PERFORMANCE OF A SCREENING QUESTIONNAIRE FOR COPD IN A SHEFFIELD POPULATION

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Objectives Chronic obstructive pulmonary disease (COPD) is a disabling illness, which is characterised by damaged airways and lungs. The main cause of COPD is cigarette smoking, however, workplace exposure to dust can also be a cause irrespective of smoking status. As COPD is a progressive disease developing later in life, diagnosis is often made after damage has occurred. This study aims to produce an effective screening questionnaire to help identify new cases of COPD.

Methods A screening questionnaire was devised using results from a previous questionnaire-based study in Sheffield. The study data contained questions on symptoms, workplace exposures and spirometry data. Airway obstruction (AO), an indicator of COPD, was determined from the latter. The screening questionnaire was revised after a review of its content and a new question set suggested. The new questionnaire was analysed using logistic regression and the area under the receiver operating characteristic curve for effectiveness.

Results Logistic regression results from both questionnaires indicated that the odds of AO doubled if the individual had ever smoked (OR=2.46) and coughing tripled the odds of AO (OR=3.10). Workplace exposure to vapours, gas, dusts and fumes increased the odds of AO by 30% (OR=1.29). The modified questionnaire had a slightly lower percentage of AO correctly classified in the dataset of 74% versus 76% with the previous questionnaire.

Conclusions Due to the nature of data collection and the possible implications of some questions the modified questionnaire has been advanced through to the pilot stage. © Crown Copyright 2011