of their CXR diagnoses.

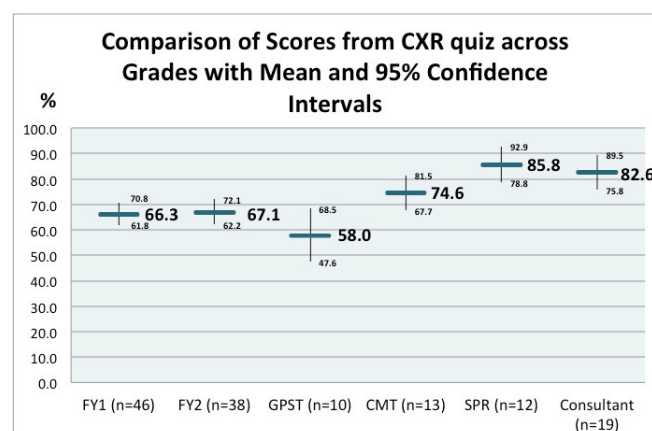
Results A total of 138 doctors completed the CXR quiz with average results and 95% confidence intervals shown in figure 1. The least well answered CXR diagnoses were left lower lobe collapse (38%), emphysema (45%), and mediastinal widening (57%). When correlated with average % confidence for each diagnosis, doctors were on average over-confident in the incorrect CXRs they answered; left

lower lobe collapse (64%), emphysema (62%), bilateral pneumothoraces (74%). Interestingly, for the correct diagnosis, the average confidence for diagnosing effusions, TB and pneumonia were much less.

Conclusion SPRs and Consultants scored the highest marks with the highest average confidence levels. Junior trainees felt least confident about making their diagnosis and were less likely to be correct. We recommend that SPRs and consultants must review all the CXRs requested to ensure accuracy of diagnosis. There also needs to be discussion with the JRCPTB and educationalist about including CXR competency as part of a trainee's generic curriculum on the e-portfolio, something which is currently lacking.

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Abstract P240 Figure 1

P241 PATIENTS' PERCEPTIONS OF THEIR RELATIONSHIP WITH HEALTHCARE PROFESSIONALS REGARDING THEIR ASTHMA MANAGEMENT: A UK SURVEY

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Introduction and Objectives Asthma is one of the most common chronic conditions in the world, with 5.4 million individuals diagnosed in the UK alone. Here, we report data from a UK-based survey, conducted to assess how patients perceive the relationship with their general practitioner (GP) or nurse with regards to their asthma management.

Methods This was a cross-sectional online survey administered by YouGov plc (November 2011) to a panel of over 350,000 individuals. An e-mail was sent to panellists who had previously identified themselves as having asthma, inviting them to take part in the survey. Responses were collated and analysed by YouGov and Insight Research Group. The survey was completed by 1083 individuals; 49% were aged over 55 years and 45% were male.

Results Overall, 91% of respondents reported that their asthma consultations occurred in GP practices; 69% had visited a practice nurse and 60% a GP. A total of 76% of respondents described the relationship with their healthcare professional (HCP) about their asthma management as 'good' or 'very good'. However, over one-third of respondents had either never been invited to (18%), or had not always attended (17%), asthma reviews. Moreover, 56% of respondents were unaware of Personal Asthma Action Plans and only 12% were currently using one, although 90% of those doing so found it 'very' or 'fairly' useful. The majority of individuals placed