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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Attitudes among FY1 Doctors Towards
Local Anaesthesia Before ABG Sampling

September 25

Never heard of Unfamiliar doing this about how to do it Unfamiliar potentially dangerous time overall pain of results of ABG guidelines for other opposedre the specific procedure of this procedure of the pr

Abstract P236 Figure 1

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

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**Background** Oxygen therapy is a life safe drug which should be administered in accordance with British Thoracic Society Guidelines<sup>1</sup>.

**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 comorbidites 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.

1. O'Driscoll BR, Howard LS, Davison AG. BTS guideline for emergency oxygen use in adult patients. *Thorax* 2008; 63: Supplement VI

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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.

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## JUNIOR DOCTORS PERFORMANCE AND INTERPRETATION OF SPIROMETRY

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

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