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427. Epidemiology of smoking and smoking cessation interventions

P4229**Airway reactivity to inhaled mannitol in young water pipe smokers**

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Background: The inflammatory cascade related to water pipe (WP) smoking and airway hyperresponsiveness (AHR) remains unknown. We aimed to determine whether WP smoking is associated with AHR in young WP consumers.

Methods: Mannitol challenge test (Aridol[ ] Pharmaxis Ltd) was performed in acute (n=30) and chronic (n=30) WP smokers as well as cigarette smokers (CS, n=30) and life-long non-smokers (n=30). Acute exposition was defined a single episode of WP smoking \leq 24 hours, chronic as a weekly consumption of WP for \geq the last 4 weeks.

Results: Data of 74 subjects has been analyzed so far (15 acute and 9 chronic WP smokers, 19 CS, 31 non-smokers). Mean age was 22.6 ± 2.4 years, 51.4% male, mean FEV₁ 3.76 ± 0.70 (p=ns for all). CS had 5.9 ± 3.2 PY; 35 (47.3%) had a positive allergy test. AHR to mannitol expressed by $\geq 15\%$ fall in FEV₁ was more common in CS (26.3%) as compared to the other groups (p=0.028). The provoking dose to induce a 15% fall in FEV₁ (PD15), a measure of sensitivity, was 155mg [115-395] in CS vs 315 mg [155-475] in non-smokers. The response-dose ratio (RDR) (% fall in FEV₁/cumulative dose), a measure of reactivity, differed between the groups and was higher in CS 0.023 [0.011-0.051], followed by chronic WP smokers 0.010 [0.007-0.015], acute WP smokers 0.011 [0.006-0.015], and non-smokers 0.007 [0.005-0.017], p=0.031. While RDR differed significantly between CS smokers and non-smokers (p=0.007) and acute WP smokers (p=0.025) it did not between CS and chronic WP smokers (p=0.118).

Conclusion: Even modest amounts of cigarette smoking induce AHR to mannitol. Airway reactivity to mannitol is similarly increased in cigarette smokers and chronic water pipe smokers.

P4230

Impact of active smoking on the severity and evolution of asthma
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In adults with asthma, the effects of active smoking on asthma severity have been reported.

The aim of our work is to study the influence of active smoking on asthma control. This is a prospective study spread over four years, the profile of 25 smoking asthmatic patients (group S) and 100 non-smoking asthmatic patients (group NS). The average age is 36 years in the 2 groups. There was a male predominance in the group S and female in the group NS ($p = 0.00001$). Asthma is isolated in 33% (group S) and in 16% (group NS) ($p = 0.05$). Stage III is present in 65% (group S) and 42% (group NS) ($p = 0.001$) and is identical for stage IV (18%). Stage I is not found in group S. Asthma is associated with rhinitis in 41% (group S) and in 42% (group NS) and rhinoconjunctivitis in 32% in both groups. Prick tests were positive in 70% (Group S) and 85% (group NS). The most common allergens are, in the two groups, Dermatophagoides Pteronyssinus and Dermatophagoides farinae. After appropriate treatment, asthma was controlled in 55% (group S) and in 66% (group NS) ($p = 0.1$). We note through this work that active smoking has an impact on asthma and its evolution.

P4231

Influence of smoking on symptoms, comorbidities and severity in a population with obstructive sleep apnea (OSA) versus control

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Rationale: The association of smoking with OSA is uncertain, even is an association with increased upper airway resistance and predisposition to cardiovascular complications.

Method: We analyzed 129 OSA patients (65% active smokers, 35% never smokers) with normal lung function, without diurnal hypercapnia, successfully titrated with autoCPAP in lab and a control group of 17 active smokers with ronchopathy, regarding anthropometrical, functional lung data, OSA symptoms, severity, comorbidities and parameters after titration. We used SPSS (T, Chi, Pearsons tests). **Results:** For OSA group: 22.5% female, 77.5% male, mean values: age 49.6±11.7, body mass index (BMI) 33.6±7, apnea hipopnea index (AHI) 43.1±25.1; for smokers group: index package year (PY) 21±14.4, Fagerstrom score (FS) 3.6±2.5; for control group: 11.8% female, 88.2% male, age 40±12.1, PY 20.7±13.7, FS 4.9±2.5, BMI 29±5.3.

Significant differences: OSA patients are less fatigue ($p=0.04$), have a poorer lung function (FEV1, $p=0.036$, FVC, $p=0.04$) (justified by the effects of smoking), are fatter ($p=0.025$), with apneas more difficult to correct ($p=0.018$) related to PY ($r=0.251$, $p=0.01$). In control group was no difference in terms of smoking, BMI, neck circumference but was a smaller percentage of tonsillar hypertrophy ($p=0.043$) and diastolic blood pressure ($p=0.002$).

Conclusions: Smoking appears not to influence symptoms, severity, and comorbidities in OSA patients, except a difficult CPAP correction of apneas. Also, smoking does not seem to contribute to the appearance of OSA and tonsillar hypertrophy (cause of OSA). Studies are needed to thoroughly into the mechanisms by which smoking could influence OSA.

P4232

Bronchial hyperresponsiveness (BHR) to isocapnic hyperventilation of dry air (IHDA) in smokers is associated to airflow obstruction, chronic cough and beta-2-agonist treatment

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Background: BHR to direct stimuli (i.e. metacholine) may be associated to an increased risk for progressive airflow obstruction in smokers. The clinical relevance of BHR to indirect stimuli (i.e. IHDA) is not known.

Aim: To examine any association between BHR to IHDA and symptoms or spirometry in tobacco smokers.

Methods: Regular tobacco smokers (>25 smoke years) attending Primary Health Care Centres were invited to participate. Subjects with therapy requiring severe diseases (except for COPD) were excluded. A questionnaire regarding medication, smoking habits and symptoms was completed by 128 smokers. Spirometry (FEV₁ and VC) and impulse oscillometry (resonant frequency = F_{res}) were recorded at baseline (MS-IOS Digital Instrument, Erich Jaeger AG, Germany). A four minute IHDA was followed by measurements of F_{res} during six minutes. An increase in F_{res} of >2.4 Hz was defined as the cut off limit of BHR.

Results: 85 of 128 smokers exhibited BHR and demography or tobacco smoke exposure did not differ between the two subgroups. Smokers with BHR had worse spirometry at rest ($p<0.05$) and a history of chronic cough ($p<0.01$). Fifteen

smokers regularly inhaled a β_2 agonist and they all exhibited BHR, had higher bronchial tonus at rest ($p<0.05$) and exhibited greater response to IHDA than non-treated smokers with BHR ($p<0.05$).

Conclusions: BHR to IHDA is common among smokers and associated to chronic cough and airflow obstruction. BHR is even more common among smokers using β_2 agonists. It is not known whether this is a cause or an effect of a 12 hour interruption of β_2 agonist treatment prior to challenge.

P4233

Influence of tobacco smoking on a lipid profile

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The aim: To study influence of tobacco smoking on a lipid profile.

Materials and methods: 200 patients were examined (100-were smoking (an index of smoking ≥ 5 packs/years), 100-non-smokers). The mean age of the first group was 42,7±7,5 years and second- 42,4±7,5 years, $p>0.05$). The next parameters of a lipid profile were studied: Total Cholesterol, low-density lipoproteins (LDL), very low-density lipoproteins (VLDLs), High-density lipoproteins (HDLs), Triglycerides, Cholesterol to HDL Ratio.

Results: HDLs were revealed to be lower in 1 group in comparison with 2 group (1,32 (1,13-1,635) and 1,565 (1,33-1,785), accordingly, $p=0,0007$). VLDLs were revealed to be higher among smoking in comparison with non-smokers (0,545 (0,39-0,935) and 0,43 (0,345-0,605), accordingly, $p=0,01$). Triglycerides were revealed to be higher in 1 group in comparison with 2 group (1,23 (0,865-2,065) and 0,955 (0,765-1,34), accordingly, $p=0,004$). Cholesterol to HDL Ratio were revealed to be higher among smoking group in comparison with non-smoking group (2,73 (1,875-3,885) and 2,35 (1,72-3,08), accordingly, $p=0,039$).

Conclusions: The smoking patients had higher indicators very low-density lipoproteins, triglycerides and lower indicators of High-density lipoproteins then non-smokers.

P4234

Indian smokers: A faster downhill course?

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Introduction: The deleterious effects of tobacco smoke on lung function are well known even among asymptomatic smokers. We hypothesized that the addition of pollution and undernutrition in a developing country would cause declines in lung function at lower levels of tobacco use than usually described.

Methods: We compared the spirometry of 249 asymptomatic smokers and 143 healthy never smokers in Bangalore, India. Smoking was quantified using the smoking index (cigarette years = cigarettes/day X years smoked). To adjust for differences in demographics between groups, we compared spirometric values as percentage of predicted (ECCS reference equations; race correction factor - 87%).

Results: Compared with never smokers, smokers with even a smoking index <50 cigarette years showed significantly lower lung FEV1, worsening with increasing cigarette use.

Spirometry in Asymptomatic Never-smokers and Smokers

	Healthy Never-smoker (n=143)	Asymptomatic smoker (SI < 50), n=89	p	Asymptomatic smoker (SI 50-100), n=106	p
Age	42.1 (9.0)	40.7 (12.3)	0.33	46.3 (9.9)	0.001
Height (cm)	166.7 (6.7)	165.5 (8.7)	0.22	165.0 (6.6)	0.043
Weight (kg)	69.6 (9.1)	67.4 (11.1)	0.10	67.5 (10.8)	0.096
FEV1% pred.	85.2 (13.4)	79.8 (21.7)	0.02	79.0 (20.3)	0.004
FVC % pred.	89.9 (15.4)	84.5 (19.1)	0.02	86.0 (18.4)	0.066
FEV1/FVC %	79.0 (9.0)	78.1 (11.1)	0.54	75.7 (11.3)	0.013

Mean (SD). SI = Smoking Index (cigarette years).

Conclusions: In an Indian population, the effects of cigarette smoke on lung function are seen earlier than is usually described; this may reflect greater susceptibility to cigarette smoke or the additive environmental effect including air pollution and undernutrition. The cause effect relationship needs to be worked out, but it is clear that it is never too early to quit smoking.

P4235

Tobacco information's in preoperative patients factsheets: A French survey

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Four years ago a French experts conference on perioperative smoking had showed that smokers have 3 times more scars and general complications. Tobacco cessation 6-8 weeks before surgery until the end of the healing removed excess risk. We investigate how this information was delivered to patients through surgery procedure factsheet

Methods: In response on a request "information patient surgery" on Google Francethe first 100 patient factsheets were recorded and analyzed. These leaflets come from 32 transmitters, 2 issuers information sheets over 6, 4 are between 7 and 10 factsheets, 20 of the 32 issuers only one factsheets. Factsheets concern 13 subspecialties. Only plastic surgery and orthopedics and have more than 10 factsheets.

Results: In 76% of cases the word "information patient surgery" is not present. Only three specialties at least say a word smoking in half of factsheets, it is in the order of highest occurrence: vascular surgery and maxillofacial surgery plastic. Only 2% of factsheets address all aspects of tobacco. These 2 factsheets are about plastic surgery. The way to quit is the least approached parameter (18%).

Conclusions: A dramatic gap of information on tobacco in patient factsheets exists. Actions had to be proposed to correct the lack of information on tobacco before elective surgery.

We propose to all editors of factsheets to had this sentence: "information patient surgery"

P4236

Respiratory symptoms associated with cannabis and tobacco use in a north Edinburgh primary care population

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Cannabis is usually inhaled and is most commonly taken in a joint containing both cannabis and tobacco. We are conducting a cross-sectional study of cannabis and tobacco smokers recruited from a primary care population in North Edinburgh. One aim of this study is to investigate whether cannabis smokers report a greater number of respiratory symptoms compared with an age and sex matched group of regular tobacco smokers. The quantification of cannabis and tobacco use is assessed by the Avon Longitudinal Study of Parents and Children and the reported respiratory symptoms by NHANES III.

We have recruited 119 subjects (Group 1) who smoke tobacco as either branded cigarettes and/or roll-your-own tobacco cigarettes) and 117 subjects (Group 2) who smoke cannabis. Tobacco smokers are generally older median age men = 47 (range 24-73) and women 42.50 (range 22-63) than the cannabis smokers median age men 41 (range 22-63) and for women median 38.5 (range 22-58). The majority (>90%) of cannabis smokers employ unfiltered single skinned joints with 8% using bongs and a minority using other methods. The predominant form of cannabis used is resin (78%) with 22% smoking grass. Unadjusted data suggest that the prevalence of respiratory symptoms are greater at all ages and in both sexes for persons using cannabis and tobacco compared with persons using tobacco only. In North Edinburgh the majority of cannabis users smoke cannabis resin rolled with tobacco in a single skinned unfiltered joint. Respiratory symptoms typical of chronic obstructive pulmonary disease are more frequently reported by cannabis smokers than tobacco smokers and women report a greater number of symptoms than men.

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Education level and smoking

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Introduction: Smoking is the major risk factor for lung cancer and COPD. The role of education level and the attitudes to smoking is not completely clear.

Aim: To investigate the relationship between education level and smoking habits. **Methods:** One hundred twenty one smokers. (sixty men) aged 49.41±11.61 attending the antismoking centre of the A.R.N.A.S. Civico Palermo underwent Fagestrom test for nicotine dependence, Mondor test for the motivation to quit smoking, and exhaled CO measurement. Correlation between education level and the amount of smoke exposure, defined by pack-year (p/y), was analyzed.

Results: Lifetime smoking exposure was 74.72±35.04 p/y among subjects with elementary school (5.7% of the sample), 119.03±36.9 p/y in those with middle school (31.4%), 43.062±4.98 in subjects with secondary school (50.04%), and 32.23±15.45 p/y in graduate subjects (12.4%). A statistically significant difference (p<0.05) was observed between subjects with elementary school and other education, but not between subjects with middle school than those with secondary school diploma (p=0.18), and graduate subjects (p=0.49). Similarly, is not a statistically significant difference of pack-year among those with secondary school diploma and graduate subjects (p=0.09).

Conclusion: The qualification does not seem to be decisive in the awareness of smoking-related harm, whereas among the subjects studied, there is no statistically significant difference of the pack-year in relation to their qualifications, with the exception of those with elementary school. These results have to be to enhance investment in the prevention of smoking addiction.

P4238

Young Finnish daily smokers are experts to assess their nicotine dependence

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Background: Young adults are easily nicotine dependent and want to quit, but they have several relapses, partly due to lack of programs to help them.

Aims: To study how self-assessment of nicotine addiction by young adult smokers correlated to nicotine dependence graded by HSI

Methods: A quantitative cross-sectional questionnaire answered anonymously by Finnish male conscripts during their military service during 2008-2009 in Northern Finland with a high response rate (80%)

Results: In this group (n=721), 72.5% were current smokers and 27.5% occasional smokers. The mean age of current smokers was 19.5y, they started to smoke at the mean age of 14.7y and smoked in average 4.8y. Third of current smokers smoked less than 3-pack-years (py), third between 3 to 6py and third more than 6 py. Even 93.5% of daily smokers felt themselves nicotine addicted typically with several quit attempts (Table 1).

Table 1. Distribution of Heaviness of Smoking Index (HSI) vs nicotine dependence in 523 current young smokers

Variable	HSI 0-1	HSI 2-4	HSI 5-6	All (%)
Self-assessment of nicotine addiction				p<0.0001
- No, totally disagree	13 (56.5)	9 (39.1)	1 (4.3)	23 (100)
- Yes, quite agree	62 (52.1)	51 (42.9)	6 (5.0)	119 (100)
- Yes, I'm addicted	41 (24.7)	112 (67.5)	13 (7.8)	166 (100)
- Totally agree	23 (12.8)	127 (70.9)	29 (16.2)	179 (100)
- I don't know	3 (33.3)	5 (55.6)	1 (11.1)	9 (100)
Number of quit attempts				p=0.574
0	67 (31.3)	124 (57.9)	23 (10.7)	214 (100)
1	19 (25.3)	49 (65.3)	7 (9.3)	75 (100)
2	32 (30.5)	65 (61.9)	8 (7.6)	105 (100)
3	13 (25.0)	36 (69.2)	3 (5.8)	52 (100)
4	4 (30.8)	7 (53.8)	2 (15.4)	13 (100)
5	7 (17.9)	25 (64.1)	7 (17.9)	39 (100)

Conclusions: Young smokers experienced several quit attempts and were highly nicotine dependent. They also recognized their dependence.

P4239

The prevalence of tobacco smoking and respiratory symptoms among students of medical university

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The aim of the research was to study the smoking habits and respiratory symptoms (RS) in young patients.

Materials and methods: The study involved students of fourth year and fifth year at the age of 20 to 38 years old: 62 boys and 169 girls (response rate was 72.0%). To assess smoking the standard WHO questionnaire was used, and RS were studied on the basis of GA2LEN questionnaire. The analysis was conducted using Statistica 7 version.

Results: 82.6% of males and 71.0% of females among the students have tried smoking once mostly aged 10-15 years. 38.7% of boys and 33.1% of girls regularly smoked for 12 months or more and during the month before the survey 32.3% and 26.0% of students respectively. Intensity of smoking among boys was 11.8±6.1 and among the girls 7.0±4.4 cigarettes per day. Wheezing in the chest during the last 12 months was marked by 22.6% of boys and 22.5% of girls. 14.5% of boys and 25.4% of girls woke up from coughing. Coughing up phlegm on most days for 3 months each year was indicated by 11.3% of boys and 13.6% of girls. Wheezing in the chest in smokers compared with never smokers were 2.2 times more frequently (31.7% and 17.4% respectively, OR = 2.20 95% CI 1.12-4.32; P <0.01), cough was 3 times more frequent (35.4% and 15.4% respectively, OR = 3.0 95% CI 1.52-5.94; p <0.001), sputum - 1.5 times more frequently (18.3% and 10.1% respectively).

Conclusion: The results showed a high prevalence of smoking among both boys and girls. Despite the brief period of smoking and its adverse effect is manifested by increased frequency of RS. These findings point to the need to strengthen prevention of smoking among young people and medical students.

P4240

Smoking among medical and non-medical students in Tbilisi, Georgia: Does education matter?

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Smoking rate in Georgia remains high and even tend to increase, especially among

youth. The aim of this study was to describe the prevalence and factors influencing smoking among medical and non-medical students of Tbilisi, Georgia. The study was carried out in Tbilisi State Medical University and Tbilisi State University. 400 students were asked to fill out questionnaires. Sex ratio was 1:1. In total 48.9% of students were identified to be smokers and 51.1% nonsmokers. The mean age was 20.24 years among smokers and 20.26 among nonsmokers. Medical education did not play role in smoking habit, since 50% among medical students were smokers and 47.5% among non-medical students. 68% smokers were males. 45.8% were light smokers, 40.2% moderate and 14.0% heavy smokers. Males and females have expressed equal willingness to quit smoking. Just 37.3% of smokers have tried to quit smoking. The most common reasons of starting to smoke again were habit of smoking and alcohol. 58.8% of smokers would like to quit smoking stating health and financial reasons as the main factors on their desire. The willingness to quit smoking was expressed by 61.2% of medical and 56% of non-medical students. About 65% percent of students was exposed to smoking in the families, despite this fact did not turn out to have influence on their own smoking habit.

In conclusion, results of the study have identified the need of enhancement of smoking related education on university level. Special attention should be given to the inclusion of anti-smoking information in study curricula. These measures can only be successful if tobacco control policies will be fully enforced on national level as well.

P4241
Affective symptoms in smokers applying for smoking cessation clinic: Are they related to specific socio-demographic and clinical characteristics?

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Aim: To evaluate socio-demographic and clinical characteristics associated to high levels of affective (i.e. depressive/anxious) symptoms in smokers applying for smoking cessation clinic.

Method: Current smokers applying for smoking cessation clinic at the University Hospital of Pisa were evaluated (n = 146). Socio-demographic and clinical (e.g. carbon monoxide of expired air - CO, attempts to quit, history of diseases) data were collected during their first visit. Self-administered rating scales were used to assess the level of nicotine dependence (Fagerstrom Test for Nicotine Dependence - FTND) and the level of affective symptoms (Hospital Anxiety Depression scale - HADS). Data were analyzed comparing the subjects with high HADS total score (HADS+) with those having low HADS total score (HADS-) (cut-off = 13, median). **Results:** Compared to HADS- (n = 70), the HADS+ subjects (n = 76) were more likely to be female, low educated (≤ 13 years of school), with not executive working activity. Moreover, they had a higher rate of lifetime cancer, respiratory, psychiatric disorders, and higher CO, FTND scores. Running the multivariate logistic analysis adjusted for age and sex, the risk to be HDAS+ versus HADS- was significantly related to education (OR = 0.37, 95%CI 0.161- 0.876), CO (OR = 10.53, 95% CI 1.003-1.105) and the lifetime history of psychiatric disease (OR = 2.67, 95% CI 1.206-5.893).

Conclusion: Subjects with low education, high levels of CO, and a lifetime history of psychiatric disease were at high risk to experience affective symptoms when they apply for smoking cessation clinics.

P4242
Hospital clinicians use of smoking AAAs

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Introduction: All health care professionals have a responsibility to identify, recommend, and assist smokers to stop smoking. Unfortunately, despite having infrastructures in place, use of the 3As is underutilised.

Aim: Ascertain clinicians use of 3A's: Ask, Advise, Act during Outpatient clinic consultations.

Use of 3AAAs in Hospital OP Clinics

	Number of patients	Percent Conversion
Total respondents	204	100%
Total smokers	53	(53/204) 26%
Total Smokers Identified	26	(26/53) 49%
Total Smokers Advised	10	(10/26) 38.5%
Total Smokers Assisted	6	(6/10) 60%
First Consultation: Total	53	(53/204) 26%
First Consultation: Smokers	14	(14/53) 26.5%
First Consultation: Smokers Identified	8	(8/14) 57%
First Consultation: Smokers Advised	1	(1/8) 12.5%
First Consultation: Smokers Assisted	1	(1/1) 100%
Follow up visit: Total	151	(151/204) 74%
Follow up visit: Smokers	39	(39/151) 26%
Follow up visit: Smokers Identified	18	(18/39) 46%
Follow up visit: Smokers Advised	9	(9/18) 50%
Follow up visit: Smokers Assisted	5	(5/9) 55.5%

Method: Patient survey completed within the department post consultation.

Results: Of 224 respondents, self-reported smoking prevalence was 26% (53/204). 49% were correctly identified as current smokers, but only 10/26 (38.5%) were advised to stop and only 6 patients were given instructions albeit none were referred to NHS Stop Smoking Services.

Conclusions: Anecdotal information and assumptions regarding suspecting poor clinician usage of smoking 3As appears to be substantiated. Despite an interaction with a healthcare profession, smokers are not identified, and thus not advised nor referred to smoking cessation. Identification of smokers needs to be systematic and availed at every health care interaction when health is a major salient concern for the patient.

P4243
Role of respiratory and cardiovascular disease as a motivational factor for smoking cessation

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Rationale: Smokers with tobacco-related disorders are more motivated to give up smoking than healthy smokers, but comparative data about the influence of each pathology type on motivation is still insufficient.

Methods: We studied the behavior of persons with a history of smoking, healthy/sick with cardiovascular (CVD)/respiratory (RD) tobacco-related disease, using 2 questionnaires-for former smokers/active smokers regarding motivation, preparation status for quitting, health status, degree of nicotine-addiction, quitting history, determinant factors for tobacco consumption. We use Excel (chi, T tests). **Results:** 240 persons were interviewed: 83 women/157 men, mean age 47±16.2 years; 124 active/116 former smokers. Disease present 43.6% of active smokers (53.7% CVD, 42.6% RD, 3.7% both) and 68.1% of former (32.9% CVD, 44.3% RD, 22.8% both) (p=0.0001). Those with RD and both diseases are more former smokers (p=0.0038). Healthy smokers cannot refrain from first cigarette (55.6%, p=0.001). 69% of smokers with CVD want to quit smoking, but only 38% are in the action-phase, vs 65% of those with RD - 61% in the action-phase (p=0.005). 95.8% of respondents believe that smoking can cause a disease, mostly ill patients (p = 0.0001), who saw smoking as the cause of their illness (p=0.005) (especially those with RD and both p=0.036). Patients with RD/both diseases are more determined to quit (p=0.003).

Conclusions: The most motivated and ready to quit smokers are the respondents with a disease, especially respiratory. Medical staff should focus attention on ill patients and "personalized" programs must be developed for those with cardiovascular disorders.

P4244
Smoking cessation: Results of three year's activity

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Introduction: Cigarette smoking is widely considered the most common cause of cardiovascular and pulmonary diseases and smoking cessation programs are effective in the treatment of this condition.

Aims: To analyse the results of our protocol for smoking cessation after three years of activity; to check the efficacy of follow up; to value the drug success rate of NRT (Nicotine Replacement Therapy), Varenicline and association between Varenicline and Nicotine Inhaler.

Methods: from June 2006 to December 2010 we enrolled 445 subjects, 163 men (37%) and 282 women (63%). All patients who participated in our protocol, which includes a course of three sessions and counselling combined with drug therapy (Nicotine Therapy Replacement and/or Varenicline), were called by phone in February 2011.

Results: The mean age of our patients was 49±11 years and the mean smoking exposure 34 pack/years. The degree of nicotine dependence tested with Fagerstrom Questionnaire was very low (0-2) in 9% of patients, low (3-4) in 17%, medium (5-6) in 34%, high (7-8) in 30% and very high (9-10) in 10%. The average of Exhaled Carbon Monoxide (CO) was 25±13 ppm.

The abstinence rate was: after a month 71%, 3 months 38.4%, 6 months 37.9%, 1 year 37.8%, 2 years 36.3% and 3 years 26.5%.

The drug therapy success rate was 37.2% for NRT, 28.5% for Varenicline and 34.2% for Varenicline associated with Nicotine Inhaler as needed.

Conclusions: Our results confirm the importance of follow up and regular phone calls in improving outcomes in smoking cessation. The NRT has showed the best success rate and the efficacy of Varenicline can be improved with Nicotine Inhaler association: maybe we can consider this drug combination like an emerging treatment.

TUESDAY, SEPTEMBER 27TH 2011

P4245**Making smoking cessation easier and closer the smoker: The results of Milan study of antismoking centers in pharmacies**

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Background: - A few strong inputs from the Italian Institute of Health indicate that information and assistance to smokers are still far from being satisfactory.

Aims: - To verify if offering smoking cessation at the pharmacy, a health facility where smokers have often the chance to stop, can promote the participation to cessation programs.

Methods: - A 6-month pilot phase was carried out from October 2010 to March 2011. Five pharmacies in Milan were selected. Chemists were trained by the team of the Antismoking Center of the Istituto Nazionale dei Tumori (INT). Every pharmacy was equipped with informative material, CO analyzers, motivational and FTND's questionnaires and with a clinical briefcase; moreover a trained psychologist of INT collaborated with the chemist.

Results: - In the first four months of activity 144 smokers (54% male, 46% females) asked for a consultation. The median values were: age 52 years, p/y 31, CO 14ppm, FTND's test 5. Regarding the pathologies, 25% of the smokers had cardiovascular and 11% respiratory diseases, 22% other pathologies, 43% declared they were "healthy" smokers. Overall, 45% of the smokers asked to stop smoking, 33% to reduce, 21% just wanted to get information.

Conclusions: - The results show that the opportunity to have accessible and free smoking cessation service is considered useful by smokers. The great number of requests, together with the easy transferability of the project to other pharmacies, makes it a very promising initiative for the next future.

P4246**Nurses' and patients' communication in smoking cessation at nurse-led COPD clinics in primary health care**

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Aim: To examine smoking cessation communication between patients and registered nurses, with a few days of Motivational Interviewing (MI) based education, in consultations over time at nurse-led Chronic Obstructive Pulmonary Disease (COPD) clinics in primary health care (PHC).

Method: The first and third of three consultations were videotaped, involving 13 smokers and six nurses. In these consultations smoking cessation communication was analyzed using the Motivational Interviewing Treatment Integrity (MITI) Scale and Client Language Assessment in Motivational Interviewing (CLAMI).

Results: The nurses did, but only to a small extent, evoke patients' reasons for change, foster collaboration and support patients' autonomy. In the registration of specific utterances; they provided a lot of information (42%), asked closed (21%) rather than open questions (3%) and made more simple (14%) than complex (2%) reflections. Most of the registration of the patients' utterances in the communication were either toward or away from smoking cessation coded in the category Follow/Neutral (59%), followed by utterances in the categories of Reason for change 40%, Taking steps 1% and Commitment 0%. No significant differences could be observed in the results of MITI and CLAMI between the first and third consultations.

Conclusion: Smoking cessation communication at nurse-led COPD clinics neither focused on the patients' reasons for or against smoking nor motivated patients to express commitment to, or take steps towards, smoking cessation.

P4247**Training pharmacists in the stage-of-change model of smoking cessation: A randomised controlled trial in Sicily**

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Introduction: Most pharmacists are eager to undertake an important role in health promotion but in Italy pharmacists are not trained for smoking cessation counselling.

Aim and objectives: This study set in pharmacies in Sicily has evaluate the effect of training pharmacists in the stage-of-change model of smoking cessation and motivational interviewing.

Methods: A training package based on the stage of change model of smoking cessation and motivational interviewing was been carried out by University. The training was been piloted on a cross-section of pharmacy personnel. A total of 46 pharmacies have participated in the trial and attended a 3 hour training on 2008 guideline *Treating Tobacco Use and Dependence*. Successively pharmacies were randomly allocated by sequential allocation to the intervention or control group. The intervention group attended a 6 hour training by scheduling a initiation

workshops. During the 3 month customer recruitment period, all smokers who sought advice on stopping smoking or those who bought an OTC anti-smoking product in preparation for a new attempt to stop smoking was been eligible for inclusion.

Results: A total one 587 smokers participated. At 12 week 64.4% were lost at follow-up in active group and 69.7% in reference group. At 24 week subjects who were lost at follow-up accounted for 72.5% in active group and 90% in reference group. At 12 week the quit rate were 25.7%, for intervention group and 14.4% for control group. At 24 week the quit rate were 11.2%, for intervention group and 6.3% for control group.

Conclusion: The study demonstrated the utility of the stage-of-change model and motivational interviewing in a pharmacy setting.

P4248**Predictors of smoking cessation within a lung cancer CT screening trial**

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Background: Participating in a lung cancer CT screening may trigger smoking cessation but a clear impact on abstinence rates hasn't been shown.

Aim: To evaluate smoking cessation in subjects enrolled in a lung cancer CT screening trial (Italung-CT).

Methods: 3004 current or former smokers (20≥ pky; 55-69 yrs) from the general population were randomised in the active (CT scan, AA) or control (usual care, CA) arm of the Italung-CT in three Italian centres (Florence, Pisa, Pistoia). A postal/telephone questionnaire was administered at baseline (round 1) and at the last evaluation (round 4). Preliminary smoking data from 1186 AA subjects (94% of AA) and from 1261 CA (67% of CA) were evaluated. A pulmonologist-assisted smoking cessation program (counselling & pharmacotherapy, SCP) was offered only in the Pisa centre. Multivariate logistic regression analysis was performed with smoking cessation as outcome variable. Independent variables were: sex; age (≤ 60, > 60 yrs); pky; baseline CT-detected nodules (unknown/CA subjects, none, ≥ 1); participation in SCP.

Results: Crude cessation rates at round 4 were 21% in AA and 18% in CA (p=0.086). Smoking cessation was significantly associated to male sex (OR = 1.54 95% C.I.[1.17, 2.02]), pky (0.98 [0.98, 0.99]), ≥ 1 baseline CT-detected nodules (1.43 [1.00, 2.05]), participating in SCP (2.44 [1.59, 3.75]).

Conclusions: According to preliminary results, smokers participating in the active arm of Italung-CT show statistically borderline higher smoking cessation rates as compared to controls. Smokers with lung CT-detected nodules, offered of a SCP are more likely to quit smoking. Smoking cessation programs should be always offered within a lung cancer CT screening.