

P284 A QUESTIONNAIRE STUDY OF ELECTRONIC CIGARETTE USAGE IN PATIENTS ATTENDING RESPIRATORY CLINICS IN A DISTRICT GENERAL HOSPITAL

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10.1136/thoraxjnl-2014-206260.402

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; 26/42 had used no outside support, two had used nicotine gum or patches, three used drug therapies including Zyban or Champix, seven had used a combination, and four had used other unspecified techniques. 11/49 (22.4%) of those who had ever smoked had tried e-cigarettes: average set up was £23.33 with purchase on-line for three, specialist shops for four, market stalls for two, supermarket for one, and for one patient it was a gift. Only one patient had prior concerns about harmful effects, with two others asking and two others specifically being told by their retailer. Similarly, only two were given advice about suitable dosing based on baseline nicotine use, and two others about how to plan use and weaning.

Conclusions Although based on a small number of patients, the high use of e-cigarettes is recognised as is the intention to quit smoking. Importantly, the survey identifies a need for patient education about use and potential for harm and it is important that we now actively engage.

P285 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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10.1136/thoraxjnl-2014-206260.403

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.¹ Many patients with respiratory disease are highly nicotine-dependent and varenicline is an effective treatment^{1,2} 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.¹ Nicotine withdrawal during varenicline initiation was treated with standard combination nicotine replacement therapy.¹

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 (SD) 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%).² Varenicline should be used as a treatment for smokers admitted with respiratory disease.¹

REFERENCES

- 1 NICE PH guidance 48. *Smoking cessation in secondary care*. 2013
- 2 Jiménez Ruiz *et al*. *Nicotine and Tobacco Research*. 2012;14(9):1035-1039

P286 RECOMMENDATIONS FOR SMOKING CESSATION SERVICE PROVISION FOR SMOKERS WITH COPD WITH MULTIPLE COMPLEX NEEDS: FINDINGS FROM A PILOT STUDY

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10.1136/thoraxjnl-2014-206260.404

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 psychology intervention targeting barriers to smoking cessation.

Results 57 patients (moderate COPD, high prevalence of complex physical and psychological comorbidities) were included in the study (Table 1). 20/57 (35%) patients attended >2 sessions (mean=5, range 2–12). 7/20 had already quit (relapse prevention referrals), 13 were smokers. 22/57 (39%) patients never engaged, 15/57 (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

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

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

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10.1136/thoraxjnl-2014-206260.405

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.

P288 THE DESENSITISATION EFFECT OF GRAPHIC HEALTH WARNING LABELS AND CROSS-CULTURAL DIFFERENCES IN THE AWARENESS OF SMOKING RELATED CONSEQUENCES: COMPARING A LONDON AND SINGAPORE COHORT

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10.1136/thoraxjnl-2014-206260.406

Introduction and objectives Graphic Health Warning Labels (GHWL) assist in primary and secondary smoking prevention. A lack of evidence exists regarding their desensitisation with increased exposure. Investigating knowledge and attitudes around GHWL may allow better implementation of future public health policies. Singapore introduced GHWL in 2004, five years before they were introduced in the UK; this study aims to investigate any potential desensitisation effect by direct comparison.

Methods Data were collected from 266 smokers and non-smokers, 163 from London (54.6% smokers, 54.0% male, mean age 52.4 (17.8)) and 103 from Singapore (47.6% smokers, 77.7% male, mean age 57.7 (14.5)) between 2011 and 2013. A structured interview with fifty items, showing ten different GHWL, recorded demographics, smoking history, plans to quit and knowledge about the health-related consequences of smoking, as well as the emotional response, processing and impact of GHWL on behaviour. Participants further ranked hypothetical conditions that they could develop in terms of prevention and treatment.

Results The London cohort experienced significantly higher levels of 'disgust' when viewing GHWL than their Singapore counterparts (smokers 74.1% vs 49.0%, $p = 0.003$; non-smokers 83.8% vs 57.4%, $p < 0.001$), and felt GHWLs were a sufficient deterrent (smokers 33.7% vs 16.3%, $p = 0.029$; non-smokers 71.6% vs 50.0%, $p = 0.013$). London non-smokers had a higher awareness of heart disease (82.4% vs 32.0%, $p = 0.007$), stroke (72.3% vs 28.2%, $p = 0.02$), mouth and throat cancer (95.6% vs 35.0%, $p < 0.001$) and lung cancer (98.7% vs 35.0%, $p < 0.001$) as smoking-related diseases. London smokers reported an increased motivation to quit if they hypothetically developed smoking-related disease (85.2% vs 72.7%, $p = 0.001$). Blindness was the least well-known consequence overall (27.8%), despite provoking the highest levels of fear amongst Singaporeans.

Conclusion A desensitisation effect of GHWL is observed in cohorts with an increased length of exposure, both in smokers