

between knowledge and confidence levels in our sample. Lack of awareness of their need for education may represent a barrier to doctors accessing training. Respiratory physicians are well placed to lead improvements in ACP and general palliative care in hospital.

Respiratory education and training

P234 TRAINING DEFICIENCIES AND LACK OF CONFIDENCE AROUND KNOWLEDGE IN PRIMARY CARE NURSES TREATING ASTHMA AND COPD PATIENTS

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¹AG Davison, ²L Jongepier. ¹East of England Pharmaceutical Alliance; ²NHS Midlands and East, Cambridge, England

There has been an increasing shift of respiratory care from secondary to primary. We have undertaken a training needs analysis by questionnaire of primary care nurses who treat patients with Asthma and COPD in all 511 practices in the East of England. 63% responded. Nurses were asked to grade their confidence levels from high (5) to low (1) in aspects of Asthma and COPD. Chi-square was used for statistical analysis.

Results 1. ASTHMA. 63% had a diploma. 90% followed BTS/SIGN guidelines. There was a high confidence level in 27% for differential diagnosis, 52% for inhaler devices and how to use them, 24% for interpretation of spirometry, 39% for emergency treatment, 22% for dealing with children 5–12 years old. High confidence was significantly greater (<0.001) in those with an asthma diploma.

2. COPD. 35% had a diploma. 82% followed NICE or GOLD guidelines. 76% ran clinics. There was a high confidence in 37% diagnosis, 37% for management and monitoring, 26% for interpreting spirometry, 32% in emergency treatment. High confidence was significantly greater in those with a COPD diploma. Nurses were asked if they were aware of services and confident how to refer; 94% were for smoking cessation, 55% for spirometry, 35% for oxygen assessment, 63% for pulmonary rehabilitation. The level of awareness was significantly higher for the latter two in those with a diploma.

3. ONGOING TRAINING OPPORTUNITIES Nurses were asked where and how often training was accessed on a scale 1–5. The most frequent (5) was self-directed learning in 37% and from the pharmaceutical industry 17%; the least (1) were time to learn 46%, monitoring with a practice expert 45%, secondary care provider 43%.

Conclusions This study has revealed serious deficiencies in training with many having no diploma. The benefit of having a diploma is shown in greater confidence in knowledge and in awareness of services and how to refer. On-going professional education is haphazard. If increasing care is going to be successfully transferred into primary both these issues must be addressed.

P235 THE BRISTOL COPD KNOWLEDGE QUESTIONNAIRE (BCKQ): ASSESSING THE KNOWLEDGE OF HEALTHCARE PROFESSIONALS INVOLVED IN THE DELIVERY OF COPD SERVICES

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K Edwards, S Singh. University Hospitals of Leicester NHS Trust, Leicester, United Kingdom

Introduction Healthcare professionals (HCPs) involved in the delivery of COPD services and self-management interventions require appropriate knowledge to inform patients about their condition. Although patient knowledge is often assessed to encourage patient education and self-management, little is done to assess the knowledge of HCPs providing disease information to patients and to establish whether HCPs have a broad spectrum of knowledge to effectively support disease management.

Objective To assess the knowledge of HCPs involved in the delivery of COPD services.

Method The Bristol COPD Knowledge Questionnaire (BCKQ) was distributed to 108 HCPs working in primary and secondary care COPD services (Coventry, Leicester, Lothian, Nottingham and Northampton) to assess knowledge. The BCKQ is primarily an outcome measure for patient knowledge (White *et al.* 2006). It is a multiple choice questionnaire containing 13 topics, each with five statements giving a total of 65 questions for which there is a right or wrong answer. Positive scoring was used with a mark being given for a correct answer. Incorrect responses indicate a knowledge deficit.

Results The overall findings revealed that HCPs had a mean score of 50 (77%) (minimum 24, maximum 62). The results from the BCKQ revealed particular gaps in knowledge in the breathlessness topic with a mean score of 3.3 (66%) (minimum 1, maximum 5) and across the medication topics, particularly inhaled steroids with only a mean score of 2.7 (54%) (minimum 0, maximum 5) of participants providing correct answers.

Conclusion The HCPs involved in the delivery of these COPD services had particular gaps in knowledge around breathlessness and medications. HCP gaps in knowledge could inadvertently impact patient knowledge and understanding of their condition and subsequently the ability of patients to effectively self-manage their COPD. Identifying gaps in knowledge can encourage HCP education and training to enhance HCP knowledge and subsequent patient care.

1. White, R. Walker, P. Roberts, S. Kalisky, S and White, P (2006) 'Bristol COPD Knowledge Questionnaire (BCKQ): testing what we teach patients about COPD'. *Chronic Respiratory Disease* 3: 123–131.

P236 THE USE OF LOCAL ANAESTHESIA FOR ARTERIAL BLOOD GAS SAMPLING - A MULTICENTRE SURVEY

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¹F Khan, ²A D'Silva, ³S Ahmed, ⁴E Patel, ⁵S Hassan, ¹ARC Patel. ¹Whipps Cross University Hospital, London, UK; ²Southend University Hospital, Southend on Sea, UK; ³Royal London Hospital, London, UK; ⁴Homerton University Hospital, London, UK; ⁵Newham University Hospital, London, UK

Background BTS guidance for Emergency Oxygen Use recommends that local anaesthesia should be used for all routine arterial blood gas (ABG) sampling [1]. Intradermal and/or subcutaneous local anaesthetic (LA) via small gauge needle has been shown to reduce pain associated with the procedure by more than half [2]. We aimed to quantify the prevalence of this practice and ascertain potential barriers.

Methods 160 FY1 doctors with at least eight months working experience, from five hospitals in London were given a ten-item anonymised questionnaire to measure practice and opinions regarding local anaesthesia before ABG sampling.

Results All 115 respondents (72% response rate) performed ABG sampling regularly, with 84% doing so at least weekly.

Only 27% of respondents had ever used intradermal and/or subcutaneous LA before ABG sampling, although only 5% did this regularly.

The commonest needles used were 25 gauge (orange) (49%), 28 gauge (insulin needle) (18%), and 23 gauge (blue) (16%).

70% of respondents had never used LA of any kind for ABG sampling. Topical LA use was rare.

14% of respondents had never heard of LA used for ABG sampling; 24% were unfamiliar with how to do it; 14% believed it was potentially dangerous; 34% claimed not to have time, 21% believed that LA would not reduce the overall pain of the procedure (Figure 1).

Allen's test was usually performed by only 25% of doctors before ABG sampling.