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426. Anti-smoking interventions: prevention and treatment

P4209
Breast change perception in women after smoking cessation
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Aims and background: There are several barriers to smoking cessation that are unique to women. Compared to men, women report lower levels of motivation to quit and greater perceived difficulty with cessation. However, recent studies might favour commitment by women to quit through higher risk perception related e.g. to the development of premature facial wrinkling or to the decrease of mammographic density due to cigarette smoking.
Methods: To evaluate the perception of breast change after cessation and its possible motivational effect on manteinance, we interviewed 25 premenopausal women who had quit $\geq$ 1 year before. We obtained information and discussed with them about change in breast size and turgor. The two groups of women with and without breast change were statistically compared. with the non-parametric Mann-Whitney test (continuous variables) and the Fisher test (categorical variables).
Results: Median age was 41 years (range: 30-49 years). Median CO before quitting was 18 ppm and PY was 22.5; both these parameters characterize a category of mild smokers. Sixteen women (64%) reported breast change at 6 months after smoking quitting. Such an outcome was paralleled by only moderate effects on weight or BMI increase after quitting: Notably, of the 16 women with breast change, only 3 (19%) with a normal baseline BMI showed a BMI increase to >25.
Conclusions: These results indicate that women in pre-menopausal status reported subjective perception of change in breast size after smoking cessation, which may not be totally explained by weight gain. Further studies are needed to understand the effect, if any, of such perception on motivation to quit smoking.

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P4210

Smoking prevalence and its effect on lung function and soluble adhesion molecules levels in medical students

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The purpose of the study was to investigate the prevalence of tobacco smoking in students of Nizhny Novgorod Medical State Academy (Russia) and its effects on lung function and serum levels of soluble intercellular adhesion molecules (sICAM) sCD50 (sICAM-3) and sCD54 (sICAM-3).

Materials and methods: Data were collected between 2009-2010 using a structured questionnaire on 149 medical students (42 males and 107 females), aged 20 ± 1 years. The questionnaire included questions regarding personal characteristics, dependence and quitting smoking, consequences on health. Lung function tests were performed in 31 students (16 smokers and 15 non-smokers). The serum concentrations of sICAM-1 and -3 were determined using ELISA-method.

Results: There were 18,8% of current smokers (from which 46% females); an index of duration of smoking was $3,0\pm1,9$ pack/years. The early age of the beginning of smoking (of 9-14 years) has been registered. Means of FVC and PEF in smoking students were significantly lower than in non-smoking ($81,1\pm5,9$ vs $87,5\pm9,1\%$ and $75\pm9,7$ vs $84,9+7,6\%$, respectively). The serum levels of sCD50 and sCD54 in smoker ($140,4\pm57,7$ U/l and $78,9\pm29,7$U/l, respectively) were significantly reduced compared with non-smoker ($242,4+54,4$ U/l and $172,7+51,5$ U/l, respectively).

Conclusion: These results indicate high level of tobacco use among medical students in this Russian city, especially among females. The reduced levels of FVC and PEF, as well as of sICAM-1 and -3 in smoker compared with non-smoker were revealed. Decrease in levels of sCD50 and sCD54 in smokers might be due to inhibitory effect of smoking on intercellular adhesion.

P4211

The role of smoking in development of endothelial dysfunction in patients with COPD in combination with AH

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Endothelial dysfunction (ED) is a pathological finding of COPD and arterial hypertension (AH) at different stages.Incidence of AH in patients with COPD is higher than in the population.The important risk factor of COPD and AH is smoking which may initiate vascular impairment by stimulate adhesion molecule expression and leukocyte adhesion to endothelium.

Aims: The purpose of study was to find out the role of ED in the pathogenesis of COPD in combination with AH using sVCAM-1, and to study the reversibility of changes in the endothelium after smoking cessation.

Methods: Plasma levels of sVCAM-1 were quantified by ELISA in age-matched 45 patients with COPD and AH (mean age $61\pm6,5$) that were either current smoking COPD patients with AH (n=12) and COPD ex-smokers with AH (n=12),to be compared with smokers (n=10) and nonsmokers with AH (n=11).

Results: The comparison of smoking (19.5 ± 4.8) and ex-smoking (15.5 ± 3.6) COPD patients with AH revealed that level of sVCAM-1 was higher in smokers (p<0.05). There is no difference in smokers with AH (14.7 ± 5.4) comparing with non-smokers (16.5 ± 4.7). We have found difference between smokers with COPD and AH and smokers with AH (p<0.05), and a correlation between sVCAM-1 plasma level and the age (r=0.46,p<0.05).

Conclusions: Our results show that COPD smokers with AH have more evident expression of adhesion molecule to endothelium to be compared with ex-smokers. The combination of COPD and AH has more evident contribution in development of ED.The less evident of ED in ex-smoking patients shows reversibility of these changes.Correlation between sVCAM-1 and age shows that ED in elderly patients plays important pathogenetic role in comparing with middle age patients.

P4212

Acute effects of water-pipe smoking on pulmonary function and cardio-pulmonary exercise capacity in healthy subjects

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Background: Waterpipe tobacco smoking (WTS) has gained popularity, but the physiologic effects of WTS have not been extensively studied. Studies that have evaluated the impact of WTS have focused on its chronic effects or have only evaluated limited parameters. In a pilot study, we evaluated the acute effects of WTS on lung function and exercise capacity in water-pipe users. We hypothesized that

acute exposure to WTS alters pulmonary function and cardio-pulmonary exercise test (CPET) responses.

Methods: We recruited 15 healthy WTS male subjects (S). We used a single-group pre-test (having abstained from WTS for at least 48 hours before testing) post-test (within half an hour of 45-minute WTS session in a café design). We performed spirometry and CPET (cycloergometer; 2-min 20-Watt warm-up and 25-Watt increase every 2-min for 10 min).

Results: Mean age was 21.2 years; average carbon monoxide pre-test was 4.6 ppm and 27.5 ppm post-test; forced expiratory volume in one second (FEV_1) decreased in 7/15 S by 0.48 L/sec (9%), forced expiratory flow from 25% to 75% of vital capacity ($FEF_{25-75\%}$) decreased in 11/15 S by 0.65 L/sec (12%). Breathing reserve decreased in 10/15 S by 10.2%; oxygen pulse decreased in 9/15 S by 2.4 mL/beat (19%); 8/15 S could not complete the CPET after WTS (8.29 min average), vs. 6/15 S pre-WTS (8.33 min average); 9/15 S reported greater degree of shortness of breath at mid/peak exercise using Borg scale; among those completing exercise time pre and post (6/15 S), maximum oxygen consumption (VO_2max) dropped in 5/6 S.

Conclusion: Acute WTS causes impairment in pulmonary function and CPET ventilatory and cardiovascular responses.

P4213

Waterpipe smoking in Lebanese women: A lower prevalence but a higher risk of dependence

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Introduction: Waterpipe smoking has gained in popularity among Lebanese women. Our objective was to evaluate whether nicotine dependence is higher in smoking women compared with men.

Methods: Data were taken from a cross-sectional study on Lebanese residents aged 40 years and above. After an oral informed consent, subjects answered a questionnaire, including smoking history, cigarette and waterpipe dependence using validated dependence questionnaires (Fagerström for cigarettes and LWDS-11 for waterpipe).

Results: 1066 males and 1134 females were interviewed; respectively, 58.7% and 42.9% of them had ever smoked cigarettes, while 6.9% versus 6.7% had ever smoked waterpipe (p<0.001). Similar results were found for actual and previous smokers. However, when looking at dependence, patterns differed between genders: 57.5% vs 49.1% in cigarette smokers (p=0.041), 35.9% vs 51.6% in waterpipe smokers (p=0.076), and 67.9% vs 43.6% in mixed smokers. These results were confirmed by dependence dose-effect relationship (p=0.05 for trend) and multivariate analysis (ORa=2.28). The main components of waterpipe dependence in women were positive and negative reinforcement (p<0.05), but not nicotine dependence or psychological craving. In female waterpipe smokers, a higher prevalence of respiratory disease and symptoms were found.

Discussion and conclusion: Since tobacco dependence seems highly associated with tobacco related diseases, waterpipe smoking women could be at a higher risk of disease; they should be considered as real smokers, and receive particular attention during tobacco related health education and in smoking cessation treatments.

P4214

Smoking in posttuberculosis bronchiectasis syndrome patients

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Bronchiectasis is the permanent dilation of the bronchial airway. Posttuberculosis bronchiectasis syndrome occurs with the healing of extensive and destructive tuberculosis. The frequency of this association is 15-20%. The smoking – active TB association has a 45-85% frequency rate.

Material and methods: We assessed 53 patients with idiopathic bronchiectasis, with a mean age of 52.2 ($\pm$ 12.8) and another 37 patients with pulmonary tuberculosis sequelae, mean age of 48.4 ($\pm$ 16.6). We compared the share of smokers in the two categories.

Results: In the group of idiopathic bronchiectasis patients, the fraction of smokers was 60.52%, with a 32.1 ± 17.9 PA index; in the group of patients with bronchiectasis secondary to tuberculosis, the fraction of smokers was 71.42%, with a 30.2 ($\pm$ 11) PA index.

Conclusions: The number of smokers among posttuberculosis bronchiectasis patients was higher, although the PA index was lower than in idiopathic bronchiectasis patients. The high smoking rate in patients with idiopathic bronchiectasis, as well as the PA index was surprising. I believe the high smoking rate in patients suffering from the posttuberculosis bronchiectasis syndrome was due to their poor socio-economic conditions, which also explains a lower PA index, as well as to the need of implementing health education programs for these categories.

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P4215
Interrelationship between clinical symptoms expressiveness and brush-biopsy cell count and proteinases and its inhibitors in sputum at smokers and nonsmokers with COPD

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We study relationship between clinical picture and expressiveness of inflammatory changes in bronchi at COPD smokers and nonsmokers.
Endobronchial biopsy and brush-biopsy cytological research and definition of elastase and its inhibitors in sputum were conducted at 46 COPD patients. To reveal correlations we used Spearman coefficient. At COPD nonsmokers the expressiveness of cough and dyspnoe has positive correlation with neutrophiles count (R=0.95), dystrophical epithelial cell count (R=0.95) and negative correlation with eosinophiles count (R=-0.95). COPD nonsmokers have positive correlation between elastase activity and goblet cell count (R=0.81) and atrophical epithelial ciliated cell count (R=0.83). It is evidence of influence of elastase on development of atrophy and hypersecretion in COPD exacerbation. COPD smokers have no correlation between cough expressiveness and brush-biopsy cell count, but dyspnoe expressiveness has positive correlation with neutrophiles count (R=0.42), and negative with lymphocytes count (R=-0.70). At COPD smokers the negative correlation was revealed between FEV_1 and dystrophical epithelial cell count (R=-0.40), between a2MG and reserved cell count (R=-0.42), positive correlation between a2MG and typical epithelial ciliated cell count (R=0.46), proliferated epithelial ciliated cell (R=0.56). That may be caused by capacity of a2MG to increase count of cell mitoses. Smoking influences on inflammation mechanisms at COPD patients, that is reflected on correlations between brush-biopsy cell count, proteinases and its inhibitors in sputum and clinical symptoms expressiveness.

P4216
Determinants of change in quality of life after smoking cessation of health care employees

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We aimed to assess the influence of a smoking cessation programme on quality of life (Qol).
703 smoking employees from University Hospital Basel, Switzerland, and two local health industry companies (Novartis Pharma AG, F.Hoffmann- La Roche AG) participated on a structured smoking cessation programm. This consisted of 10 visits with counselling and motivational within 2 years of follow-up. Various modalities of nicotine replacement therapy and/or bupropion were offered. Quality of life was asessed by Satisfaction with Life scale (Qol). The impact of several factors on quality of life was analyzed by linear mixed effect model (fixed effects with 95% confidence intervalls are shown in parentheses)
38% of participants were abstinent from nicotine after 2 years. Successful quitting at 2 years was associated with a significant improvement in quality of life (0.75 95% CI 0.015;1.49; p= 0.045). Smokers with higher quality of life (Qol) at baseline showed greater improvement than those with lower baseline values (0.5 95% CI 0.42; 0.57; p< 0.001). Changes in quality of life were affected by medication after a successful quit attempt (p= 0.029) and the interaction of time and medication (p= 0.02)

Quality of life after a smoking cessation attempt

	Num d.f.	Den d.f.	F-value	p-value
Age	1	411	1.92	0.167
Gender	1	411	1.54	0.216
Quality of life (baseline)	1	411	159	<0.001
Abstinence (24 months)	1	411	4.03	0.045
Treatment	5	411	2.49	0.031
Interaction (Abstinence/medication)	5	411	3.63	0.029
Interaction (visit/medication)	15	411	2.40	0.020
Center	2	411	1.38	0.250

The outcome of a quit attempt as well as baseline quality of life, pharmocological support and time influenced quality of life within 2 years of a quit attempt.

P4217
Public spirometry for primary prevention of smoking-related diseases?

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Background: The most effective action for primary prevention of COPD and other smoking-related diseases is smoking cessation early enough. In secondary prevention smokers with airway obstruction were more likely to quit smoking. The aim of this study was to evaluate the impact of a public spirometry on smoking habits in terms of primary prevention.
Methods: Spirometry with its medical analysis was offered to visitors of a local public event called "Lange Nacht der Wissenschaften" ("Long night of sciences") on 24.10.2009. The impact of results on smoking habits was evaluated in all smokers with an anonymized questionnaire afterwards.
Results: 257 people at an age of 30 (IQR 22 – 46) were examined. Out of 44 current smokers (17.1%) only two individuals showed a prebronchodilator FEV1/FVC-ratio <0.7. 14 smokers stated to have an increased motivation to quit smoking whereas 28 smokers declared that their motivation to quit smoking was independent of spirometry result. These smokers were significant younger (median age 28 vs. 40 years, p=0.025) without differences in spirometry results or smoking habits.
Conclusion: In an unselected population with a high amount of younger adults normal spirometry did not show a short term benefit for primary prevention of COPD or other smoking-related diseases in terms of an increased motivation to quit smoking.

P4218
Monitorization of tobacco industry arguments in printed press before and after smoke-free legislation in Turkey

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Turkey enacted smoke-free legislation in July 2009 despite heavy opposition from tobacco industry allies. The aim of this study was to evaluate the appearance of pro and con tobacco control arguments in the printed press within a time-line.
12453 news articles obtained by media monitoring during October 2008 and May 2010 were analyzed according to their content, timing and advertising equivalent. Of all the news 36% was related to legislation, 23% to the negative economic impact.At the time of legislation enaction, the positive news increased by 61%, negative news by 365% compared to the previous month. During the total study period, the advertising equivalent of positive news were found to be 56.2, negative news 39.9, press bulletin coverage of the national NGOs 3.2 million USD. The industry arguments such as designated smoking areas, hospitality-customer relations, ventilation systems were noted predominantly around the time of implementation of the legislation. 1041 news article were printed about the sectoral trade activities of the tobacco industry with an advertising equivalent of 12 million USD. The arguments of freedom were found in 334 news with an advertising equivalent of 4262 USD, while advertising rights were reported 569 times with advertising equivalent of 10 million USD. The negative press coverage lasted longer than previously reported.
Media monitoring is a not only a useful tool, to watch sectoral activity and misleading information distribution, but also to plan the counteracting activities. Media campaigns to increase awareness among public should be started long before the enaction of the legislation, and sustained after the implementation.

P4219
Modification of the international primary care airways group (IPAG)-questionnaire for Japanese

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Background: Several reports showed the IPAG- Questionnaire (Q) is useful for screening COPD, but may require modification for Japanese. However its modification hasn't been reported yet.
Objective: The aim of this study was to establish a modified IPAG-Q for Japanese.
Method: Smokers (excepting those with a history of bronchial asthma) aged 40 and over who underwent a screening CT and had given written informed consent were enrolled. They were classified into two groups based on the results of respiratory function tests (FEV$_1$% ≥ or < 70%): control-smokers and a COPD group. We compared the original IPAG-Q between the two groups and statistically analyzed the results to modify it.
Results: A total of 268 subjects (control-smokers/COPD: 244/24) were enrolled. We described the receiver operating characteristic (ROC) curve about the original IPAG-Q: the area under the ROC curve (AUC) was 0.764, cut-off was 18.5/total 56 (score), sensitivity was 0.750 and specificity was 0.615. Logistic regression analysis revealed only "wheeze frequency" was useful in the "symptoms/history", so we deleted "symptoms/history" except for this parameter. And we improved the stratification for age, BMI, and pack/year: age ≥ or < 50 yrs, BMI <18.5/≥ 18.5 & < 25.0/≥ 25.0, and pack/year ≥ or < 30. We then constructed a new scoring system based on the original paper and designed a modified IPAG-Q for Japanese. This modified model was proved valid in the ROC curve; AUC was 0.828, cut-off was 8.5/total 31 (score), sensitivity was 0.833 and specificity was 0.672. This model was superior to the original one.
Conclusion: Our modified IPAG-Q is of greater use for screening COPD among Japanese than the original one.

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P4220

WITHDRAWN

P4221
Motives to quit smoking: Insight from the Melen study
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Background: Ethnic, cultural and social factors influence the motives to quit smoking.
Aim: To investigate the current prevalence of smoking and motives to quit on smoking cessation in Turkey in a large population-based epidemiologic study.
Methods: A total of 2298 subjects with a mean age of 50 (age range 18 to 92) were interviewed. The subjects reported information regarding socio- economic status, medical history and current use of medications. Tobacco use behaviors (current status of smoking, number of cigarettes smoked daily, duration of smoking, age of addiction, attempts and desire to quit) and motives of quitting were asked.
Results: Sixty five percent of the study population (1495 subjects) had never smoked. Three hundred eighty nine subjects were current smokers where as 414 subjects had quitted smoking. Crude smoking rate of the population was 17%. The most frequent motive was the smokers' health status (having a chronic disease that urged the patient to use drugs daily and continuously). The most common motive in primary prevention was the assistance of a physician. Self motivation and religious beliefs showed better success rates. Age and existence of chronic diseases were found to be the independent predictors of quitting (Odds ratio (OR): 1.03 [95% confidence interval (CI): 1.02-1.05], p: <0.001 and OR 2.1 [95% CI 1.37- 3.18] p:<0.001; respectively).
Conclusions: Prevalence of smoking is decreasing in Turkey. Smoking ban, cost, physician assistance, comorbidities, notices on packages, religion, care for family members and self motivation are the most important motives to quit.

P4222
Factors associated with different patterns of adherence to treatment in a smoking cessation unit
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Objective: Identify different patterns of adherence to therapy in the treatment of patients attending a specialized smoking.
Material and methods: Retrospective cross-sectional study of a sample of smokers who come for smoking cessation. The sample was divided into 4 groups: group 1, who only attend the first visit, group 2, persons who do not attend all visits and not answering phone calls, group 3, people who do not attend all visits but answer phone calls to complete a period of 6 months of treatment, group 4, all patients attending follow-up visits.The collection period runs from January 2004 to June 2010. Data were collected at each visit following the same methodology using an electronic medical record designed for this purpose.

Results: We analyzed a total of 1545 people who attended the clinic. The results are summarized in Table 1. The quantitative variables are described as mean and standard deviation. The qualitative variables are described as total count and percentage.

Variable		Group 1	Group 2	Group 3	Group 4	Total	p
N		591 – 38,3%	346 – 22,4%	359 - 23,2%	249 – 16,1%	1545 -100%	
Age		44,94 (11,55)	46,16 (11,17)	45,79 (12,06)	47,67 (11,07)	45,8 (11,54)	0,017
Sex	Male	363 (61,4%)	166 (48%)	192 (53,5%)	152 (61%)	873 (56,5%)	0,000
	Female	228 (38,6%)	180 (52%)	167 (46,5%)	97 (39%)	672 (43,5%)	
Abstinence at 6 months		0 (0%)	0 (0%)	177 (49,3%)	172 (69,2%)	349 (22,6%)	0,000
Ends drug treatment		0 (0%)	207 (59,8%)	182 (50,7%)	241 (96,8%)	630 (40,8%)	0,000
Richmond test high		382 (65%)	185 (53,8%)	253 (70,7%)	174 (71,3%)	994 (64,8%)	0,000
Psychiatric comorbidity		156 (26,4%)	139 (40,2%)	106 (29,5%)	48 (19,3%)	449 (29%)	0,000
number of cigarettes per day		27,10 (13)	23,91 (10,29)	25,73 (11,93)	24,55 (10,83)	25,65 (11,94)	0,000
Diabetes Mellitus		40 (6,8%)	13 (3,8%)	13 (3,6%)	19 (7,6%)	85 (5,5%)	0,037

Conclusions: Age, a lower level of motivation, the coexistence of psychiatric disorders and increased consumption of cigarettesis are associated with poorer adherence to treatment.

P4223
Smoking cessation ward rounds – The impact on smoking patterns
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Background: Smoking cessation is a NHS (UK) priority and all health care professionals are encouraged to refer smokers to a "stop smoking" service. Many UK public health campaigns have targeted smokers. Our busy District General Teaching Hospital introduced a daily "targeted" smoking cessation ward round in 2008. This study evaluates the impact of this, on smoking patterns.
Results: 136 patients were surveyed in 2008 and 187 in 2010. 58% of both groups had a history of smoking, 69% were current smokers in 2010 and 35% in 2008. Of the smokers, 73% in 2008 had tried to quit compared to 68% in 2010. the percentage of smokers offered educational material while in hospital increased from 29% in 2008 to 38% in 2010
The table below summarises reasons for patients deciding to quit smoking:

Table 1. Reasons for smokers deciding to quit

	% 2008 (n=58)	% 2010 (n=73)
Personal illness	19	49
Social pressure	39	30
Medical advice	12	23
Cost	29	22
Other	3	9

Conclusions: There has been a marked increase in the number of patients deciding to quit smoking following education and advice from medical professional's. The number of smokers who decide to quit due to personal illness has also increased. A new daily smoking cessation ward round and additional support from healthcare professionals is considered to have significantly increased the uptake of smoking cessation advice in this group of patients.

P4224
Effectiveness of a cognitive orientation program with and without nicotine replacement therapy in stopping smoking in hospitalised patients
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Introduction: We analysed the effectiveness of a high intensity behavioural-cognitive intervention compared to minimal intervention started during a hospital stay, to see if the combination of nicotine replacement therapy (NRT) can increase the quitting rate at 12 months of follow up.
Method: 2560 active smokers were studied during their hospital stay. Of these, 717 smokers refused to enter the study and after a minimal intervention they were asked if we could telephone them after one year to ask if they still smoked. The remaining 1843 smokers who received high intensity cognitive therapy were randomised to receive or not receive NRT. The follow up after discharge was carried out by outpatient visits or with telephone sessions.
Results: At one year of follow up, 7% of those who declined to enter the study had stopped smoking compared to 27% of those who entered the study (p=0.001). There were significant differences between the group that only had behavioural therapy (21% stopped) compared to the group that also had NRT (33% stopped; p=0.002). In this latter group there were significant differences (p=0.03) between those who had follow up in clinics (39% stopped) compared to those who were followed up telephone sessions (30%). In the multivariate analysis, the predictors of quitting at 12 months were: to have used NRT (OR 12.2; 95% CI, 5.2-32; p=0.002) and a higher score in the Richmond Test (OR 10.1; 95% CI, 3.9-24.2; p=0.01).
Conclusions: A cognitive type intervention started on smokers when admitted to hospital increases quitting rates at 12 months, compared to a minimal intervention, and these rates increase even more significantly if NRT is added.

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P4225
Smoking cessation advice (SCA) and referral: Do we need to further educate healthcare professionals?
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Background: Health promotion is a key component of holistic, patient-centred care. 50% of UK smokers make at least one annual attempt to quit; only 3% succeed long-term1. Due to the long-term complications of smoking, we recognise the importance of prompt & effective SCA, a NICE (UK) priority2.
The objectives of this study, in an area of socio-economic deprivation in Liverpool, were to determine whether we provide simple SCA and to explore referral rates to specialist SCA services.
Method: We undertook a 3-week prospective analysis on the respiratory wards at a large UK University Hospital (December 2010). Specialist SCA is available for all in-patients.
Results: 81 patient records were reviewed. Mean age 72 (SD 14) years; 34 (43%) male, 30 (37%) current smokers. Of these 40% received documented SCA from a HCP however, only 42% of this guidance was at time of admission. Only 43% of these smokers were referred to SCA services, of which 85% received a consultation; following this 36% continued to smoke whilst an in-patient.
Conclusion: Best practice would suggest SCA within 24 hrs of admission but this occurs in only 40% of cases. Long term follow-up of the smoking cessation rates in these patients is pending. We are working within our hospital to ensure training occurs in this area as per NICE guidance2, aiming to reduce the burden of smoking related lung disease and have implemented a cyclical SCA education programme for all HCPs with the hope of improving SCA referral rates.
1 West R (2006) Background smoking cessation rates in England
2 NICE- www.guidance.nice.org.uk/CG101/Guidance/pdf/English

P4226
Status of the smoking cessation and its costs in eastern Mediterranean countries in 2009
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Background: This study was designed with the purpose to address the situation with smoking cessation efforts and its expenditure and to provide basis for future studies and implementing tobacco control programs across countries in the region.
Materials and methods: The study was in form of questioning participating country representatives from the Eastern Mediterranean region in INB3 who were all either focal point individual or expert in tobacco control programs. Information needed included methods for tobacco cessation, cost of services including counseling by primary physician or specialist, gum or nicotine patch, Zyban, champix and other practices were collected.
Results: In 10 countries (47.6%), smoking cessation programs and counseling was directed by primary physicians. Also, 8 countries (38%) provided services through specialists. In 13 countries (61.9%), nicotine gum and in 14 countries (66.7%) nicotine patch is accessible in pharmacies. In 6 countries (28.6%), Zyban (Bupropion 150 mg) and in 7 countries (33.3%), Champix (Varnicline 1 mg) are available at pharmacists with written prescription. The mean costs of each service were higher than a pack of cigarette significantly.
Conclusion: In countries with support services for tobacco cessation, directors need to provide care at society level, less costly and accessible for every body and in countries where such programs have not been initiated, it is recommended that effort to do so occur.

P4227
Smoking assessment & treatment in hospital: Are we providing "right care" and/or missing cannabis-smoking?
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Introduction: Hospital admission provides opportunities for quit-smoking advice/support. Some inpatients also smoke cannabis, which causes bullous-emphysema, but prevalence is unknown. The study aimed to determine inpatient cannabis-smoking and to measure effectiveness of our quit-smoking service
Methods: Trainees/medical students carried out a single-day cross-sectional survey of adult inpatients, using standardised anonymous questionnaires, hospital notes and medication charts. Data was compared with previous surveys over five years.

Smoking Prevalence and Intervention Efficacy

	2005	2008	2010
Patients Interveiwed (n)	180	180	184
Response Rate (%)	77	69	83
Smoking-Status Documented (%)	87	86	80
Smokers (%)	17	14	18
Cannabis Smokers (%)	–	–	6.5
Advice to Stop Smoking (%)	53	62	55
NRT Offered /Prescribed (%)	–	42	44
Cessation-Plan Documented (%)	13	15	35

Results: 184/223 inpatients were interviewed. Cigarette-smoking prevalence was 33/184 (18%); cannabis-smoking 12/184 (6.5%). 10/33 (30%) cigarette-smokers smoked cannabis. 544 patients were interviewed over 5 years:
Inpatient smoking prevalence and advice to stop smoking did not change (16±2% and 57±4% respectively). NRT prescription and cessation plan documentation increased to 44% and 35% respectively.
Conclusions: 1/5 inpatients smoke but < 60% were given quit smoking advice despite being an evidence-based, cost-effective intervention. 1/3 cigarette-smokers also smoked cannabis. Further studies should determine the impact on health of this high prevalence. Whilst NRT and cessation plans have increased, the latter is only provided to ~40% of smokers. Further work needs to ensure effective interventions for all inpatient smokers.

P4228
Optimal cut-off point of exhaled carbon monoxide to validate self-reported smoking status in healthy adults
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Background: There is no current consensus regarding the optimal cut-off point of exhaled carbon monoxide (CO) to distinguish smokers from nonsmokers.
Objectives: To assess the accuracy of an exhaled carbon monoxide cut-off point in order to distinguish actual smokers from nonsmokers among apparently healthy adults.
Methods: We studied 50 current smokers (20 male; 47±12 years; BMI: 26±4 kg/m^2), with normal lung function (FEV$_1$/FVC: 81±6; FEV$_1$: 84±18%pred) who self-reported their smoking status and habits; and 31 paired non-smokers (11 male; 44±11 years; BMI: 26±4 kg/m^2; FEV$_1$/FVC: 83±6; FEV$_1$: 102±11%pred). All subjects were submitted to CO assessment (in the group of smokers, after a mean of 10±1.2 hours of cigarette abstinence), using a portable CO monitor (MicroCO®).
Results: Median [interquartile range] levels of CO in the group of smokers and non-smokers were 10 [7-17] and 3 [2-4], respectively. The 6ppm cut-off point suggested by the manufacturer generated a 77% sensitivity and 100% specificity; however a 4.5ppm cut-off point generated the highest combined sensitivity (90%) and specificity (90%). The ROC analysis indicated that the CO monitor provided high diagnostic accuracy to distinguish smokers from nonsmokers [area under the curve = 0.979 p<0,001].
Conclusions: Using a portable CO monitor, a 4.5ppm cut-off point seems more accurate than the cut-off point suggested by the manufacturer in order to distinguish smokers from nonsmokers among apparently healthy adults.

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