A QUESTIONNAIRE STUDY OF ELECTRONIC CIGARETTE USAGE IN PATIENTS ATTENDING RESPIRATORY CLINICS IN A DISTRICT GENERAL HOSPITAL

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Background/objectives In the UK there are now more than two million users and more than 400 variations on electronic cigarettes (e-cigarettes) based on nicotine strength, flavours, devices etc. Despite the exponential rise in the use of e-cigarettes primarily as an adjunct to quit smoking strategies, the drive has predominantly been patient led and industry marketed with medical profession reluctant to engage, citing potential toxic effects as yet uncertain. Reporting from semi-rural community and focusing on respiratory patients attending respiratory clinics, objectives were to (1) document the current smoking pattern of our patients, (2) investigate their prior health seeking behaviour with respect to quit smoking, and (3) more specifically with respect to e-cigarettes address some of the questions raised with respect to where the medical profession may still have a role.

Methods Prospective, self-completed, questionnaire based survey of patients (>75%) attending respiratory clinic first three weeks July 2014.

Results Of 78 patients, mean (range) age was 63 (17–91) years with 49% male. Of these, 17 were smokers, 32 ex-smokers, and 29 never smokers. 42/49 (86%) had previously attempted to quit smoking; 26/49 (53%) patients had both. Mean (SD) FEV1 was 1.18 (0.52)L (n = 40) with mean (SD) age at death 71 (61–78) years. 2 were lost to follow-up. CO-validated 4-week quit rate was 48% (21/44). Self-reported 6-month and 1-year quit rates were 41% (18/44) and 20% (9/44) respectively. Only 4/44 (9%) stopped varenicline early due to side-effects (nausea/headache).

Conclusions Varenicline was safe and well-tolerated when initiated in hospital. The 4-week 48% quit rate for these ‘sick’ smokers was almost as high as the 52% national target for ‘well’ smokers. Self-reported 6-month quit rates were almost as good as the best published rates with intensive support in COPD (41% cf 49%). Varenicline should be used as a treatment for smokers admitted with respiratory disease.

REFERENCES
1 NICE PH guidance 48. Smoking cessation in secondary care. 2013

ASSESSING THE IMPACT OF VARENICLINE INITIATION DURING ACUTE HOSPITAL ADMISSION FOR CURRENT SMOKERS WITH RESPIRATORY DISEASES: 18-MONTH EXPERIENCE FROM AN INNER CITY DISTRICT TEACHING HOSPITAL

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Introduction Smoking is a significant cause of respiratory disease and risk factor for chronic obstructive pulmonary disease (COPD) and asthma admissions. 70% of smokers admitted to hospital want to quit and quit smoking interventions during acute admission are NICE recommended. Many patients with respiratory disease are highly nicotine-dependent and varenicline is an effective treatment but is not routinely initiated during admission.

Method We retrospectively reviewed the notes of all patients prescribed varenicline during in-patient stay on the respiratory ward over 18 months (August 2012–January 2014). Baseline data included demographics, disease details (diagnosis, spirometry) and smoking history (tobacco/cannabis use, pack/joint-years). The primary outcomes were carbon monoxide (CO) validated quit rates at 4-weeks and self-reported quit rates at 6-months and 1-year.

All patients were seen on the ward by a smoking cessation advisor and after discharge as per NICE guidance. Nicotine withdrawal during varenicline initiation was treated with standard combination nicotine replacement therapy.

Results 44 patients (17M:27F) were prescribed varenicline during admission. Mean (range) age was 61 (23–81) years with median (range) 50 (8–180) pack-years. 8/44 (18%) also smoked cannabis. 29 (66%) had COPD, 7 (16%) asthma, and 8 (18%) had both. Mean (5D) FEV1 was 1.18 (0.52)L (n = 40) with FEV1%predicted 47 (21%) (n = 26). 7 patients (16%) died; all from smoking-related diseases, within 18 months of admission with mean (range) age at death 71 (61–78) years. 2 were lost to follow-up. CO-validated 4-week quit rate was 48% (21/44). Self-reported 6-month and 1-year quit rates were 41% (18/44) and 20% (9/44) respectively. Only 4/44 (9%) stopped varenicline early due to side-effects (nausea/headache).

Conclusion Varenicline was safe and well-tolerated when initiated in hospital. The 4-week 48% quit rate for these ‘sick’ smokers was almost as high as the 52% national target for ‘well’ smokers. Self-reported 6-month quit rates were almost as good as the best published rates with intensive support in COPD (41% cf 49%).

Varenicline should be used as a treatment for smokers admitted with respiratory disease.

REFERENCES
1 NICE PH guidance 48. Smoking cessation in secondary care. 2013

RECOMMENDATIONS FOR SMOKING CESSION SERVICE PROVISION FOR SMOKERS WITH COPD WITH MULTIPLE COMPLEX NEEDS: FINDINGS FROM A PILOT STUDY

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Introduction Smokers with COPD are highly nicotine addicted and often have additional complex needs. Quit rates are poor and there is little evidence-based guidance on specific cessation interventions for these patients. This pilot study aimed to identify barriers to smoking cessation for this patient group.

Method Smokers with COPD were offered up to 12 individual sessions with a clinical psychologist in addition to standard smoking cessation counselling and pharmacotherapy. The psychological intervention included an initial assessment and formulation on factors maintaining smoking which informed an individualised psychological intervention targeting barriers to smoking cessation.

Results 37 patients (moderate COPD, high prevalence of complex physical and psychological comorbidities) were included in the study (Table 1). 20/37 (35%) patients attended – 2 sessions (mean=5, range 2–12). 7/20 had already quit (relapse prevention referrals), 13 were smokers. 22/37 (39%) patients never engaged, 15/37 (26%) were lost to follow-up. 6/7 (86%) of the relapse prevention group maintained their quit. 2/13 (15%) of...
the current smoker group maintained a 28 day quit and 4/13 (31%) reduced tobacco intake. Psychological barriers to quitting were identified including smoking as a means of emotion regulation.

**Conclusions** For COPD smokers with a heavy smoking history and multiple quit attempts, and complex needs, additional psychological intervention alongside traditional quit smoking support may aid in preventing relapse, although further research is needed. For current smokers, the hypothesis was not supported, although the study did illuminate common themes regarding obstacles to quitting for this complex group who present a challenge to traditional quit smoking services.

It is clear that the current ‘one size fits all’ approach to smoking cessation does not meet the needs of these smokers who require more focused specific interventions to support smoking cessation including:

- Pre-quit support
- ‘Cut down to quit’ approach
- Long-term, intensive follow up
- Assertive outreach
- Multi-agency working

The above recommendations may provide a starting point for future service design.

**Abstract P286 Table 1** Patient demographics and morbidity

<table>
<thead>
<tr>
<th>Age (mean years±SD)</th>
<th>59 ± 10 (n = 57)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M:F</td>
<td>27:32</td>
</tr>
<tr>
<td>FEV1 (mean litres±SD)</td>
<td>1.59 ± 0.8 (n = 37)</td>
</tr>
<tr>
<td>MRC Dyspnoea Score (means±SD)</td>
<td>2.28 ± 1 (n = 37)</td>
</tr>
<tr>
<td>Consisting physical health problem e.g. arthritis, diabetes</td>
<td>79% (n = 29)</td>
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<tr>
<td>Consisting mental health problem e.g. depression, anxiety</td>
<td>64% (n = 28)</td>
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<tr>
<td>% with at least one psychosocial issue e.g. housing problems</td>
<td>67% (n = 30)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>57% (n = 35)</td>
</tr>
<tr>
<td>Pack Year History (means±SD)</td>
<td>41 ± 22</td>
</tr>
<tr>
<td>No. of previous quit attempts</td>
<td>3 ± 2</td>
</tr>
</tbody>
</table>

**P287 MEASURING THE ACUTE CARDIOVASCULAR EFFECTS OF SHISHA SMOKING: A CROSS-SECTIONAL STUDY**

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**Objectives** To investigate the acute cardiovascular effects of smoking shisha.

**Design** A cross-sectional study was carried out in six shisha cafes. Participants smoked shisha for a period between 45 min (minimum) and 90 min (maximum). The same brand of tobacco and coal was used.

**Setting** London, UK.

**Participants** Participants were those who had ordered a shisha to smoke and consented to have their blood pressure, heart rate and carbon monoxide levels measured. Excluded subjects were those who had smoked shisha in the previous 24 h, who smoke cigarettes or who suffered from cardiorespiratory problems.

**Main outcome measures** Blood pressure was measured using a sphygmomanometer. Pulse was measured by palpation of the radial artery. Carbon monoxide levels were obtained via a carbon monoxide monitor. These indices were measured before the participants began to smoke shisha and after they finished or when the maximum 90 min time period was reached.

**Results** Mean arterial blood pressure increased from 96 mmHg to 108 mmHg (p < 0.001). Heart rate increased from 77 and 91 bpm (p < 0.001). Carbon monoxide increased from an average of 3 to 35 ppm (p < 0.001). A correlation analysis showed no relationship between carbon monoxide and the other indices measured.

**Conclusion** The acute heart rate, blood pressure and carbon monoxide levels were seen to rise significantly after smoking shisha. The weak correlation between carbon monoxide levels and the other variables suggests that carbon monoxide levels had not contributed to their significant increase.