Meeting new challenges, joining local and global efforts: towards the tobacco endgame in Europe
Aim & Scope

Tobacco Prevention & Cessation, (Abbr: Tob. Prev. Cessation; ISSN:2459-3087) is an open access, peer-reviewed online journal that encompasses all aspects of tobacco use, prevention and cessation that can promote a tobacco free society. The aim of the journal is to foster, promote and disseminate research involving tobacco use, prevention, policy implementation at a regional, national or international level, disease development - progression related to tobacco use, tobacco use impact from the cellular to the international level and finally the treatment of tobacco attributable disease through smoking cessation.

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Cessation I: Oral Presentations

Smoking cessation in cardiovascular, diabetes and COPD patients – lessons from the pilot TOB G project in Romania

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Introduction

Smoking cessation is the most effective intervention to stop disease progression in high risk categories of smokers like cardiovascular (CVD), diabetes and COPD patients. The “TOB G” project has implemented a set of specialized guidelines in a pilot program for such patients, developed in the Clinical Hospital of Pulmonary Diseases of Iasi, Romania.

Aim and objective: To determine the real world effectiveness and barriers of the TOB-G guideline recommendations among 150 smokers enrolled in the pilot TOB G running in Romania.

Methods

Smokers with CVD, diabetes and COPD willing to quit smoking were recruited from the hospital database and enrolled in the pilot TOB G. They were delivered a smoking cessation counselling intervention consisting of 4 sessions either in-person or by telephone. Abstinence rate was assessed at 1, 2 and 6 months, with careful observation of the barriers and inconveniences arising from pilot implementation in a real life clinical setting.

Results

150 patients were enrolled. Smoking abstinence was documented at the 6-month follow-up with 36.0% abstinent in the CVD group (biochemically validated in 22%), 63.3% (40.8% validated) in the diabetes group and 64% (51.6% validated) in COPD group, respectively. The major pilot implementation barriers were observed in the severe COPD smokers, in smokers with mild CVD and in smokers uncompliant to diabetes care.

Conclusions

The TOBG Guidelines for CVD, diabetes and COPD patients proved feasible to implement and produced significant increases in patient smoking abstinence and in disease outcomes. Future research is needed to improve the guidelines applicability in real life clinical settings.

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Availability of Smoking Cessation Products among 14 European Countries

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Introduction

The aim of our study was to investigate availability of smoking cessation products and make comparisons across 15 European partner countries (Albania, Armenia, Belgium, Bulgaria, Georgia, Greece, Italy, Kosovo, Poland, Romania, Russia, Serbia, Slovenia, Spain, Ukraine) of EPACTT-2 (EuroPean Accreditation Curriculum on Tobacco Treatment project) project that aims to develop and expand an accredited curriculum for tobacco treatment dependence.

Methods

The structured 8-item self-administered questionnaire in English was distributed among partner country representatives for completing. The questionnaire covered availability and price of smoking cessation products, as well as country profiles.

Results

Fourteen countries (4 lower-middle income, 5 upper-middle income, and 5 high-income) participated in the online survey in 2017. Only Russia and Italy had all the listed smoking cessation products available in the market. Out of the listed six forms of NRT, each lower-middle income country, on average, had 1.5 form of NRT product available in the market. Importantly, Georgia did not have any NRT available. Upper-middle income countries had on average 3.0 form of NRT products available in the market. However, Albania did not have any smoking cessation product available. The most available smoking cessation product other than NRT in lower-middle income and upper-middle income countries was Cytisine. All high income countries had Bupropion, Varenicline and at least 3 NRT products (gum, patch and at least one other form of NRT) available. On average, high income countries had 4.2 form of NRT available. Among high income countries, Cytisine was available only in Italy.

Conclusions

Despite considerably higher burden of smoking and the evidence based efficacy of NRT and pharmacotherapy in successful smoking cessation, lower-middle income countries have reported limited availability compared to upper-middle and high income countries. Countries should implement actions to make smoking cessation medications available, accessible, and free or at an affordable cost in accordance with Article 14 of WHO FCTC.

Funding

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Smoking cessation services in Serbia
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Introduction
To analyze available smoking cessation services in Serbia

Methods
Data were obtained through questionnaire sent in 2017 by Office for Smoking Prevention of the Institute of Public Health of Serbia to all primary health centers, institutes of public health, general hospitals, clinical centers and some special hospitals. Out of 232 institutions targeted, 154 completed the questionnaire, out of which majority were primary health centers (93 out of 158).

Results
Results show that 36 institutions provide some smoking cessation interventions, while 19 institutions have smoking cessation counseling within functional or organizational units. Most of smoking cessation counseling services are functioning within different departments such as preventive centers, health promotion centers, GP services, while some of them are organized as separate functional units. Smoking cessation counseling units have been established in the period 1993-2016, while in some intuitions these units don’t function anymore. Smoking cessation is provided by various health professionals (epidemiologist, specialist of social medicine, specialist of hygiene, psychiatrists, nurses…). Only 15 institutions provided data on number of counseled patients showing that in 2016 in total, 529 patients applied for smoking cessation, 329 completed program, 226 stopped smoking within or after completing program, while 142 reported six months abstinence. Individual and group counseling are free of charge while pharmacotherapy is not covered by health insurance. Educational needs for smoking cessation were expressed by 114 institutions. Majority of intuitions (125 out of 154) participate in the some smoking prevention activities such as workshops in educational institutions and public events and more than 50% participate in the some of the activities on the occasions of world and national no tobacco days.

Conclusions
Having in mind that there are approximately 2.5 million of smokers in Serbia, further activities aimed at better coverage with smoking cessation are needed.

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The perception of environmental reinforcement mediates the effect of cigarette dependence on depressive symptoms in smokers seeking smoking cessation treatment
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Introduction
The associations between depression and cigarette dependence had been established through a large amount of studies. Nevertheless, mechanisms underlying such association are not clearly recognized. The main aim of this study was to explore whether the perception of environmental reinforcement mediates the effect of cigarette dependence on depressive symptoms in smokers seeking smoking cessation treatment.

Methods
The sample consisted of 275 smokers (61.5% women, average age 45.36 years, SD = 10.96), seeking smoking cessation treatment in the Smoking Cessation and Addictive Disorders Unit of the University of Santiago de Compostela. The following questionnaires were applied: Fagerström Test of Cigarette Dependence (FTCD), Beck Depression Inventory - II (BDI-II) and Environmental Reward Observation Scale (EROS) that evaluates the degree of reward / reinforcement provided by the environment. To examine the associations between study variables bivariate correlations were tested. Mediation analyses were conducted through the statistical macro PROCESS.

Results
The total sample obtained an average score in the EROS of 27.92 (SD = 4.51), in the FTCD of 4.78 (SD = 2.16); and in the BDI-II of 10.57 (SD = 9.17). Bivariate correlations were statistically significant between depressive symptoms, perceived environmental reinforcement and cigarette dependence. There was a significant direct effect of cigarette dependence on depressive symptoms (b = 0.63; p = .004), and a significant indirect effect of cigarette dependence on depressive symptoms via perceived environmental reinforcement (a*b = 0.36, 95% CI [0.140-0.612]).

Conclusions
Findings show significant associations between cigarette dependence and depressive symptoms through perceived environmental reward in smokers seeking smoking cessation treatment. This support previous research suggesting that smoking cessation interventions including components aimed at increasing reward probability and access to reward stimuli or activities others than tobacco, could be useful in order to improve depressive symptoms, as these could be a barrier to achieve smoking abstinence.

Funding
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28 Days Without – a new approach to nicotine dependence treatment in Finland
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Introduction
The Finnish tobacco-free municipalities’ project aims to help municipalities to make decisions to become tobacco-free as well as assisting in the implementation of the decision. Tobacco cessation support and introduction of new TDT methods is crucial in
this development. The 28 Days Without tobacco dependence treatment group meetings are open for all types of nicotine addiction.

Methods
The Model consists of four weekly meetings. The themes are addiction, medication and other support, risks and relapses and worries and self-detection + monthly peer support meetings. Meetings are open and continuous. Quitters can choose which sessions to attend. 2017 the concept was complemented with online meetings, which are an alternative for quitters not willing or able to attend face-to-face meetings.

Monitoring
The participants fill in an online questionnaire before the first session, and follow-up questionnaires one month and six months after the first meeting.

Results
It seems that since many have already tried to stop using tobacco several times before, they don’t necessarily need all the information that traditional tobacco cessation groups offer. This new approach is a tailored answer to their needs. Customer feedback has been invariably positive. According to the follow-up questionnaire answers the meetings have strengthened the participants’ willingness to stop using tobacco products, as well as their trust of being able to make the cessation decision. Approximately 50 percent of the respondents reported having stopped tobacco use during the meetings.

Conclusions
There is a need to create new quitting methods. The monitoring results show that the 28 Days Without model works well. The coverage of the model is already nation-wide, and effort will be put on efficient marketing of the model through diverse channels, including the health care system.

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Factors associated with success in smoking cessation programs
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The aim of this work was to analyse the role of several factors (personality traits, previous prolonged experiences of smoking abstinence, nicotinic dependence, administration of pharmacological treatment, presence of psychopathology or the sex of the smoker) in the abstinence at 9 months after completion of the treatment to stop smoking.

The sample consisted in 249 adults (91 men and 158 women), with an average age of 46.37 years (range = 23-69 years) who voluntarily participated in a treatment to stop smoking (10 sessions in 3 months). Prior to commencing the treatment, they signed the commitment and informed consent. For the purpose of analysis, the subjects were asked to complete the following tests at the beginning of the study: a semi-structured interview, to measure the psychopathology and their tobacco habit; personality questionnaire (Big Five Questionnaire) and the nicotinic dependence measure (Fagerström test). Consumption measures were also taken at the end of treatment (T1) and 9 months after completion (T2).

The results obtained showed that in T1, 83.7% of the participants who completed the treatment, had stopped smoking in T2, 52% still did not smoke. On the question of pharmacological treatment with Varenicline, this study sounds that it favoured the completion of treatment, but did not affect the abstinence in T2.

By means of binary logistic regression analysis, explaining between 12% and 16% of the variance, it was found that sex (in favour of males), the absence of psychopathology, the low level of nicotinic dependence, previous experience without smoking and greater tenacity in the personality questionnaire, predicted the 79.4% of the non-smoking participants in T2. This study concludes that personality factors (tenacity), previous experience of success greater than 6 months, absence of psychopathology, low nicotine dependence and male sex emerged as reliable predictors of success of the treatment to stop smoking.

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Youth and Tobacco 1: Oral Presentations

Smoking Prevalence in Greece
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Introduction
The current study aimed to investigate the smoking prevalence in Greece using two nationally representative sets of data conducted before and after the implementation of tobacco prevention programs through school-based interventions in Greece since 2009.

Methods
4 cross-sectional surveys were used to summarize the prevalence of smoking in Greece using the “Kaparesearch” Surveys and Statistics Company surveys of 2012 (S12) and 2017 (S17) and two surveys from the Hellenic Statistical Authority (HSA) conducted in 2009 (S09) and 2014 (S14). For surveys S12 and S17, 1,066 individuals in 2012 and 2,054 in 2017 >17 years of age, were interviewed by telephone using an electronic questionnaire. Surveys S09 and S14 included a sample of 6,172 and 8,223 individuals, respectively, via in-person interviews. Annual data on legally taxed cigarettes in Greece from 2007 to 2016 were also obtained from the Hellenic Ministry of Economy and Development.

Results
Smoking prevalence in Greece was 37.9% in S09, 36.7% in S12, 32.5% in S14 and 27.1% in S17. A total of 28.5% reduction of smoking was observed from 2009 to 2017, while those aged 16-24 years exhibited a 33% reduction from 2009 to 2014. The total number of legally taxed cigarettes in Greece showed a parallel trend, with 35.1 billion in 2007 and 17.9 billion in 2016 showing an overall 49% total reduction.
Conclusions

Smoking prevalence in Greece has been steadily declining from 2009 to 2017 and supported by a parallel trend in billions of cigarettes taxed over time. This reduction was especially apparent among youth, which indicates the possible role of implemented school-based intervention programs.

Funding

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Smoking prevalence among youths: Two Surveys (HBSC & GYTS) in Croatia

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Introduction

In Croatia GYTS (Global Youth Tobacco Survey) was conducted in 2016, while HBSC was conducted in 2014. Objectives: Comparison of HBSC and GYTS data on smoking.

Results

Surveys included: 3,587 adolescents, aged 13 and 15 (HBSC), and 2991, aged 13 and 15 (GYTS). In HBSC Lifetime prevalence has been determined with question: On how many days (if any) have you smoked cigarettes? “In your life time”. Answer categories: Never, 1-2 days, 3-5 days, 6-9 days, 10-19 days, 20-29 days, 30 days (or more) “Never” answered: 78.5% (76.6% boys, 80.3% girls) age 13; 51.3% (50.7% boys, 52% girls). In GYTS: Have you ever tried or experimented with cigarette smoking, even one or two puffs? “Yes” answered: 30% adolescents aged 13, 59.9% aged 15, almost equally boys and girls (46.9%;44%). Current smokers (smoked cigarettes at least once during last 30 days), were also determined with similar question in both Surveys: How many days you smoked cigarettes during last 30 days? Answers offered in GYTS questionnaire was: none, 1-2, 3-5, 6-9, 10-19, 20-29, or each day, and in HBSC: Never, 1-2 days, 3-5 days, 6-9 days, 10-19 days, 20-29 days, 30 days (or more). GYTS founds that: 6.5% aged 13 and 24.4% aged 15 almost equally boys and girls (15.1%;14.1%), are current smokers, and HBSC: 7.7% aged 13 (8.7% boys:6.8% girls), and 28.7% aged 15 (29.9% boys: 27.2% girls).

Conclusions

Both surveys determined that tobacco smoking habits between youths increases with the age. Concerning determination of Prevalence shows that a small difference in the asked question can lead to large differences in the responses.

Funding

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Exposure to second-hand smoke at home among children under 15 years old in Catalonia, 2012-2016

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Introduction

Second-hand smoke (SHS) can cause cancer, increasing the risk of heart and respiratory diseases in children and adults.

In Spain, since 2011 private areas (cars) are the main places of exposure.

Object

Describe the characteristics associated to SHS exposure at home in a population less than 15 years in Catalonia.

Methods

Between 2012 and 2016, 3,831 minors were included in the Health Survey of Catalonia (ESCA). The percentage of SHS exposure (number of people who smoke at home) is calculated according to sociodemographic characteristics and their association is analysed.

Results

17.7% of minors were exposed. Significant differences are observed according to age (18.9% in group 4-14 years versus 14.0% in group 0-3); according to social class (20.5% in low class versus 10.9% in upper class); father’s educational level (21.9% with primary education/no education versus 9.2% with university studies) and mother’s educational level (20.8% with lower levels versus 10.3% with university studies).

Conclusions

Almost one out of five minors is exposed to SHS at home, especially in families with lower social class or educational level. It is important to move forward in the protection of children in environments that are still not regulated, proposing a new regulatory framework and strengthening information and health education in family environment.

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Antismoking campaign to keep youngsters between 12 and 15 years from smoking by diving into their own world

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Introduction

Create an awareness campaign to keep youngsters between 12 and 15 years from smoking, focus on youngsters in vocational education, since they are more vulnerable to start smoking, they start smoking at an earlier age and they smoke more cigarettes.

Methods

- We started with qualitative research of the target group to get an idea of their world, by means of focus groups and we determined the right channels how to reach youngsters.
- Development of creative concepts and testing in focus groups
- In total we had 3 waves of “Vloggers vs Cigarettes” and a campaign with a song in the 4th wave over a period of 2 years, these were all submitted to an evaluation.

During 3 campaign waves Youtube-stars made vlogs about toxic substances in cigarettes After that a Belgian rap-artist created a song that was launched on Youtube and Spotify and that artist also launched a number of vlogs. We also set up a collaboration with a Belgian radio channel, set up a contest and created content about cigarettes in their radio programmes.

Results

Quantitative evaluation of the impact of the campaign after the first wave (online questionnaire): some of the results: 6 out of
Profile of the tobacco and cannabis consumer students of the University of Murcia

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Introduction
The aim of this study was to identify the profile of the tobacco and cannabis consumer students of the University of Murcia (UMU), Spain.

Methods
A cross-sectional study of UMU students, with a cluster random sampling method and using a self-administered questionnaire, was performed in 2012. Percentages were calculated. The chi-square test was employed to analyze the relation with socio-economic variables. The U-Mann-Whitney test was used to compare the average age of initiation of tobacco consumption. Database in SPSS V.21.

Results
946 students were surveyed (Response Rate: 95.4%). 29.7% of students smoke (boys:26.8%; girls:31.1%), daily 16.4% (boys:16.2%; girls:16.6%). 14.9% have used cannabis in the last month (occasionally:10.9%; weekly:2.5%; daily:1.5%), higher consumption in boys than in girls (21% vs. 12.2%; p=0.001). After trying cannabis, 40.4% reported a current consumption (boys:39.4%; girls:27.2; p<0.001).

42% of tobacco smokers use cannabis (boys:60%; girls:34.1%; p<0.001). There are significant differences (p<0.05) between tobacco consumers and dual consumers (tobacco and cannabis) in relation to sex, course, living and working situation, and level studies and employment status of parents. The average age of initiation of tobacco consumption is 15.75 years (SD:2.095) and of cannabis 16.48 years (SD:2.032). The average age of onset in tobacco consumption is lower in dual consumers (15.45 ±2.117 years) than in those who only smoke tobacco (16.09 ±2.602 years).

Conclusions
1. Profile of the consumer of tobacco and cannabis: Spanish boys of the third course, single, who does not work, with working parents and having a secondary education level.
2. The age of onset in dual consumers is slightly lower than that of tobacco consumers only.
3. It is necessary to promote actions aimed at reducing the consumption of tobacco and cannabis at the University with a gender and equity perspective, with the Healthy Universities projects being a good strategic framework.

Funding
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Monitoring tobacco legislation in Europe after the TPD (Eurest-plus)

Smoke-free legislation in 6 European countries
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Implementation of smoke-free legislation at national level is one of the key measures to reduce and ultimately eliminate the passive exposure of general population to secondhand tobacco smoke. Even though most of the EU countries have already introduced smoke-free laws mainly regulating smoking at public places, these laws have different degree of comprehensiveness and the compliance with the legislation differs among European countries. In this presentation, we will present the results of the first wave of Eurest-Plus survey conducted in 2016 for six European countries (Germany, Greece, Hungary, Poland, Romania, and Spain). In particular, the prevalence of the observance of smoking in workplaces and hospitality venues (pubs/bars, restaurants, and discos) for each country will be shown as well as the respondents’ reports about smoking themselves in those venues. These results will be presented according to the level of national smoke-free legislation in force at the time of the survey.

Funding
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Extent and correlates of self-reported exposure to tobacco advertising, promotion and sponsorship in smokers from eight European countries

Ute Mons

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Comprehensive bans on tobacco advertising, promotion, and sponsorship (TAPS) are known to be effective measures to reduce smoking prevalence. Thus, the FCTC calls for comprehensive TAPS bans. However, more than ten years after the FCTC came into force and despite efforts to harmonize advertising regulations at the EU-level, there is quite some heterogeneity with regards to TAPS legislation in Europe, leading to considerable country-differences in TAPS exposure. In this presentation, findings from eight European countries participating in the ITC project (i.e., Germany, Greece, Hungary, Netherlands, Poland, Romania, Spain, United Kingdom) will be presented. Prevalence of self-reported exposure to TAPS at different sites (TV, radio, print, online, billboards, point-of-sale) will be shown, with a special focus on differential exposure of vulnerable groups. Finally, associations between TAPS exposure and quitting-related outcomes (quit intentions, quit attempts) will be presented.

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Trends and correlates of tobacco use, smoking cessation and support for tobacco control policies in the European Union

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The landscape of tobacco use has changed in Europe, as a result of tobacco control policies, the introduction of novel products, such as e-cigarettes and the recent Tobacco Products Directive. We analysed data collected through Eurobarometer surveys across all 28 member states of the European Union (EU) in 2009, 2012, 2014 and 2017 to assess trends and correlates of tobacco use, smoking cessation and support for tobacco control policies. There is wide variation between EU member states in the prevalence of tobacco and e-cigarette use, as well as in trends of use over time. Overall, manufactured cigarette use has declined, while roll-your-own tobacco and e-cigarette use have increased between 2009 and 2017 in the European Union. The use of different cessation methods also varies between member states and trends are associated with national-level tobacco control policies. Use of e-cigarettes for smoking cessation assistance increased, while use of pharmacotherapy and smoking cessation services declined between 2012 and 2017. Individuals living in countries with comprehensive smoking cessation policies were more likely to have used any cessation assistance, pharmacotherapy and smoking cessation services compared with those living in countries with weak smoking cessation policies. In general, countries with more comprehensive tobacco control have performed better in a series of indicators, including use of evidence-based cessation methods, exposure to tobacco advertising and second-hand smoke. Finally, although support for tobacco control is high among EU citizens, the level of support is associated with tobacco and e-cigarette use, with ever and current users less likely to support tobacco control policies, as well as with general political views. Our research provides insights into differences among EU member states and can inform future policies.

Funding

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Assessing e-cigarette product compliance to the TPD

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The most popular e-liquid websites and their marketed brands, in 9 European countries (Greece, France, Poland, Germany, Holland, the United Kingdom, Spain, Romania and Hungary) were identified and 122 products in total were bought. We evaluated the different types of labelling information and warnings that may be included either within or on the packaging and leaflet of the products, assessed technical design/safety features and evaluated the chemical composition of e-cigarettes. There is a good compliance level of the products in specific technical design/safety characteristics such as nicotine content ≤20 ml, child proof vial, list of ingredients which varied among countries while refill mechanism requirements implementation was poor among products. As for chemical evaluation of the products, several respiratory irritants and discrepancies in the reported vs. measured nicotine content of e-liquids were identified.

Funding

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Youth and Tobacco 2: Oral Presentations

Tobacco Addiction in Young Population and Factors Associated with Motivation to Quit; The Case of University of Vlora, Albania Students

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Introduction

Tobacco use in young population is a public health priority in Europe. Most tobacco users start smoking before the age of 25 years, while quitting early substantially reduces future disease risk. This study aimed to investigate tobacco use among university students in Albania and factors associated with their motivation to quit.
Methods
A cross-sectional study was conducted among students of all faculties and semesters of University of Vlora, Albania from May-July 2017. They were randomly selected and those who agreed to participate, completed part of the Global Adult Tobacco Survey (GATS). A 10-point Likert scale was used to rate the importance and confidence to quit. SAS 9.1 was used for the analysis.

Results
A total of 1360 student participated (27% males) with 18% (n=234) of them being daily smokers, smoking on average 13 (SD=13.3) cigarettes per day. 36.5% of smokers reported smoking their first cigarette within half an hour from the time they wake-up while 62.2% reported that they plan to quit smoking within the next 6 months. Although participants consider it important to quit smoking (mean=7.75, SD=2.87), they are not confident that they would be able to succeed (mean=5.09, SD=3.11).

Doctor’s advice appears to be an important motivation to quit for the majority of smokers (73.0%) while 69.0% of them reported seeing health warnings on cigarette packages. However, only 25.0% were motivated by these messages/photos to quit smoking. In addition, 64.0% of smokers reported seeing information about the dangers of smoking cigarettes or that encourages quitting in newspapers/magazines and television in the last 30 days.

Conclusions
Results highlighted the importance of doctor’s advice in motivating students to quit and the necessity of integrating smoking cessation into daily clinical practice. Future research is needed to further investigate the factors which will support future interventions in Albanian and European level.

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Smoking and school absenteeism among 15–16 years-old adolescents: a cross-section analysis on 36 countries
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Introduction
Prevention of youth smoking is a cornerstone of tobacco control policies, where schools have a crucial role to play. However, the well-known long-term consequences of adolescent smoking may be insufficient to convince education stakeholders to implement tobacco control policies at school level. Although they may be individually aware of public health issues, they may hardly devote much time to efforts for which they will not be rewarded. In this paper, we investigate the link between smoking behaviors and school attendance.

Methods
We performed logistic regressions on the risk of more than three missed school days, by cause, as function of daily smoking, adjusting for age, sex, socioeconomic status, academic performance, parental involvement, and other risk behaviours. Then, generalized linear models were estimated on the number of missed days, by cause, as function of regular smoking, adjusting for the same covariates. The consistency of results was assessed by replicating the analyses for each sex and age group.

Results
Daily smoking was significantly linked to school absenteeism, with a 43% excess risk of more than three missed school days per month due to illness (OR=1.43, IC95% 1.37-1.49), and a 86% excess risk due to skipping (OR=1.86; IC95% 1.78-1.95). Daily smoking was also linked to a 26% excess number of monthly missed days due to illness (beta=0.26; IC95% 0.24-0.29), and to a 66% excess number of monthly missed days due to skipping (beta=0.66; IC95% 0.64-0.69). These findings were consistent across age and sex groups.

Conclusions
By showing the link between daily smoking and absenteeism, we argue that smoking may also be upholding school performance, and thus bringing short-term damaging effects to the adolescents.

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Role of health care professionals informing adolescents about health promotion issues at primary health care level
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Objectives
The goal of this study was to find out if adolescents receive full information about health related issue and role of primary health care professionals in health promotion.

Methods
The quantitative survey was conducted among 11-19 years old adolescents. Overall 1000 young people were interviewed across Georgia using a standard questionnaire in 2014. The survey sampling methodology was multi-stage probability sampling. All information were analyzed in SPSS 21 version.

Results and Conclusions
According to the study results mostly adolescents do not receive appropriate services and adequate consultation in primary health care centers as it is written in the national and international guideline. Primary health care doctors do not provide full information to young people about reproductive health, healthy lifestyle and health promotion issues. It is necessary to educate adolescents especially face to face consultation is needed. Furthermore, it is important to train health care professionals, namely family doctors and pediatricians in adolescents’ health issues and to implement it in clinical practice.

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The role of primary health care in assessing and preventing health risk factors of adolescents in Georgia
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The goal of this study was to evaluate health risk factors, specifically tobacco use and alcohol consumption among
adolescents and primary health care role in health promotions activities.

The quantitative survey was conducted among 11-19 years old adolescents. Overall, 1000 young people were interviewed across Georgia using a standard questionnaire in 2014. The survey sampling methodology was multi-stage probability sampling. All information was analyzed in SPSS 21 version. According to survey results 32.1% (n=256) respondents consume tobacco; 90.5% (n=698) tried alcohol at least once. The 2.5% (n=19) of respondents drink alcohol without limit and the 2.7% (n=21) - drinks frequently.

According to survey results, primary health care professionals do rarely talk with young people about healthy life style. It is very essential to implement health promotion topics at primary health care level. There is a need to adopt effective measures, including launching an information campaign focusing on adolescents’ awareness that tobacco use and alcohol consumption are harmful to health. There is a need of multi-sectoral integrated approach and increased coordination between different government agencies and international and national programs to improve the adolescent health.


Rapid decline in cigarette smoking among children in Poland

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1Health Promotion Foundation, Poland, 2London School of Hygiene and Tropical Medicine, 1Chief Sanitary Inspectorate, Poland

Introduction

In the last decade daily cigarette smoking among children has been rapidly declining in several countries around the world. Studies conducted in this period in Poland include the Health Behaviour in in School-aged Children (HBSC) study (2010 and 2014) and the Global Youth Tobacco Survey (GYTS, 2016). This paper explores whether this positive trend also applied in Poland.

Methods

GYTS, a nationally representative school-based survey of students, was conducted in Poland in 2016. This paper compares the smoking prevalence in Poland among 15-year-olds in GYTS with earlier studies.

Results

GYTS included responses from 5154 pupils, among whom 1699 were aged 15. The overall response rate was 81.7%. Among participants aged 15 daily smoking prevalence has decreased for the first time to under 5% (to 4.8% among boys and 3.6% among girls). This constitutes a significant decrease since 1998, the year with the highest daily smoking among 15-year-olds in Poland, when the prevalence was 24% among boys and 14.4% among girls 1.

Conclusions

A similar decline has been noted in other European countries. In Norway in 1998 among 15-year-olds smoking prevalence stood at 18.2% among boys and 20.9% among girls. By 2014 the daily smoking prevalence declined among 15-year-old boys to 2.1%, and among girls to 0.6% 2. In several other countries, including USA, daily smoking prevalence among children is at similar levels of under 5% 3.


New Perspectives on Implementing FCTC Article 14

Progress in Article 14 Implementation?

Martin Raw1
1UK Centre for Tobacco and Alcohol Studies, Nottingham University, UK

This talk will present data from our group’s survey of the provision of support in 142 countries. The survey results suggest that implementation of FCTC Article 14 remains slow and may even be getting worse in low and middle-income countries. It is important to try to understand why offering cessation support to smokers is so slow, in order to improve it. A number of possible reasons will be considered, including the perception that cessation support is expensive, and an emphasis on articles 6, 8, 11, 12, 13 and accompanying reluctance to acknowledge that many smokers need help to stop. This reluctance is reflected in a lack of funding for work on cessation. Is it time to consider new perspectives: that it should be considered unethical to motivate smokers to try to stop without offering help to those that need it, that such help should be considered a human right, and that new disruptive technology may offer dramatically more effective help for people to stop.


TB, HIV and Tobacco Cessation in LMICs

Mark Parascandola1
1National Cancer Institute (NCI), USA

While tobacco is a well-known risk factor for non-communicable diseases, the substantial burden of tobacco use on infectious diseases has been overlooked. In low- and middle-income countries, the concurrent tobacco, HIV, and TB epidemics amplify the potential devastation of each epidemic alone, and threatens HIV- and TB-related public health advances. Smoking is a cause of TB infection and disease progression and worsens treatment outcomes and survival in persons living with HIV. However, tobacco cessation has not yet been integrated into most TB and HIV treatment settings, and conventional tobacco cessation interventions face additional obstacles in these settings. This talk will describe the breadth of the syndemic, explore the impact of tobacco and tobacco cessation on TB- and HIV-related outcomes, and present novel cessation strategies for these at-risk populations in high burden, low-resource settings.

How to utilize human rights arguments and mechanisms to advance smoking cessation advocacy
Laurent Huber1
1Action on Smoking and Health (ASH), Washington DC, USA

Introduction to challenges
The goal of the presentation is to increase the capacity of tobacco control advocates on how to use human rights arguments and human rights treaties to further their tobacco control goals, particularly for smoking cessation. Attendees will learn how to incorporate human rights approaches into their strategy to ensure that smokers have access to quitting services.

Intervention and responses
First, attendees will learn how to use the key elements to the right to health under the International Covenant on Economic and Social Rights which recognizes “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health” and recognizes the four following factors to be essential element of the right to health:
1. Availability: Healthcare facilities, goods, services and programs are available in sufficient quantity;
2. Accessibility: Health facilities, goods & services that are accessible to all, esp. vulnerable populations;
3. Acceptability: of health goods and services; and
4. Quality: goods and services are scientifically and medically appropriate

Attendees will also learn how to use the country reporting obligations to human rights treaty bodies their countries have ratified and the Universal Periodic Review of the Human Rights Council. Attendees will be introduced to resources developed by Action on Smoking and Health to help public health advocates use human rights arguments to find entry points into the human rights system.

Conclusions
The mass manufacturing and marketing of cigarettes that leads to 7 million deaths every year is irreconcilable with the human right to health. Tobacco control advocates and smokers who want to quit can use human rights arguments to further their right to access smoking cessation services.

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So, why bother with cessation? A Summary
Taylor Hays1
1Mayo Clinic College, USA

Dr. Hays will provide a summary and overview of the effectiveness and cost effectiveness of smoking cessation treatment across World Health Organization regions. The impact of effective smoking cessation treatment on reducing premature morbidity and mortality will be presented along with review of the social and real costs of continued tobacco use particularly in lower and middle income countries. The role of smoking cessation treatment in Comprehensive tobacco control will be discussed. A call for investment in smoking cessation capacity building as well as the use of effective, culturally appropriate and affordable smoking cessation treatment will be made.

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An analysis of smoking cessation behaviours in the Republic of Ireland
Naomi Petty-Saphon1, Paul Kavanagh2
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Introduction
The policy ‘Tobacco Free Ireland’ sets a target for Ireland to be smoke free (a smoking prevalence of less than 5%) by 2025. This study aimed to describe patterns of smoking cessation and identify determinants of quit attempts and the use of smoking cessation aids in the adult general population in Ireland.

Methods
A secondary analysis of an annual cross-sectional nationally representative survey was undertaken. Multivariable logistic regression models were performed to identify 1, factors associated with making quit attempts, and 2, factors associated with the use of help in a quit attempt.

Results
In excess of 500,000 smokers made a quit attempt in 2015, but over half (50.3%) of these were made without the use of help. Smokers in more deprived areas were as likely to make a quit attempt as smokers in less deprived areas, were more likely to use help in a quit attempt but were less likely to be successful. The odds of a smoker living in the most deprived area making a successful quit attempt less than half that of a smoker living in the least deprived area (OR 0.45, 95% CI 0.27 to 0.73). Motivation to quit had the largest effect on making quit attempts and using help in quit attempts. Younger smokers were more likely to make a quit attempt but less likely to use help, smokers with higher levels of tobacco dependency were less likely to have made a quit attempt, but more likely to use help when they did make a quit attempt. Gender was found to be an effect modifier.

Conclusions
This work identified that the MPOWER elements need to be continued and strengthened to mobilise intention to quit and provide an environment to facilitate effective smoking cessation. As well as general risk approaches, high risk approaches are required.

DOI: 10.18332/tpc/90697

Youth and Tobacco 3: Oral Presentations

Generation Y (Millennials) toward health and tobacco - a look at their needs, beliefs and behaviours
Krzysztof Przewozniak1
1Foundation “Smart Health - Health in 3D”

Introduction
To evaluate the needs, beliefs and behaviors of Generation Y toward health and tobacco.

Methods
Two types of research analysis will be done in order to evaluate health and tobacco beliefs and behaviors of Generation Y: 1/ review of scientific literature, research reports and press articles on attitudes of Generation Y toward health, 2/ pilot qualitative study on health and Generation Y toward tobacco and behaviors conducted among users of selected websites dedicated to Generation Y. For
Introduction

Comunitària. Agència de Salut Pública de Barcelona
Sub-direcció General de Promoció de la Salut. Secretaria de tobacco. responding to new forms of consumption such as rolling consumption and the progression to normal use among first-teams of the educational centres. Prevent the onset of tobacco agency of Barcelona, different social entities, and the teaching Catalonia (ASPCAT), Ministries of Health, of Education, is due to the collaboration of the Public Health Agency of year 1, 200 Catalan youth aged 14 years become daily cigarette Nine out of ten smokers first tried smoking by age 18. Every Results

There are few research studies and reports on health behaviors of Millenials defined as specific demographic and social category. However, this generation constitutes today important segment of population and becomes substantial for both public health reform and socio-economic development. Millennials are first generation that seriously criticize and do not want to continue risky health behaviors of their parents, including traditional tobacco use. Millennials are more healthy population, with lower risk of chronic diseases and lower health care utilization. They rather define health as well-being and healthy life style than lack of disease. Generation Y tends to invest in evidence-based, cost-effective and flexible health care and tobacco control strategies. However, they like much more liberal, open-minded and individual-oriented activities than restrictive policies. Millennials are also open for new challenges and technologies and therefore accept innovative and novel tobacco products such as slims, ENDS and HNBs. They think digitally, actively promote their health beliefs in Internet and often act like cyber tribe closed in informative bubble.

Conclusions

Generation Y might be helpful in combating against tobacco epidemic. However, some elements of the present public health and tobacco control strategies have to be adapted to needs, beliefs and behaviors of Millennials.

Funding

The study research team does not have any affiliation, financial or otherwise, with a tobacco industry or any other commercial company and the research project was not granted by these entities.

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Fourteen years of ‘Smokefree Class’, a school-based smoking prevention programme in Catalonia that adapts to new forms of consumption.

Araceli Valverde1, Josep Suelves1, Clara Prades2, Núria Hortal1, Jaume Vinyals2, Carmen Cabezas1

Introduction

Nine out of ten smokers first tried smoking by age 18. Every year, 1,200 Catalan youth aged 14 years become daily cigarette smokers. Smokefree Class was introduced in Catalonia in 2004 (after its beginning in Barcelona in 1997). Its progress is due to the collaboration of the Public Health Agency of Catalonia (ASPCAT), Ministries of Health, of Education, and of Labour, Social Affairs and Families, the Public Health Agency of Barcelona, different social entities, and the teaching teams of the educational centres. Prevent the onset of tobacco consumption and the progression to normal use among first-cycle (1st-2nd years) secondary school students in Catalonia, responding to new forms of consumption such as rolling tobacco.

Methods

‘Smokefree Class’ reinforces the decision of youth to stay tobacco-free with the support of all classmates and teachers. Their commitment must be maintained (at least 5 months), and participate in different educational activities that can help the whole group to obtain one of the prizes that are offered annually. Studies are developed periodically to explore new forms of consumption, behavioural determinants, beliefs that contribute to its dissemination.

Results

In its 14 years of implantation, the programme has brought smoking prevention to 65,537 youth, 74.5% of which (48,807 schoolchildren) have successfully completed it. A teaching guide for teachers has been developed to give guidance and facilitate participation, as well as a teaching unit on rolling tobacco, with three objectives: to improve information on rolling tobacco, to correct misleading beliefs on rolling tobacco, and to increase the perception of rolling tobacco-related risk, equating it to smoking tobacco products in general and manufactured cigarettes.

Conclusions

The programme maintains variable coverage levels, with a minimum of 116 participating classrooms the first year of implementation in Catalonia and a maximum of 230 during the 2008-2009 school year. The interministerial and intersectorial collaboration has been key in the maintenance of the programme. The intersectoral policies for tobacco prevention have contributed to reduce daily consumption among Catalan schoolchildren aged 14-18, from 23.0% to 2004 to 11.0% in 2014.

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Children's rights and tobacco control

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Introduction

Tobacco morbidity and mortality disproportionately affect children, especially those living in low socioeconomic conditions. We will analyse how international and regional human rights regimes contribute to protecting and promoting specific aspects of child health and development in tobacco control enforcement. We will demonstrate both the power and limitations of using international and regional human rights systems in countering the negative effects of tobacco.

Methods

This paper and presentation will present a legal analysis. The methods used include literature and document analysis in the form of treaty interpretation.

Results

Although prenatal tobacco-related harm has the most detrimental effect on child health and development, adults and society at large, unborn children as such do not receive explicit human rights protection but the right to health of children is understood as to include prenatal care;

- Governments hold clear obligations to protect children against ETS. A protective approach is particularly acute for young children in light of their best interests;
Taking into account the evolving capacities of children, adolescents should be involved in tobacco regulation aimed at demand reduction and cessation amongst adolescents.

Governments should regulate the tobacco industry; not just to prevent children from being involved in tobacco farming but also to the extent that their marketing and advertisement strategies no longer target children.

Conclusions
The international human rights framework provides for a promising framework on children’s rights protection in relation to tobacco control and preventive care. In line with children’s incremental development, human rights law shows potential yet also reflects inherent shortcomings to effectively protect children against tobacco-related harm across the entire tobacco supply chain.

Funding
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Predictors of tobacco products and cannabis use among nursing students
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Introduction
Nurses are powerful agents in public health, which includes being active in tobacco control. Nursing students, as the future labor force of Nursing, constitute one of the key groups to monitor.

Objective: To identify the prevalence and predictors of smoking tobacco products use and cannabis use among the overall population of nursing students in Catalonia.

Methods
Cross-sectional multicenter study conducted in 15 University Nursing Schools in Catalonia (conducted in 2015-16). An anonymous, self-administered questionnaire in paper based on the Global Health Professional Survey was designed. The questions included information on consumption of tobacco products (manufactured cigarettes, rolling cigarettes, shisha, and electronic cigarettes), cannabis use, and several sociodemographic variables (age, year of school, type of Nursing school). We computed prevalence rates (%) and calculated multilevel logistic regression models to calculate the odds ratios (OR) and their corresponding 95% confidence intervals (95%CI).

Results
4,381 students participated (57.1% of Nursing students in Catalonia). 29.7% were smokers (18.4% daily and 11.3% occasional). Daily consumption increased with age (≤19: 10.8%, 20-24: 20.0%, ≥25: 27.6%, p <0.001). The main predictors of smoking were: male sex (OR: 2.81, 95%CI: 2.11-3.73), age ≥25 years (OR: 2.57, 95%CI: 2.03-3.26) and birth in other regions than Catalonia (OR: 1.82, 95%CI: 1.30-2.54). Among smokers, 66.4% used manufactured cigarettes, 47.0% roll-your-own cigarettes, 10.0% shisha and 0.4% electronic cigarettes. 71.5% had low nicotine dependence. 11.5% used cannabis (daily or occasionally).

Conclusions
Tobacco and cannabis use is high among nursing students. It is necessary to carry out early tobacco and cannabis cessation programs among young Nursing graduates, taking into account that their prevalence and addiction consolidate along the University years.

Funding
Catalan Council of Nurses (REF: 1043).

Cost of passive smoking in children in Spain
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Introduction
To estimate the economic impact in the Spanish Healthcare System of secondhand smoking on children in Spain in 2015.

Methods
The cost has been estimated for primary care, outpatient care and hospital admissions for Spanish population of children (0-14 years old) in 2015. The Population Attributable Fraction (PAF) has been calculated from OR’s to children exposed to household smoking and the number of real events has been obtained from the Ministry of Healthcare of Spain. To estimate the cost of primary care consultations, the price by consultation has been calculated as a mean of the public prices published by all the regions of Spain. The prices for each outpatient consultation and hospital admission have been obtained from the Spanish Healthcare System.

Results
The attributable cost of secondhand smoking in children for the Spanish Healthcare system in 2015 was around 27M€ (27.162.048€): 19.300.383€ due to primary care, 360.360€ was spent providing outpatient care and 7.501.305€ for hospitals admissions.

Conclusions
The reducible percentage of the total budget of Spanish Healthcare System expended in 2015 due to children were exposed to passive smoking is around 0.041%, calculated in terms of hospital cost, outpatient care and primary care admissions. This amount could totally disappear just adopting better and stronger policies forbidding smoking in front of children.

Funding
European Union. Tackling secondhand tobacco smoke and e-cigarette emissions: exposure assessment, novel interventions,
impact on lung diseases and economic burden in diverse European populations. The TackSHS project

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### ERS Symposia

**Emerging challenges in tobacco control – Heated tobacco products, Harm reduction and the Foundation for a Smoke-Free world**

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In order to warrant tobacco industry’s profits and overcome a declining cigarette market, tobacco companies have recently launched the novel heated tobacco products (HTPs), claiming a 90-95% reduction in harmfulness. While there is robust evidence that studies either performed or funded by the tobacco industry cannot be trusted, public health advocates have stressed that the short and long-term health effects resulting from continued consumption of these addictive products remain unclear. These new products mislead consumers about their safe use, and may potentially attract more users, recruit non-smokers and youths, and postpone quitting in regular smokers while promoting the social acceptability of tobacco use. However, while these products remain largely unregulated, the tobacco industry has been aggressively marketing them as safe products, and cessation and harm reduction tools.

This presentation will present the findings from independent research focusing on the potential of HTB to harm human health, while will discuss the need for strict regulation. Finally, it will highlight ERS leadership and engagement in tobacco control and present the ERS statement on the “Foundation for a Smoke-free world” and tobacco emergent products.

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### H2020 SMOKEFREE BRAIN SYMPOSIA

**Running away from addiction: Exercise, smoking cessation and neuroscience**

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**Background and purpose**

There is substantial evidence to suggest that exercise decreases nicotine withdrawal symptoms in humans; however, the mechanism mediating this effect is unclear. Here we investigate in a mouse model the effect of exercise intensity on nicotine withdrawal symptom severity and the binding of α4β2*, α7 nicotinic acetylcholine (nAChR), µ-opioid (MOPr) and D2 dopamine receptors, and on brain-derived neurotrophic factor (BDNF) and plasma corticosterone levels.

**Experimental approach**

Male C57BL/6J mice treated with nicotine (minipump, 24 mg/kg/day) or saline for 14 days underwent one of three concurrent exercise regimes: 24, 2 or 0 hrs/day-1 voluntary wheel running. Mecamylamine-precipitated withdrawal symptoms were assessed on day 14. Quantitative autoradiography of α4β2*, α7 nAChRs, MOPr and D2 receptor binding was performed in brain sections of these mice. Corticosterone and BDNF levels were measured in plasma and brain regions, respectively.

**Key results**

Male C57BL/6J mice treated with nicotine (minipump, 24 mg/kg/day) or saline for 14 days underwent one of three concurrent exercise regimes: 24, 2 or 0 hrs/day-1 voluntary wheel running. Mecamylamine-precipitated withdrawal symptoms were assessed on day 14. Quantitative autoradiography of α4β2*, α7 nAChRs, MOPr and D2 receptor binding was performed in brain sections of these mice. Corticosterone and BDNF levels were measured in plasma and brain regions, respectively.

**Conclusions and implications**

Exercise reduces nicotine withdrawal symptoms irrespective of intensity. This is concomitant with an upregulation of α7 nAChRs in the hippocampus. This novel mechanism may underline the beneficial effect of exercise on nicotine withdrawal.

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### Smoking cessation, neurofeedback and sleep

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The concept of self has evolved over time to become one of the central pillars of the human mind. Work over the last two decades have begun to relate the concept of self to large scale networks of the brain1 and especially with the default mode network (DMN)2. Recent work from our team3 has further suggested that the neural representation of self (NRS) is confined to two nodes at the very centre of the DMN. A node in the dorsal midline frontal cortex is likely the executive part of the NRS while a node on the mid-parietal cortex is likely the depository of the memory store of the NRS. The NRS may well be the pinnacle of evolution in humans, but it also creates a conflict. For a number of fundamental evolutionary reasons3-4 the NRS must retain its individuality intact while the world outside changes, often in dangerous ways, demanding that these changes are also reflected in the internal representation of the world. In this context safe learning emerged as a way of achieving experience-guided change of the internal representation of the world that makes only the minimal necessary changes to the NRS. It seems that evolution has resolved the conflict through segregation of learning in time. Learning when practically no change in the NRS is involved is allowed in real time, while learning that also demands changes of the NRS, is allowed in the form of safe learning only during special times, mainly during sleep. Detailed studies of the changes during light sleep have revealed how this safe learning (memory
consolidation) is prepared during spindles\(^5\): first the environment is checked and if judged as safe then the alerting system is actively inhibited so that influences from the environment are blocked; then and only then, memories that are temporarily stored in mid-temporal brain areas are highlighted for spindle-mediated transfer to widespread brain areas. The changes of the NRS seem to be controlled by the rostral, executive, part of the NRS as the actual NRS-related memories are transferred to its caudal part \(^3\). In the framework described above neurofeedback is seen as a safe yet incomplete process to reverse aberrant behaviour to physiological norms. The process is safe because it relays and exploits the natural ways of safe learning described above and for this reason it is incomplete: whatever is achieved during neurofeedback corresponds to directed experience related to the NRS that will be developed further during the day, but only consolidated during sleep, because only then the NRS is open for change. In the context of helping people stop smoking in the SmokeFreeBrain project, the influence of the object of addiction that overrides the normal controlling influence by the NRS is confronted by neurofeedback in two stages; in the first stage a small number of sessions are used to bring the NSR closer to normal physiological patterns. In the second stage the well-established alpha-theta protocol is used to address the addiction directly. Early results from the cases already completed show that both neurofeedback stages have a positive influence, with progress in the first stage being a pre-requisite for successful outcome of the combined sessions.


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**How varenicline affects sleep quality and functional connectivity? A polysomnographic evaluation**

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The SmokeFreeBrain (SFB), which is an EU, H2020-funded project aims to compare several antismoking approaches. Among them, the varenicline intervention seems to be extremely robust in terms of nicotine abstinence rate. However, there are some reports of side effects during sleep associated with insomnia and negatively aroused dreaming. However, these symptoms have never been objectively quantified. This study presents preliminary results from 17 participants who underwent entire polysomnographic (PSG) recordings before and 21 days after the intervention initiation. Our aim was to investigate how both smoking abstinence and varenicline treatment affect sleep quality. We employed both visual sleep scoring and functional connectivity analysis. The purpose of visual sleep scoring analysis, performed according to the guidelines of the American Association of Sleep Medicine (AASM) was to investigate sleep macro-architecture, defined as the sleep cycles during night. We calculated various sleep parameters like efficiency, onset, stage and latency duration, sleep fragmentation and the number of arousals during sleep. Additionally, we also estimated the co-operative degree among electroencephalographic time series as well as the interactions among brain and heart. The latter analysis aimed to quantify neuroplasticity changes associated both with smoking cessation and varenicline treatment. Early results demonstrated beneficial effects from nicotine abstinence (increased oxygen saturation level, facilitated sleep onset). However, there were neurophysiological patterns of increased arousal both on autonomic (heart rate variability features) and on cortical level (increased connectivity within beta band). These patterns observed even during deep sleep stages indicating poor sleep quality.


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**Information Wars: The era of massive digital misinformation. The footprint of tobacco industry in social media and mobile health**

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Internet and mobile technologies are nowadays used by most of the world population. These technologies are not just available for highly engaging and for many people an essential tool in their daily life. Not surprisingly, the use of mobile health and online health for smoking cessation is quite well studied and evidence shows they can be cost-effective. However, the tobacco industry is also leveraging the power of those channels for mass communication. Furthermore, we will explore how bogus smoking cessation “treatments”, such as auto-hypnosis, are being promoted in apps stores or social media. Overall, we will study user cases on how social media and mobile technology has been used to promote harmful public health messages. These case studies will be used to provide some guidelines on how to create strategies to use social technologies such as mobile apps and social networks to promote smoking cessation and increase awareness about tobacco risks. This presentation will also be based on our experience from the project SmokeFreeBrain where we combined online and mobile technologies for smoking cessation.


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Smoking Cessation supported by Mobile App in Taiwan
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Introduction
Taiwan has around 4 million smokers, resulting in 27,000 deaths annually. Despite the knowledge of smoking hazards and intention to quit smoking, the abstinence rate is below 20%. The objective of this study is to evaluate if a mobile app based smoking cessation intervention, embedded with the concept of recommender system and computer tailoring is effective to increase the abstinence rate in Taiwan.

Methods
This intervention would record data from two sources: the clinical study and public study. The patients in clinical study will be recruited in smoking cessation centers in Taiwan with 50 patients in the intervention group using the mobile app, and 50 patients in control group. They will be followed-up for 6 months and their expired carbon monoxide and urine cotinine levels will be used for the assessment of being smoke-free. In public study, web users intended to quit smoking will be able to download the same mobile app and randomly allocated to an intervention group, receiving personalized motivational messages or to a control group that receives basic motivational messages. They will also be assessed through routine self-reported questionnaires for 6 months.

Expected Results
Preliminary results show that health recommender system based mobile motivational messages have a positive influence in smoking cessation towards smokers willing to quit smoking.

Discussion
To our knowledge this is the first mobile app based intervention in Taiwan to make use of combination of I-Change behavioral change model with health recommender system and computer-tailoring for smoking cessation. If found effective, our solution could help provide new clinical insights for smoking cessation.

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So-Lo-Mo Study: An mHealth Intervention to Improve the Efficacy of the Smoking Cessation Process
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Introduction
Social-Local-Mobile (So-Lo-Mo) is an innovative intervention based on mobile technologies: it has the capacity to trigger behavioural changes. In this sense, the So-Lo-Mo App is a complement to pharmacological therapies to quit smoking providing personalised motivational messages, physical activity monitoring, lifestyle advices and distractions (mini-games) to help pass the cravings. The purpose of this study is to analyse the efficacy of the So-Lo-Mo intervention applied to the smoking cessation process compared to usual care. Secondary study objectives are: (i) to analyse safety of pharmacological therapy; (ii) to analyse subjects’ motivation to give up smoking; (iii) to analyse subjects’ health-related quality of life; (iv) to monitor physical activity; and (v) to monitor healthy lifestyle habits.

Methods
So-Lo-Mo study is a 12-months randomized open-label parallel-group trial performance at the Virgen del Rocio University Hospital premises. Efficacy was considered as the abstinence rate at 1 year measured by means of exhaled Carbon Monoxide (CO) and urine cotinine tests; safety was measured as the number of adverse events related with pharmacological therapies under consideration (either bupropion or varenicline); subjects’ motivation was measured through the Richmond test; health-related quality of life was measured through the EuroQoL-5D-5L questionnaire; physical activity was measured through the International Physical Activity Questionnaire (IPAQ-27); and lifestyle habits was measured through the subjects’ weight evolution during the follow-up period.

Results
So far, data gathered from 59 subjects (30 women, 28 controls) has been analysed at 6 months form baseline, yielding the following results: (i) Efficacy: success rate were 53.6% and 71% for control and intervention groups respectively (p = 0.168). (ii) Safety: 12 adverse events were reported for the bupropion therapy (n = 24) while 30 adverse events were reported for the varenicline therapy (n = 35). (iii) Motivation: Richmond scores were 9.36 ± 0.83 and 9.50 ± 0.63 (p = 0.465) for control and intervention group respectively. (iv) Health-related quality of life: the average evolution on the Visual Analogic Scale (VAS) score was 6.87 ± 11.31 (p = 0.007) and 7.69 ± 16.20 (p = 0.023) for control and intervention groups respectively (p = 0.168). (v) Physical activity: the evolution of metabolic equivalent (MET) minutes per week was 1120.42 ± 6113.12 and -10.36 ± 4188.47 (p = 0.436) for control and intervention groups respectively. (vi) Lifestyle habits: subjects’ weight evolution in kilograms was 3.51 ± 2.90 and 2.93 ± 5.77 (p = 0.202) for control and intervention groups respectively.

Conclusions
(i) Efficacy: the So-Lo-Mo intervention provides a consistent improvement on the efficacy compared to controls. (ii) Safety: the number and type of the reported adverse events related to the pharmacological treatment is in keeping to their expected incidence as reported by the European Medicines Agency. (iii) Motivation: a slight bias on the subjects’ motivation has been reported, showing lower motivation score in controls compared to intervention group. (iv) Health-related quality of life: Statistically significant improvements in the VAS health score were found for
both groups. Furthermore, a greater average improvement has been reported for intervention subjects compared to controls, which suggest that the intervention has an added value. (v) Physical activity: physical activity evolution has been reported higher for controls compared to intervention subjects. This finding should be taken with care, since the variability reported for the increases in the IPAQ27 score is very high and, therefore, more observations are needed before drawing a conclusion from this analysis. (vi) Lifestyle habits: weight increment in control group was reported to be higher when compared to intervention group. This finding, in combination with the efficacy, could support the preliminary conclusion that the So-Lo-Mo intervention improves the efficacy of the smoking cessation process while helps to control weight increments associated to the nicotine abstinence. Preliminary analyses show a very promising trend in achieving the main objective of this study. However, stronger statistical significance is needed to endorse this statement.

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Behavioral change and mobile recommender systems for smoking cessation
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There are hundreds of mobile apps for smoking cessation but many of them are designed without clear evidence or the use of behavioral change models. In this presentation, we will explore how data-driven recommender systems can be used to create mobile behavioral interventions that adjust to the context of the patients in a more automatic and user-friendly manner. We will explore how we can combine the field of tailored health education with data-driven recommender systems which are delivered using mobile technologies. This presentation will use a study case the mHealth solution for smoking cessation developed in the project SmokeFreeBrain with combines just-in-time motivational messages based on the i-Change behavioral change model.

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Training Health Care Professionals in Evidence-based Tobacco Treatment: Lessons learned from the Global Bridges Network
What makes a difference in cessation: learning from the TiTAN project
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Introduction
Smoking rates in Greece are among the highest in all of Europe and responsible for a large burden of respiratory and other illnesses. The TiTAN (Tobacco Treatment Training Network in Primary Care) project was funded by Global Bridges to provide leadership and coordination for the dissemination of both a professional training program and practice tools that are tailored to support busy primary care providers and increase the number of tobacco control champions working in Heraklion Crete (2014-2016) and in a second phase Greece & Cyprus (2017-2019). This presentation will focus on lessons learned in the implementation and sustainability of the TiTAN training network.

Methods
The intervention program involves an adaptation of the Ottawa Model for Smoking Cessation. A pre-post evaluation has been used to examine the impact of the program on: i) provider attitudes, knowledge, intentions; and ii) rates of evidence-based tobacco treatments (5As) delivery.

Results
Pre-post evaluation data suggests the TiTAN project has had a significant influence on provider’s attitudes and confidence in tobacco treatment delivery. Local adaptation, and clinical leadership have been important parts of the TiTAN program’s success. Teaching techniques such as role-play, interactive case studies, booster training, and social media have been used to enhance clinician skill and confidence in tobacco treatment delivery. An overview of the evidence-based techniques, key messages and training materials which have been designed for use in the TiTAN project will be presented. Facilitators and challenges faced in the scale-up of the TiTAN network will be discussed.

Funding
TiTAN Greece & Cyprus is supported by Global Bridges: Healthcare Alliance for Tobacco Dependence Treatment through a Pfizer Independent Grants for Learning and Change (GB-25944945).

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A longitudinal outcomes evaluation of an adapted Certified Tobacco Treatment Specialist (aCTTS) for physicians in the Former Yugoslavian Republic of Macedonia (FYROM)
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Introduction
The CTTS program has been shown to decrease smoking in populations within the United States. The program was adapted into a 1 ½ day training for Macedonian physicians. The overall program aim was to train 100 medical providers in the aCTTS curriculum. The objectives were to: 1) increase provider knowledge and self-efficacy for patient counseling; and, 2) counsel at least 500 patients to quit tobacco use over a one-year period.

Methods
A longitudinal survey was conducted at baseline, immediate post-intervention (knowledge only), and 6- and 12-months post-intervention. Data were analyzed in SPSS (version 25). Data are analyzed through 6-months post-intervention. Analysis included descriptive data, bivariate analysis to determine significant
changes across time, and multivariate analysis to further refine associations between physician demographic characteristics, physician personal smoking history, and changes in knowledge and self-efficacy for counseling between baseline and 6-months post-intervention. In addition, weekly data has been collected from physicians regarding their engagement in tobacco counseling with patients.

Results
On a 30-item knowledge scale, scores increased between baseline and immediate post-intervention from 10.9 to 17.4 (t=-10.04, p<0.001). Post-intervention, physicians report counseling over 70% of patients who use tobacco. Additional data presented will include impact of the training on physicians’ knowledge about tobacco use, addiction, and health risks, physician-patient communication, physician perceptions and attitudes regarding tobacco use, perceived peer and systemic support for tobacco counseling, and perceived self-efficacy for patient counseling.

Conclusions
The adapted CTTS program has been well-received by physicians in Macedonia and is contributing to increased counseling for patients of trained providers. Future efforts include expanding the training across Macedonia with potential for use in the broader region.

Funding
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Building capacity to support smoking cessation amongst Family Physicians in Romania: The Challenges of VBA in Primary Care Practice
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Introduction
Romania has a population of 19.5 million. Smoking rates are 37% men and 16.7% women. According to the WHO, 77% of all deaths in 2008 were caused by diseases for which tobacco smoking is the main risk factor. Family Physicians (FPs) have regular and ongoing contact with their patients, therefore they have a unique opportunity to address smoking cessation (SC) efforts. The overall goal is to build capacity to support SC amongst FPs, aiming to improve the health outcomes of patients with tobacco dependence by increasing the number of quit attempts and successful quits.

Methods
Selection of 15-20 teachers in family medicine interested in SC; adapting and developing a teaching curriculum in accordance with the agreed content but suited to local needs: lack of specialized SC services 2 required Very Brief Advice PLUS (VBA+pharmacological treatment+behavioural support); supporting these teachers in delivering workshops to local FPs; offering to taught FPs a pattern of supporting system for monitoring smokers and SC attempts; adapting and developing a model of educational evaluation to monitor and report progress and outcomes.

Results
This is an ongoing project using a “cascade” approach. At the moment there are: 4 participants in the IPCRG international teachers’ workshop (1st level) and 32 participants in the in-country teaching other teachers (2nd level); the 3rd level has begun and will continue by August 2018. The estimated participant and beneficiary numbers are 250 FPs taught and 43,000 patients.

Conclusions
Building capacity to support SC amongst FPs in Romania using the standardisation of Ask and Advise methods, and adaptation of Act to the national context might increase quit attempts and the number of successful quits when delivered at primary care level.

Funding
The project is part of the International Primary Care Respiratory Group Teach the Teacher Programme “Capacity Building - Teaching the teachers of primary healthcare professionals to treat tobacco dependence” and funded by a Global Bridges grant.

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Nurses making a difference in tobacco dependence treatment in Portugal
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Despite the existence of effective ways to help patients quit smoking, nurses are usually ill prepared to address it as it was not a priority in nursing training. Nevertheless, if properly trained, the over 66,000 nurses in Portugal would make a significant difference in the tobacco epidemic. Experience from several countries has demonstrated the efficacy of combination of Training-of-Trainees. This project aims at filling the nurses’ tobacco educational gap and build capacity among Portuguese nurses for evidence-based cessation interventions in clinical practice, increasing by 40%, the number of nurses self-reporting “always/usually” when assessing the patients tobacco use 3 months post educational intervention. Using a descriptive, pre-post design, this project implemented education workshops on tobacco dependence treatment for Portuguese nurses. The project started in October 2017. Statistical analysis was performed using IBM® SPSS® Statistics and a confidence level of 95%. Initial-final response comparisons were done with the Wilcoxon test.

Fifty six nurses were enrolled in the study, mainly oncology nurses (31%) and specialists (64%). After the program, we observed an increase in the number of nurses that: 1) advise patients to stop smoking (p=0.01); 2) assess whether patients are interested in quitting smoking (p=0.02); 3) recommend using a telephone line for smoking cessation (p=0.02); 4) analyse the barriers to cessation with patients who are not interested in trying to cease (p=0.02); and 5) inform patients and their families about the importance of creating a smoke-free home environment after hospital discharge (p=0.006).
In conclusion the program was effective in changing nurses' attitudes towards their role in tobacco control. Although short- and medium-term beneficiaries of the project are nurses, the ultimate beneficiaries are smokers supported in their tobacco cessation efforts.

**Funding**

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**Factors Associated with the Implementation of the 5As smoking model**

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**Introduction**

Several health organizations have adopted the 5A’s brief intervention model (Ask, Advise, Assess, Assist, Arrange), based on evidence-based guidelines for smoking cessation. We examine individual, cognitive, behavioral, and organizational factors associated with the 5A’s performance among clinical healthcare workers in Catalonia. We also investigate how these factors interact and potentially predict the implementation of each component of the 5A’s.

**Methods**

A cross-sectional survey was conducted among clinical health workers enrolled in an online smoking cessation training course (n=580). The survey included questions about individual characteristics as well as cognitive, behavioral, and organizational factors previously identified in research. We assessed self-reported performance of the 5A’s, assessed on a scale from 0 to 10, and used Multivariate regression to examine factors associated with its performance.

**Results**

The performance means (standard deviation) were moderate for the first 3A’s [Ask: 6.4 (3.1); Advise: 7.1 (2.7); Assess: 6.3 (2.8)] and low for the last 2A’s [Assist: 4.4 (2.9); Arrange: 3.2 (3.3)]. We observed a high correlation between Assist and Arrange (r=0.704, p<0.001). Having positive experiences and feeling competent were positively associated with performing the 5A’s model and having organizational support with Assist and Arrange. Personal tobacco use among healthcare workers was negatively associated with Advice and Arrange.

**Conclusions**

Our study found that clinical healthcare workers do not perform the 5A’s completely. The main barriers identified suggest the need of training and making available practical guidelines in healthcare services. Organizational support is essential for moving towards the implementation of Assist and Arrange.


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**Waterpipe and Novel Tobacco Products: Oral Presentations**

**Tobacco Prevention & Cessation**

**DOI: 10.18332/tpc/90706**

**Waterpipe (shisha) smoking: prevalence, harm perception and correlates of favourable harm perception among university of Ibadan undergraduate students**

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World Health Organisation (WHO) describes tobacco as a killer of up to half of its users, and causes the death of no less than Six (6) million people yearly. Notwithstanding the notable achievement of public health policies in plummeting cigarette smoking in many countries, waterpipe smoking has sustained tobacco consumption even in the wake of these numerous stern tobacco control policies and regulations that are habitually cigarette-oriented. Hence, this study sought to determine the prevalence, harm perception and correlates of favourable harm perception of this emerging public health problem.
method of tobacco consumption among undergraduate students in University of Ibadan. A cross sectional descriptive study was conducted among 390 undergraduate students residing in the halls at the University of Ibadan. Data were obtained using a semi-structured questionnaire and analysed with SPSS 21. A Likert scale was used to determine the harm perception of waterpipe tobacco smoking by current smokers while Bi-variate analysis was used to test for associations and correlates of favourable harm perception. The study revealed that mean age of initiation of WPS was 18.5 ± 2.7yeers, 7.8% were ever users while 3.9% were current users with an intermittent pattern of use. 33% of current waterpipe users had favourable harm perception while 67% of them had unfavourable harm perception. Health warnings on shisha smoking packages and considering of shisha use as smoking were significant correlates of favourable harm perception while Shisha smoking among siblings of respondents, knowledge of waterpipe (Shisha) instrument, sex, current cigarette smoking status, and shisha smokers among friends were not significant. WPS is practiced among the University’s undergraduate students with less awareness on its health consequences. Hence, education and promotion of the intending harm in smoking waterpipe should be well advocated while specific laws should be formulated in the Tobacco Control Act to regulate its use in the country. 

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Waterpipe use and attitudes related to it among Serbian adult population
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Introduction
To analyze prevalence of water pipe use and attitudes related to it among Serbian adults.

Methods
Data were obtained through cross sectional survey conducted in December 2017. Three stage random nationally representative stratified sample was used. Data from 1045 Serbian adults were collected through computer assisted personal interviewing.

Results
Lifetime prevalence of waterpipe use is 6% (7% male, 5% female). In addition, 7% of population visited bars specialized for waterpipe use (waterpipe bars) but haven’t smoke waterpipe. The highest percentage of waterpipe lifetime users was in the 18-24 age group (15%), followed by age group 25-34 (12%). In the same age groups, additional 22% and 12% respectively have visited waterpipe bar, but haven’t smoke waterpipe. Almost every third citizen of Serbia (29%) thinks that waterpipe use is less harmful than cigarette use, 39% agree with the statement that waterpipe users can develop nicotine addiction and 36% think that waterpipe use is risk factor for malignant diseases. Young adults 18-24 years old are less aware of harmful consequences of waterpipe use. There are more citizens that agree that waterpipe use in hospitality sector should be banned than those who disagree with such measure (40% vs. 24%). Younger population is less favorable to the waterpipe smoking ban in hospitality sector.

Conclusions
Waterpipe use and spending time in specialized waterpipe bars is popular in Serbia, especially among young adults. Insufficient number of citizens is aware of risks associated with waterpipe use. Findings indicate need of awareness raising on health effects associated with waterpipe smoking and exposure to waterpipe smoke.

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Heated tobacco: technology and nature of emissions
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Tobacco industry launches worldwide campaigns to support the heated tobacco.

No data showed that this product is more harmful than regular cigarette.

We analyze 4 questions about emission of heated tobacco (formally heated not burn (hnb), but recent publication doesn’t speak anymore of “not burn”):
1 How work heated tobacco?
2 What is the exact nature of emission?
3 Are emissions less dangerous than regular cigarette one?
4 What is the influence of tobacco Industry communication on the heated tobacco emission?

How tobacco is heated?
The old heated tobacco devices heated specially prepared tobacco by combustion of carbon product as in water pipe. The Revo® is the only device using this technology that remains marketed. The carbon product is burn. Emission contains CO and smoke. Very few data’s are available on emissions of this product and no risk reduction is proven in real use.

The three main electric devices use specific tobacco preparation. These products are IQOS® from PMI using Heets®, GLO® from JTI using Vapodes®. In each case the name of the device and the name of the specific tobacco use is different to offer, in some countries, the opportunity to get around the regulation on advertising, promotion and don’t paid excise tobacco taxes. The temperature of heat goes from 180°C for Ploom® to 340-350°C for IQOS®.

Emission
More 40 publications from PMI concern IQOS®. All the comparison of cigarettes emission are done using ISO 3308 norm but with the intensive Canadian pattern (HCl) of smoking.

The emission contains gases, including small concentration of carbon monoxide (CO), aldehydes, nitrosamines, black carbon and others solid particles. The solid non nicotine matter recover on filter during study of emission named tar according ISO for regular cigarette, are rename as Nicotine Free Dry Particle Mater (NFDPM) probably to avoid bad reputation of tar and protect market!

In smoking machine the level of toxic is usually more 10 times lower than observed with regular cigarette, but risk reduction is not yet demonstrates. All the PMI scientific publications announced a “potential” risk reduction, not an establish risk reduction. The nicotine delivery is sometime close to nicotine delivery of regular cigarettes, sometime lower, but in any case the nicotine is delivered in few minutes as from cigarette to produce cerebral
shoot of nicotine. The produce is built to produce nicotine shoot to obtain by upregulation an increase of the number of nicotine receptor and increase tobacco dependence. The clinical studies reported are conducted mainly in close controlled situations to control the total switch from standard tobacco to heated tobacco. Published data in real world sustains more an tobacco risk increase than a risk reduction, because the number of complete switches from regular tobacco use to the IQOS® concern only 11% of those who use the device in Japan , with no risk reduction demonstrate, but the risk reduction may exist for these users. Most of users are dual users of regular tobacco and heated tobacco. It is clear than no benefit are expect from this dual use, but the main concern is the massive use of IQOS® by never smokers: 20% of users in the Japanese study2 and 51% of in the Italian one . Because of the strong promotion of the product the IQOS® is clearly a tobacco promotion product who increases the tobacco risk in real world.

Conclusions
Heated tobacco produces smoke and toxic emission. Heated tobacco is not a clean product. Heated tobacco is not a risk reduction product. A smoke-free world is a world without heated tobacco.

DOI: 10.18332/tpc/91869

Promotion of “Heat Not Burn” Tobacco Products in Russia: New Threat to Tobacco Control
Marina Chernova
Confederation of Consumer Societies (KONFOP), Program Director

Introduction
To evaluate the promotion of (“heat not burn”) tobacco system IQOS in Russia

Methods of Research
The study was conducted in June-November 2017 by Confederation of Consumer Societies (KONFOP), using the “mystery shopper” method (when visiting IQOS stores) and by analyzing information on IQOS website.

Methods
Currently, in Russia there’s an active promotion of IQOS - the system for heating (“heat not burn”) tobacco, produced by LLC Philip Morris Sales and Marketing. IQOS device is positioned and promoted as less harmful to health than conventional cigarettes. In IQOS stores, located at in Moscow, managers propose to test device directly in the shop, while the passport for establishing the age is not asked, it’s not considered as a violation of the smoking ban. At the same time, it’s confirmed that IQOS contains tobacco and nicotine. CONFOP conducted study showed that, both on the website and in the company’s IQOS store, the potential buyer is offered stimulating terms of purchase (discounts when buying replacement sticks, vouchers for consumer, who brought a friend to the shop).

Conclusions
The results of the study confirm the facts of IQOS promotion. Currently, regulation of this product in Russia is controversial. While tobacco advertising in Russia is banned, there is a loophole in legislation, and IQOS advertising is not prohibited, health warnings are not to be placed on the devices or on the packs of replacement heatsticks.

Promotion of the tobacco heating system IQOS undermines Russian Federation health policy, stimulates tobacco consumption and maintain nicotine addiction among consumers. Heated tobacco and related nicotine delivery devices must be subject to the regulation for common tobacco products.

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Electronic cigarette youth access in Poland
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Introduction
Electronic cigarette (e-cigarette) use among youth in Poland become very popular. Since the onset of this product access to these products was unrestricted. The aim of this study was to establish functioning of channels of e-cigarettes supply among students aged 16-18 in Poland.

Methods
A school-based, cross-sectional survey was administered in 2016 to 21 secondary/technical schools across two regions of Poland. Analyses focused on students aged 16-18 who reported use of e-cigarettes (both exclusive use and dual use with tobacco cigarettes). After exclusions, 531 students (166 exclusive users, 365 dual users) remained in the final analytic sample. Pearson chi-square tests were used to examine associations between dual and exclusive users of electronic cigarettes, supply channels and possible difficulties in accessing e-cigarettes.

Results
For youth exclusive e-cigarette users most common source of obtaining their first e-cigarette was getting from a friend (47%) and vapor shops (22%), for dual users purchase in vapor shops (32%) and getting from a friend (30%). Teens buy mostly e-liquids in vapor shops (52%). Internet is the source for only 4,6% of them. Overall, only 7 % of youth e-cigarette users (10% in exclusive and 6% in dual users) reported having difficulty obtaining (purchasing or getting from other sources) an e-cigarette. Most youth reported no difficulty obtaining cartridges/e-liquid containing nicotine (93%).

Conclusions
In Poland, teenagers get their first e-cigarettes with the help of friends and in vapor shops. Internet is not a popular source of products. Mostly students did not have problems supplying themselves with electronic cigarettes and cartridges/e-liquids. Introduction of a regulation of age limit on e-cigarette sales should restrict the number of youth who start vaping. Continued surveillance efforts are needed to assess the effectiveness of this policy on curtailing youth e-cigarette use in Poland.
What happens when you ban e-cigarette sales? A Turkish case study
Aslı Çarkoglu1, Mehmet Atilla Uysal2, Ayse Turan3
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Aim and objective
Turkey banned the import and sales of e-cigarettes in 2013. Yet their use has been expanding rapidly in the last few years. This study aims to understand who the users are, what their motivations are to start and to stop using e-cigarettes.

Methods
A survey of 234 e-cigarette users was conducted via snowball sampling within vaping communities.

Results
E-cigarette users in this study were mostly middle-class employed (27% civil servants, 20% employees, 14% healthcare professionals) men (90%) in their 30’s (mean age 35) with above average education (86% with high school and above education). Main reason for switching to e-cigarettes was to quit smoking (74%), while 51% continued to smoke cigarettes. 86% reported using e-cigarettes 6 or more times a day and 54% daily used inside their homes, 31% also reported frequently using it in the presence of their children.

170 of the 284 participants reported stopping e-cigarette use. Most frequently cited reasons to ending the use were “failed to quit smoking” (27%) and “worries about the risk” (23%). A total of 90 of the 234 people surveyed reported having quit cigarettes and 60 of these were among the ones who also stopped using e-cigarettes. Yet, it would be premature to claim that this group quit successfully since the average time of switch to e-cigarette use was 4.01 ± 2.62 months.

Conclusions
While quitting smoking is the main stated reason for the switch to e-cigarettes, failure to quit is listed as the main reason to stop using e-cigarettes as well, pointing to a lost opportunity for cessation and the limited reach of existing cessation services in Turkey. Success of reaching currently healthy young adults via hospital based cessation clinics –the predominant cessation service mode in Turkey- needs to be reevaluated.

Funding
No funds were used when conducting the study. (301 kelime).

What happens when you ban e-cigarette sales? A Turkish case study
Aslı Çarkoglu1, Mehmet Atilla Uysal2, Ayse Turan3
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Funding
No funds were used when conducting the study. (301 kelime).

Expended air-co and urinary cotinine levels of the electronic cigarette users: Descriptive study from Turkey
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Introduction
The tobacco control community has raised some concerns about whether studies on electronic cigarettes (e-cigarettes) published in scientific journals hide any conflicts of interest (COIs) and whether such reports are biased. This study assessed potential COIs in the e-cigarette scientific literature.

Methods
We analysed all e-cigarette publications indexed in PubMed up to August 2014. We extracted information about the authors (affiliations, location, etc.), publication characteristics (type, topic, subject, etc.), results and conclusions, the presence of a COI statement (yes/no), and funding by and/or financial ties to pharmaceutical, tobacco, and/or e-cigarette companies. An algorithm to determine the COI disclosure status was created based on the information in the publication. Prevalence ratios (PRs) were calculated to identify associations with COI disclosure, controlling for several independent variables.

Results
Of the 404 publications included in the analysis, 37.1% (n=150) had no COI disclosure statement, 13.4% had declared potential COIs with pharmaceutical companies, 3.0% with tobacco companies, and 10.6% with e-cigarette companies. The conclusions in publications with COIs, which were mainly ties to pharmaceutical companies, were more likely to be favourable to e-cigarettes (PR=2.23; 95%CI:1.43–3.46). Publications that supported the use of e-cigarettes for harm reduction (PR=1.81; 95%CI:1.14–2.89) or as a tool for smoking cessation (PR=2.02; 95%CI:1.26–3.23) were more likely to have conclusions that were favourable to e-cigarettes.

Conclusions
One-third of the publications reporting studies on e-cigarettes did not have a COI disclosure statement, and this proportion was even higher in news articles, editorials, and other types of publications. Papers with conclusions that were favourable to e-cigarettes were more likely to have COIs. Journal editors and reviewers should consider evaluating publications, including the funding sources, to determine whether the results and conclusions may be biased and to determine whether there are any relationships with PTEC COIs.

Funding
The group and this study is partially funded by the Spanish Society of Epidemiology.
The electronic cigarette (e-cigarette), which is accepted as a new market by the tobacco industry, is highly dependent on health and is addictive due to its nicotine content. Informing and raising awareness is extremely valuable to protect the identified risks of e-cigarette in society. The aim of this study was to determine the socio-demographic characteristics of volunteer e-cigarette users, to determine the causes of e-cigarette smoking, to identify some risks (nicotine, carbon monoxide).

In this descriptive study, volunteer electronic cigarette smokers participated in the questionnaire, carbon monoxide was measured, urine sample was taken and directed to the toxicology laboratory for measurement of cotinine, and cotinine was measured in urine. Twenty volunteer e-cigarette smokers participated in the survey. Eighty five percent of the participants were male, 60% were married, 75% were college / university graduates, 80% were working, 65% of them were economical, 35% were good, 40% and 35% regularly use medicines. The median age of participants was 38.5 years, the youngest participant was 22, the oldest was 69 years old. Fifteen (75%) of the respondents stated that they were passively affected by tobacco smoke. Eight of these 15 (73%) were exposed to friends, eight (54%) were at home, eight (54%) were at cafes, etc., and four were exposed at work.

The participants’ main reasons for starting to smoke are friend influence and curiosity. Thirty percent of participants had tried e-cigarette before using e-cigarette, 90% used e-cigarette every day, e-cigarette was most frequently obtained from internet and friends / relatives, 79% did not use cigarette e-cigarette and all use nicotine. Participants’ median e-cigarette smoking duration was 5.5 months; monthly e-cigarette expenditures are median 60 TL. Participants main reasons to smoke e-cigarette are to quit smoking, to increase in one day (ml) and cotinine levels in urine specimens (Pearson correlation test, r = 0.511, p = 0.025).

As a result, this study, in which nicotine exposure and increase in carbon monoxide and urine cotinine levels due to the use of e-cigarettes is documented, is an important proof of the country’s scientific work on e-cigarettes. Preventive strategies should be strictly used for any tobacco products including e-cigarettes.
Carbonyl emissions from a novel tobacco heated product (IQOS): comparison with an e-cigarette and a tobacco cigarette
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Introduction
Heated tobacco products have been recently marketed as harm reduction products, but the scientific literature is mostly comprised of industry funded studies. The aim of this independently-funded study was to compare carbonyl emissions from a novel heated tobacco product (IQOS) in comparison with a commercial tobacco cigarette and a new generation e-cigarette.

Methods
Aerosol and smoke was collected using an automated machine in 2 impingers connected in series that contained DNPH. The e-cigarette was tested at 2 power settings (10 W and 14 W). Health Canada Intense (HCI) and two more intense puffing regimes were tested. Analysis was performed using HPLC, using a previously validated method.

Results
IQOS regular and menthol IQOS emitted 6.4 and 5.0 μg/stick formaldehyde, 144.1 and 176.7 μg/stick acetaldehyde, 10.8 and 10.4 μg/stick acrolein, 12.8 and 11.0 μg/stick propionaldehyde and 2.0 and 1.9 μg/stick crotonaldehyde. IQOS products emitted approximately 10-fold less formaldehyde, 7-fold less acetaldehyde, 10-fold less acrolein, 9-fold less propionaldehyde and 20-fold less crotonaldehyde compared to the tobacco cigarette. The e-cigarette emitted approximately 65 to 130-fold less formaldehyde, 1000-fold less acetaldehyde and 300-fold less acrolein compared to the tobacco cigarette. Propionaldehyde and crotonaldehyde were not detected in the e-cigarette aerosol. At more intense puffing regimes, only formaldehyde was observed to be increased in IQOS products, while all other carbonyls were emitted at levels similar to the HCI regime. The levels of carbonyls emitted from IQOS were similar to those reported by the manufacturer in the literature.

Conclusions
IQOS emits substantially lower levels of carbonyls compared to a commercial tobacco cigarette but higher levels compared to an e-cigarette. There seems to be a risk continuum between different harm reduction products.

Funding
The study was funded by Mayo Clinic.

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IQOS- HYBRID product a new trap?
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Introduction
Very recent in December 2017 – “The International Union against tuberculosis and lung diseases” published his position on “Heat-Not-Burn Tobacco Products” (HNB). It is important to know this report because it’s one of the first official reactions against the new generation of tobacco products. This new “attractive” offers are now everywhere, even in Romania. IQOS is one of them with very clear objectives announced by tobacco industry.

Aims
The authors are trying to find out the key of the new politics of the tobacco industry in offering this type of product

Methods
We are comparing what the studies of the tobacco industry are saying and what are the realities of the consequences of implementing on the market of this product.

Results
We are emphasising with new evidence that’s another lie and another type of trap for the potential smokers. Arguments are more evident from one month to another.

Conclusions
This is a new attitude and another kind of strategy of tobacco industry where we have to know more for counteracting in time.

Funding
No funding from any pharmaceutical company or tobacco industry

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Cross sectional cooperation as a tool in tobacco control – what can be learnt from Denmark?

Smoke-free Future – a bottom-up approach, broad partnerships
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Every day 40 children and young people in Denmark start smoking and eight out ten Danes started smoking before they turned 18. Unfortunately, these facts are not news. If the statistic is to change, we have to think differently. This is what the Danish Cancer Society and the Danish foundation TrygFonden are doing with their partnership “Smoke-free Future”.

Smoke-free Future was launched on World No Tobacco Day on the 31st May 2017. Its overall objective is that by 2030 no children and young people smoke and fewer than 5% of the adult population smoke.

Our main focus is children and young people. We are working to achieve a new smoke-free norm, where tobacco is neither visible, nor attractive nor easily accessible. Furthermore, we want to influence the structural framework to ensure that our children become the first generation who is smoke-free.

How will we achieve this? One of the great ideas behind Smoke-free Future is to involve many different parties in making our vision of a smoke-free future a reality. We can’t do it alone, which is why we need a wide range of partners who can get involved and contribute with initiatives ranging from communicating our message on digital platforms to introducing changes to the structural framework, such as smoke-free school hours.

The parties involved have different backgrounds and include municipalities, government min-istries, administrative regions,
patent associations, schools and businesses.
All parties have signed a partnership statement supporting the main messages of Smoke-free Future: Children and young people have a right to grow up without tobacco smoke and together we take responsibility for making this possible. Together we will create a smoke-free future in which more children and young people can live a healthy and happy life. Together we will ensure that fewer people smoke, so fewer people become ill from tobacco smoke.
Smoke-free Future has just celebrated its one-year anniversary. We’ve been able to do this with over 72 partners – and more are going to join.

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**Smokefree school hours – cooperation between schools and NGO’s**

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The prevalence of daily smoking among youth at Danish vocational schools is 37%, while the prevalence among high-school students is 12%. Tobacco-Free-Schools (TFS) are schools with a policy that prohibits the use of tobacco products by anyone. This includes students, staff, and visitors, on school grounds or at school events at all times. This policy may be effective in reducing smoking among both students and staff. However, there have been few smoking prevention interventions implemented so far at Danish vocational schools. Further, a recent study demonstrates that smoking among students and staff has been found to be beneficial for socializing and bonding, and staff and managers may be reluctant to implement TFS. The shortage of previous interventions, along with the study findings, indicates the need for a broad approach if TFC policies are to be successfully implemented in Danish vocational schools. Thus, The Danish Heart Foundation, The Danish Cancer Society, and Steno Diabetes Center Copenhagen are running a multi-component intervention targeting both students and staff, with a goal of preparing, implementing, and embedding TFS in nine vocational schools. The project will run from 2018 to 2020 and is funded by The Danish Health Authority.

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**Cooperation between health sectors and municipalities**

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In Denmark smoking cessation counselling is based in the 98 municipalities and is carried out by trained smoking cessation counselors. It is free of charge however the demand for the services is generally low – especially among heavy smokers (smoking 15 or more cigarettes a day).
Latest data shows that 22.4 pct. of the adult population smokes in Denmark. 16.9 pct. smoke daily and 7.9 pct. are heavy smokers. The prevalence has not changed since 2011.
From 2014 to 2017, 27 municipalities received a national grant aimed at the population of heavy smokers to:
- increase the number of heavy smokers who receive cessation counselling
- strengthen the smoking cessation counselling by offering subsidized smoking cessation medication
- strengthen the referral system from the primary and secondary health care sector to smoking cessation counseling in the municipalities.
The results from the project show that subsidized cessation medication and a strengthened referral system is an effective way to increase the demand for smoking cessation counselling. The number of heavy smokers receiving cessation counselling increased by more than 500 pct. during the project. The results also indicate Very Brief Advice (VBA) is an effective method to identify smokers who wish to quit smoking and to refer them to smoking cessation. The smoking cessation rates for the smokers participating in this project were similar to the cessation rates of the general population.

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**Smoking cessation in new settings**

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In Denmark there is a social gradient in smoking and this is showing in the statistics on smoking-related disease and deaths. From 2014 to 2017 7 projects led by civil society organisations received a national grant to work with smoking cessation. The purpose was to test what happens when organisations that do not normally work with smoking cessation work with recruitment and counselling of heavy smokers.
Answers to the following questions were sought in the project:
- Would it be possible to recruit a group of heavy smokers that the regular smoking cessation offers funded by municipalities and the government traditionally have difficulty in reaching?
- Would the organisations be able to help the group to stop smoking?
The organisations behind the projects had very different experiences in working with smoking cessation. Their specific target groups were also different, i.e. homeless persons with a (former) drinking problem, socially vulnerable and workers who work in shifts.
Despite the differences some commonalities can be drawn from the projects:
It is important to:
- Have staff support - when working in settings focused on the socially vulnerable, as the staff often themselves are smokers, smoke breaks are used as a pedagogical tool and the approach tend to be that the socially vulnerable have more important and pressing issues than smoking
- Have support from management
- Support from experienced counsellors
- Set-up supervision for the counsellors as other issues surface during the counselling
- Combine the smoking cessation with other offers, i.e. counselling on exercise and healthy nutrition, suggestions for other activities than smoking, a “stop smoking” buddy and counselling outside the actual cessation session.

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Emerging best practices for supporting cessation among health care professionals: Lessons from across the globe

Cessation among health care professionals: The case for action

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Healthcare professionals (HCPs) should work on a strong partnership with policy-makers, governments, NGOs, media and the society to promote tobacco control best practices and denormalise tobacco use. All HCPs should be tobacco control leaders by being role models as non-smokers; educating the general population about tobacco hazards and the benefits of quitting; promoting cessation and systematically identifying tobacco users as part of their routine clinical practice; advising and supporting them to quit; and advocating for comprehensive tobacco control policies. However, and despite all the robust evidence and the best efforts of many health care advocates, considerable challenges remain for tobacco control in health care. This talk will present the findings of recent surveys focusing on tobacco use among health sciences students and HCPs and will discuss the need for comprehensive tobacco control policies and organisational change in health care.

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Best practices for engaging healthcare providers who smoke: lessons learned from the adapted Certified Tobacco Treatment Specialist (aCTTS) training initiative in the Republic of Macedonia

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Introduction

The CTTS program has been shown to decrease smoking among lay populations but has not been applied to healthcare providers (HCP) who smoke. The program was adapted into a 1 ½ day training for Macedonian physicians, 1/3 of whom are active smokers. An important objective was to understand how aCTTS impacts the smoking behavior and counseling activities of healthcare providers.

Methods

A mixed-methods design was used. A longitudinal survey was conducted at baseline and 6- and 12-months post-intervention. Bivariate and multivariate analyses were used to determine significant changes across time and refine associations between HCP demographic characteristics, smoking history, and changes in knowledge and self-efficacy for counseling. Qualitative interviews were conducted with key informants at baseline and with HCP who use tobacco at 6 months post-intervention. Interviews were transcribed, coded, and analyzed thematically to surface key findings from interview transcripts, which were then compared with salient quantitative findings.

Results

While 1/3 of HCPs currently smoke, almost half indicated they had smoked at least 100 cigarettes in their lifetime. While half of current HCP who smoke indicated, at baseline, an interest in quitting within the next 6 months, that number did not decrease significantly. Interviews with HCP who smoke revealed a lack of specialized training, lack of medications and resources, and feelings of stigma and hypocrisy drove behavior. Despite this, HCP who smoke counseled patients at the same average rate as their nonsmoking peers. HCP who smoke framed patient counseling as a matter of managing exacerbation instead of preventing disease.

Conclusions

Overcoming fatalism among HCP who smoke is a vital first step to achieving universal cessation among the healthcare establishment. Further research is needed to reverse attitudes that prioritize secondary over primary prevention, in addition to providing skills to manage stigma and training and resources to support quitting.

Funding

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Tobacco control and the health of children and adolescents

Home and Vehicle Secondhand smoke exposure among US youth: Prevalence, correlates, and effect on academic performance

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Introduction

Private settings are major sources of secondhand smoke (SHS) exposure among youth. We measured youth exposures to home and vehicle SHS, and investigated effect of exposure on academic performance.

Methods

The 2016 National Youth Tobacco Survey of US 6th-12th graders was analyzed (n=20,675). Exposure was a report of having breathed SHS in a vehicle and in the home within the past 7 days. Primary outcome was grade repetition, measured with a surrogate indicator ‘Later-Age-Than-Expected for grade’ (LATE)—defined as being older than peers in the same grade based on age-grade placement standards. Being over-aged relative to peers within the same grade level could be indicative of either delayed school entry, or having repeated the same or earlier grade levels ≥1 time—both of which are associated with poor academic performance. Descriptive and multivariable analyses were performed among all students and never tobacco users.

Results

Among all students, past-7-day SHS exposures were: vehicle (21.4%, 5.56 million); home (21.7%, 5.64 million); vehicle or home (29.0%, 7.50 million); vehicle and home (14.0%, 3.63 million).

Prevalence of past 7-day home or vehicle SHS was: vehicle-free households, 6.5%; households with combustible-only users, 42.9%; households with smokeless tobacco/e-cigarette-only users, 15.3%; and households with combined tobacco products
usage, 60.1%. Among never tobacco product users, odds of LATE were higher among those exposed to SHS in car/home non-daily (AOR=1.62; 95%CI=1.13-2.31) and daily (AOR=1.95; 95%CI=1.22-3.13) than unexposed.

Conclusions
Academic performance was associated with SHS exposure. Smoke-free environments, including homes/cars, are critical to protect youth from SHS exposure.

Use of alternative and novel tobacco products among children and adolescents: a rising threat
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Although the prevalence of smoking has been steadily declining in high income countries over the past decades, a number of alternative and novel tobacco products have recently become popular among adolescents and young adults. These include roll-your-own tobacco, e-cigarettes, waterpipe and others. The role of these products as a gateway to regular smoking is still unclear, but their increasing popularity is a legitimate cause of concern, as adolescence is the period when most smokers take up smoking. This presentation will present evidence of the increased prevalence of alternative tobacco and nicotine products among youth using data from national and international surveys, such as the Global Youth Tobacco Survey, Eurobarometer, the UK Millennium Cohort study and others. There is wide variation in the prevalence of alternative tobacco products use among countries, which can be explained by the different tobacco control policies, price differentials between products, tobacco market characteristics and cultural factors. Tobacco control policies and regulations should be updated to effectively prevent uptake of tobacco use in any form among children and adolescents.

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Tobacco control policies: do perinatal and child health benefit?
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Children are particularly vulnerable to the adverse health effects of tobacco smoke. Tobacco smoke exposure can cause harm from the earliest stages of life, leading to early pregnancy loss, congenital anomalies, preterm birth, intrauterine growth retardation, and perinatal death. Exposure during pregnancy and early life is furthermore associated with the development of asthma, severe respiratory tract infections among children. Similar effects, although less consistently, have been shown for increasing tobacco prices. Decreased exposure to other people’s tobacco smoke, both at home and in public places, as well as reductions in parental smoking, including during pregnancy, are the likely primary mediators of these effects.

There is now a need to accelerate implementation of effective tobacco control policies to protect population health, including that of children. The observed health impacts on children constitute an important tool for advocacy, as children cannot protect themselves against tobacco smoke. Additional studies are needed to assess the effectiveness of tobacco control policies in low- and middle-income countries, and to evaluate the potential child health impact of newer policies including smoke-free car laws, plain packaging, and display bans.

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The Value of a Human Rights-Based Approach to Tobacco Control
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As also evidenced in the presentations in this Panel, there is ample evidence of the harmful effects of smoking and exposure to Environmental Tobacco Smoke in all phases of life and at all stages of the tobacco value chain. The harmful effects of production, sale and exposure to tobacco are not only a public health concern but also a matter of social justice in the way tobacco negatively impacts on the lives and wellbeing of individuals - smokers and non-smokers alike.

This presentation will address the potential of a human rights-based approach to tobacco control. Human rights law offers an authoritative moral and legal framework to address injustices in relation to all aspects of tobacco, and is aimed at protecting the vulnerability of the individual. Specific attention will be paid to the rights and interests of children as vulnerable subjects when it comes to tobacco use and exposure. In addition, the presentation will encompass a discussion of the possibilities for creating accountability for human rights violations in relation to tobacco. It will pay attention to the tools and mechanisms that the human rights framework offers for addressing human rights violations by governments as well as the tobacco industry.

Where possible, in this presentation links will be established between the scientific evidence presented in the other presentations in this panel and the potential of a human rights based approach. In relation to this and where possible, the presenter will be able to reflect on the opportunities that law more generally offers in curbing tobacco use.

Funding
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**Tobacco Dependence treatment among special populations**

Clean air for babies: an integrated support system and app designed to increase perinatal smoking cessation

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**Aim and Objective**

Approximately 10% of pregnant Israeli women smoke. To date smoking cessation programs across Israel consist mainly of group interventions, but these have shown to be less effective during pregnancy due to the demand for intensive and immediate support. Smoking cessation during pregnancy is further complicated, as smoking while pregnant leads to feelings of guilt and shame. Such anxiety has been shown to lead to mood shifts and in some cases depression. Meuhedet is the third largest healthcare provider in Israel with over 1.2M members, many relatively young, with 30,000 births annually. One of our major concerns is perinatal smoking. We are currently developing an integrated support program consisting of two modules: a unique counsellor training program and a 6-week active intervention program, including use of a specialized app. We have already completed the counselor training program and are currently running the 6-week intervention program. We have partnered up with MindInnovations.co—a company focused on creating innovations in therapeutic care—in order to create the CBT-based app. The app provides motivation, knowledge, and skills by tracking progress, assigning tasks, and providing participants with a clear pathway towards their quit date.

**Methods**

Our counselor training program gave smoking cessation counselors practical clinical tools for delivering extensive emotional support to expectant mothers. This program integrated theoretical background with practical protocols to attend the patients’ intense emotional needs, based on current psychological theories (CBT, Narrative Therapy, Motivational Interviewing, Stages of Change and Mindset Theory). This was conducted over a 36-hour course to a group of experienced smoking cessation counselors. Our perinatal smoking intervention program is ongoing, and the app is in its final stages of development.

**Results**

Thirty-six smoking cessation counselors completed the training course. We used questionnaires to evaluate knowledge and skills pre-and post-intervention, and participant satisfaction. Satisfaction was very high (Mean=9.81/10 ;sd=0.48) with high correlation between all items. Most participants responded that the materials were new to them (2.21/4 on a scale of 1-4, with 1 being “highly agree”). Knowledge and skills increased from 5.93 to 8.86 (on a scale of 1-10, paired t-test; p<0.001). We are enthusiastic to report on the intervention program, as well as the app, in the coming months.

**Conclusions**

Our advanced training module for experienced counselors significantly increased their skills and met their expectations. Treatment commences at this period of time. Our presentation focuses on our consultation training module and our overall program, including our smoking cessation app.

**Funding**

The project is being funded by the Global Bridges organization. *Tob. Prev. Cessation* 2018;4(Supplement):A67 DOI: 10.18332/tpc/91258

**Treatment of Tobacco Dependence for Mental Health and Addiction Patients**

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Among patients with mental health and addiction (MHA) disorders, smoking prevalence is greater, being as much as two to four times higher than that found in the general population. More than 2/3 of the individuals with some severe MHA disorders, such as schizophrenia and heroin dependence, are daily smokers. This may be one reason why patients with MHA disorders die 25 years before the general population. Numerous biological, psychological and social factors may explain these high rates of smoking, including, for example, lack of smoking cessation intervention in MHA environments or even the use of tobacco for self-medication of psychiatric symptoms. It has been recommended that smokers with MHA disorders use the same smoking cessation treatments as the general population but in a more intensive and monitored way, since they usually have higher levels of nicotine dependence and use other medication. Pharmacological and psychotherapy interactions may occur at some point, and the core symptoms of tobacco withdrawal are frequently confused with previous MHA disorder. Because of that, primary care clinicians rarely feel comfortable to provide them smoking cessation treatment. Smoking epidemiology, aetiology, assessment and treatment for individuals with MHA disorders are going to be discussed in this presentation.


**Challenges and Opportunities for Integrating Tobacco Dependence Treatment into TB care in Armenia**

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**Aim and objective**

The deadly pairing of tuberculosis (TB) and tobacco use has been widely acknowledged as a major public health concern. The negative effects of tobacco use on TB infection, progression of disease, TB relapse and mortality are supported with consistent epidemiological evidence. The potential of addressing TB treatment outcomes, recurrence of disease and prevention of deaths rationalizes the urgency of incorporating evidence-based tobacco control strategies into TB care. In this study we aimed to investigate the challenges and opportunities for integrating tobacco dependence treatment into TB care in Armenia.

**Methods**

Qualitative research methodologies were applied to study the existing smoking cessation practices within TB care among TB physicians and experts in the field of TB and tobacco control.
Overall, 21 TB physicians (in-patient and out-patient) and 5 experts from Yerevan (the capital city), Syunik, Kotayk and Gegharkunik regions of Armenia were recruited to participate in 4 focus group discussions and 10 in-depth interviews lead by semi-structured interview guides.

**Results**
Study participants shared their insights on potential opportunities and challenges for initiating smoking cessation interventions among TB patients. The diagnosis of TB that serves as a key teachable moment, continuous patient-provider encounters, and mutual trust between patients and TB physicians were mentioned as factors that can enable provision of smoking cessation counseling with TB patients. As for the participants, patients’ psychological distress because of the diagnosis, long and stressful treatment of disease, withdrawal symptoms and non-acceptance of pharmacological tobacco dependence treatment can challenge the provision of smoking cessation counseling to TB patients.

**Conclusions**
Despite the evident opportunities that exist for engaging TB patients into smoking cessation counseling in Armenia, the implemented measures of joint TB and tobacco control can be effective, once the all existing challenges are acknowledged and addressed.

**Funding**
The study was supported by the Global Bridges Healthcare Alliance for Tobacco Dependence Treatment, hosted by Mayo Clinic and Pfizer Independent Grants for Learning and Change.

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**SILNE R – Tobacco Inequalities Symposium**

**The emergence of socioeconomic inequalities in smoking over the life-course**
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**Introduction**
Economic inequalities in smoking start early in life but there still some uncertainty regarding the time they emerge, and what explains their trends. This article investigates whether and how educational inequalities in smoking evolve from pre-adolescence until young adulthood.

**Methods**
This study used data from the EPITeen Cohort, that recruited 13-year-old adolescents born in 1990 and enrolled at public and private schools of Porto, Portugal. For this analysis, we considered 1,038 participants, followed across four waves: 2003/2004, 2007/2008, 2011/2013, and 2014/2015. We modelled whether smoking behaviours were influenced by the educational attainment. We computed the odds ratio (OR) for smoking prevalence states (never smoking, experimenter, less than daily smoker, daily smoker and former smoker) and daily or less than daily smoker to former smoker) as function of education, age, and adding interactions for age with education. These analysis were done separately for men and women.

**Results**
The results showed that men with lower academical achievement were more likely to experiment until 17 years old (OR=0.83 for the interaction with 13 years old, and OR=0.66 for the interaction with 17 years old). However, those with higher academical achievement were more likely to experiment later, at 21 and 24 years old (OR for the interaction was 1.07). The inequalities in the prevalence of daily smoking emerged at 17 years old (OR for interaction with 17 years old was 0.42). Less of participants with higher academical achievement became daily smokers (OR for high education was 0.22 between 13 and 17 years old). Among women, the inequalities followed the same trends observed among men.

**Conclusions**
Our results suggested that educational inequalities in daily smoking prevalence emerge at 17 years old and are formed in a cumulative way: by the risk of experimenting from 13 to 17 years old, and by the risk of becoming daily smoker from 17 to 21 years old. In order to tackle inequalities is essential to understand when they emerge across the life-course. These results really highlight that tobacco campaigns should focus not only the middle adolescence but also the late adolescence, from 13 to 21 years old.

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**Enhancing smoke-free environments at the local level: An empirically grounded type construction in 7 European cities**
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**Introduction**
Little is known about the implementation of smoking bans at the level of European municipalities. The study analyzes the importance and development of smoke-free (SF) environments in 7 EU cities (in GER, IRL, FIN, POR, NED, ITA, BEL) with the aim of categorizing existing implementation processes, and recommending enhancement for future SF policies in Europe.

**Methods**
A semi-structured interview guide has been developed, in order to perform 56 expert interviews with local stakeholders & decision makers in 7 EU cities. All interviews were conducted and transcribed in the respective native languages, and afterwards translated into English. Data has been analyzed inductively by applying an empirically grounded type construction that has been linked with deductive realist elements of context-mechanism-outcome-configurations (CMOs).

**Results**
The findings show that SF environments are mostly adopted at national levels, but differently implemented at local levels due to varying context factors, such as the level of collaboration, enforcement strategies, and existing SF legislation. Four implementation types (“progressive-hungry” vs. “moderate-
rational” vs. “upper-saturated” vs. “lower saturated”) can be distinguished, which differ mainly in regard to their engagement in enhancing existing and future SF environments as well as along their level of tobacco de-normalization and perceived smoking visibility. Major mechanisms to enhance/expedite future SF regulations (indoor & outdoor) were found to be intersubjective comprehensible arguments, such as scientific evidence, public support, and the child frame. However, counter-mechanisms like smokers’ or tobacco industry resistance as well as minor prioritization and de-normalization can hinder perceived importance and sustained development of SF environments.

Discussion
Different priorities and legislative conditions lead to largely varying CMOs and implementation strategies in Europe. Still, future SF policies can be enhanced by reasonable arguments and the growing importance of tobacco de-normalization.

Funding
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Tobacco Advertising Promotion and Sponsorship: Oral Presentations

Tobacco Control in Ireland: How effective are dual health warnings on tobacco packaging?
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Aim and objective
Ireland has a strong history of implementing control measures - being the first country to have smoking banned in the workplace (under the Public Health (Tobacco) Acts 2002-2015 in 2004). Ireland’s implementation of the World Health Organisation’s Framework Convention on Tobacco Control treaty in 2006 and the European Union’s Tobacco Products Directive (2014) has allowed us to cement our role as a prominent Member State. This project seeks to understand the how effective tobacco control measures such as anti-smoking images, with an emphasis on dual health warnings, are in reducing the number of people smoking in a small Irish cohort. Article 8 of the Directive (2014) outlines the requirement to carry health warnings in the official language (s) of each country - In Ireland this is both Irish (Gaelic) and English.

Methods
Two quantitative surveys were completed with a sample of 650 third-level students in the Mid-West of Ireland, with an overall response rate of 82%. These studies were completed over two years as a pilot for the author’s PhD work. In the first survey students were asked to translate health warnings from Irish to English; in the second survey they were asked to rate the perceived persuasiveness of English only warnings versus combined health Irish warnings in stopping them from smoking.

Results
Results suggest that students surveyed were unable to translate and understand dual health warnings on Irish tobacco packaging resulting in students finding English language only health warnings more persuasive in 11 / 14 cases.

Conclusions
In order to fully determine the extent of such language illiteracy and its impacts, further work needs to be completed. Future work will focus on the impact of health warning messages, the use of colour and font on tobacco packaging, adopting a mixed method approach to understand the impact of such on smokers and non-smokers’ decision making processes.

Funding
No external funding was sought. Internal funding was provided as part of LIT’s Graduate & Research Studies Office bursary awards.

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Lack of Implementation of WHO Framework Convention on Tobacco Control (WHO FCTC) in Albania: An Urgent Issue to Tackle
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Introduction
Tobacco use is the leading cause of preventable morbidity and mortality worldwide and one of the main public health issues in the Albanian population, as more than 23% (41% male and 5.6% female) are daily smokers. Despite the fact that Albania ratified the WHO FCTC in 2006, it has not been fully implemented. This study sought to investigate tobacco use among university student and the level of enforcement of tobacco products advertising and promotion ban.

Methods
A cross-sectional study was conducted (May-July 2017) among students of University of Vlora, Albania. Students who agreed to participate in the study, completed part of the Global Adult Tobacco Survey (GATS). Students from all Faculties and all semesters were randomly selected before each course. Statistical analyses were conducted with SAS 9.1.

Results
In total 1360 students participated (73% female) with 18% (n=234) of them being daily smokers and 39% (n=519) being second-hand smokers. At the same time, only 11.06% of the participants reported that none of their family/friends/environment smoke. 11% of the participants reported being offered free cigarette samples the last 30 days, 7% noticed tobacco products promotion via mail and 17% via clothing or other items with a cigarette brand name or logo. 16% reported cigarette discounts at points of sale and 15% were offered free samples. Finally, 37% (n=345) stated that advertisements and/or signs promoting cigarettes were present in stores.

Conclusions
Results indicated that the need for monitoring the implementation of tobacco control laws is of paramount significance. It is a call for action for policymakers, stakeholders, civil society organizations and healthcare professionals in Albania to collaborate and monitor the enforcement of practical and sustainable interventions for this convention.

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Tobacco Packaging and Labelling in the WHO European Region: Progress After the Adoption of WHO FCTC’s Article 11 Guidelines

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Introduction

Aim: This study aimed to: (1) describe current packaging and labeling requirements in all 53 countries of the World Health Organization (WHO) European Region (ER) according to Article 11 Guidelines of the WHO Framework Convention on Tobacco Control (FCTC), and (2) assess the improvement of health warning labels (HWLs) since adoption of the Guidelines in 2008.

Methods

We analyzed over 625 pieces of legislation from the WHO ER in Tobacco Control Laws (www.tobaccocontrollaws.org), a database of the International Legal Consortium at the Campaign for Tobacco-Free Kids. Additionally, we reviewed the 2017 WHO MPower Report. We assessed HWL type (text-only vs. pictorial), size (% of the principal display areas, PDAs), and the adoption of standardized packaging.

Results

As of January 21, 2018, 2 countries have no laws requiring HWLs; 6 require text-only HWLs of at least 30%; 5 require pictorial HWLs of less than 50%; 39 require pictorial HWLs of 50-74%; and 1 requires pictorial HWLs of 75%. Since adoption of the Guidelines, the number of countries requiring text-only HWLs on at least 30% of PDAs has decreased from 35 to 6; countries with pictorial HWLs on 30-49% of PDAs have decreased from 6 to 5; countries with pictorial HWLs on 50-74% of PDAs have jumped from none to 39; and 1 country has passed a law requiring pictorial HWLs on 75% of PDAs. Following Australia’s example, 5 European countries (United Kingdom, France, Hungary, Norway, and Ireland) have adopted standardized packaging. Georgia and Slovenia have adopted legislation but the laws are not yet in force.

Conclusions

Adoption of the Guidelines contributed to an increase in effective HWLs in the WHO ER. In addition, two regional economic bodies – the European Union (through the Tobacco Products Directive 2014/40/EU) and the Eurasian Economic Commission –prompted their member states to adopt more effective HWLs.

Funding

The study was supported by the Bloomberg Initiative to Reduce Tobacco Use.

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Unravelling variation in the evidence for the association between tobacco outlet density and smoking among young people: A systematic methodological review

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Introduction

Evidence on the association between tobacco outlet density (TOD) and smoking behaviour among youth is inconclusive, which may be due to differences in methodological quality. The aim of this systematic review was to examine to what extent the methodological quality of studies determined the association between TOD and smoking behaviour among young people, by 1) assessing potential sources of bias, and 2) identifying differences in methodological quality between studies that found positive, negative, and/or no significant associations.

Methods

MEDLINE, EMBASE and Google Scholar were systematically searched for studies on TOD and smoking behaviour among young people published between 1997 and 2017. The methodological quality of the included studies was evaluated independently by two reviewers using the NIH Study Quality Assessment Tool for observational studies and the Cochrane Collaboration Risk of Bias assessment.

Results

Nineteen studies were included in the review. The quality assessment identified five primary sources of bias: misclassification of exposure measurements, over- and under-adjustment for confounders, selection bias, and under-powered analyses. Taking these biases into account, the 12 studies with a positive association were unlikely to have overestimated the association, whereas the 16 studies that did not find significant associations were more likely to have underestimated the association. Although not of poor quality, three studies found negative associations.

Conclusions

Considering the quality of the evidence, higher TOD is likely to be associated with higher smoking rates. Future research should establish the causality of this association in order to identify whether removing tobacco outlets would lead to lower smoking rates.

Funding

This study is part of the SILNE-R project, which received funding from the European Commission (EC), Horizon2020 program, Call PHC6-2014, under Grant Agreement n°635056.

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Raising awareness against TAPS in Bulgaria

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A case study from Bulgaria demonstrates lessons learned from building awareness against TAPS from zero in a TI-dominated political and media environment. Unexpectedly quick reaction by supportive lawmakers and energetic voluntary involvement of creative professionals for high level media campaign caught united TI front groups and lobby by surprise. But a united TI lobbyists’ counter-offensive blocked legislative proposals for TAPS ban submission. Lessons learned in Bulgaria can be useful and appropriate for many countries where the tobacco advertisements still exist.
This review of lessons learned in Bulgaria, employing action-research, analyzes the steps and actions taken over a year by the Smoke-free Life Coalition in Bulgaria to facilitate the submission to Parliament of a legislative proposal for a ban of TAPS. While the proposal was eventually withdrawn, the paper explores lessons learned from:

- start-up public awareness raising for a comprehensive TAPS;
- employing links to public debate over related tobacco control legislation’s enforcement (such as control and enforcement of the comprehensive smoking ban in public places);
- familiarizing MPs with legislative changes and structuring supportive documentation and evidence; attracting wide media attention in increasingly hostile media environment, dominated by TI-related ownership;
- tactics in public/Parliamentary hearings;
- designing and implementing a high-visibility campaign in support of a TAPS ban, to gain public and media attention.

The paper reports the outcomes from two Impact Assessments - on TAPS ban and enforcement of Total Smoking Ban in public places, conducted during 2016 - 2017. Outcomes show that the state budget relies on “toxic money” while the macro-economy of Bulgaria losses from tobacco consumption double that the budget benefits from excise duties on cigarettes. The Impact Assessment on total smoking ban enforcement showed that the money invested in better control of the total ban are not lost money. The paper builds up on previously reported findings about TI arguments employed against TAPS ban (ENSP 2017).

Funding
The reported research and activities were performed as part of a project of the Smoke-free Life Coalition, Bulgaria, supported by The Union against Tuberculoses and Lung Disease.

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GACD H2020 Research on e-cigarettes in the EU

Passive Exposure to E-cigarette Emissions: Minor Respiratory Effects
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1George D. Behrakis Research Lab Hellenic Cancer Society, Athens, Greece; 1Institute of Public Health, The American College of Greece, Athens, Greece; 2Biomedical Research Foundation, Academy of Athens, Athens, Greece, Athens Medical Centre, Athens, Greece, 1Tobacco Control Unit, Department of Cancer Epidemiology and Prevention, Catalan Institute of Oncology (ICO), L’Hospitalet de Llobregat, Barcelona, Spain, 2Tobacco Control Unit, Bellvitge Biomedical Research Institute (IDIBELL), L’Hospitalet de Llobregat, Barcelona, Spain

Introduction
Exposure to anti-smoking advertising and its effects differ across countries. This study examines: 1) reported exposure to anti-smoking advertising on traditional mass media and internet/social media; 2) the relationship between exposure to anti-smoking advertising and two other variables: knowledge of the harms of smoking/SHS and quit attempts in six European countries.

Methods
Data come from the first wave of the International Tobacco Control Policy Evaluation Project 6 European Country Survey within the context of the H2020 EUREST-PLUS (ITC 6E) (Germany [DE], Greece [GR], Hungary [HU], Poland [PL], Romania [RO] and Spain [ES]) carried out between June 2016 and September 2016 (n=5805). Key measures included whether in the last six months participants had noticed anti-smoking advertising, their knowledge of 13 adverse smoking/SHS health effects and if they have made at least one quit attempt in the last 12 months.

Results
RO and PL participants had significant higher odds of reporting exposure to anti-smoking advertising than DE, GR, HU and ES participants. There was a significant and positive association between exposure to anti-smoking advertising and quit attempts in the last 12 months.

Conclusions
Participants in countries where an anti-smoking advertising campaign happened in the last 2 years, had the highest odds to report exposure to anti-smoking advertising. Participants exposed to anti-smoking advertising were more likely to make a quit attempt than those not exposed. However, exposure to anti-smoking advertising was not associated with health knowledge.

Funding
Travel expenses for the conference will be funded by La Caixa Fellowship programme through the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement. This work was supported by a grant from the European Commission (Horizon2020 HCO-6-2015; EUREST-PLUS: 681109)

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Passive Exposure to E-cigarette Emissions: Minor Respiratory Effects
Anna Tzortzi1,2, Stephanie Teloniatis3, George Matiampa1, Gerasimos Bakellas1, Vergina Vyzikoud1, Constantine Vardavas1,2, Panagiotis Behrakis2,3, Esteve Fernández1,2
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Introduction
Exposure to anti-smoking advertising and its effects differ across countries. This study examines: 1) reported exposure to anti-smoking advertising on traditional mass media and internet/social media; 2) the relationship between exposure to anti-smoking advertising and two other variables: knowledge of the harms of smoking/SHS and quit attempts in six European countries.

Methods
Data come from the first wave of the International Tobacco Control Policy Evaluation Project 6 European Country Survey within the context of the H2020 EUREST-PLUS (ITC 6E) (Germany [DE], Greece [GR], Hungary [HU], Poland [PL], Romania [RO] and Spain [ES]) carried out between June 2016 and September 2016 (n=5805). Key measures included whether in the last six months participants had noticed anti-smoking advertising, their knowledge of 13 adverse smoking/SHS health effects and if they have made at least one quit attempt in the last 12 months.

Results
RO and PL participants had significant higher odds of reporting exposure to anti-smoking advertising than DE, GR, HU and ES participants in 4 of the 6 of the media venues. Reported exposure to anti-smoking advertising was not associated with higher health knowledge in the six countries. There was a significant and positive association between exposure to anti-smoking advertising and quit attempts in the last 12 months.

Conclusions
Participants in countries where an anti-smoking advertising campaign happened in the last 2 years, had the highest odds to report exposure to anti-smoking advertising. Participants exposed to anti-smoking advertising were more likely to make a quit attempt than those not exposed. However, exposure to anti-smoking advertising was not associated with health knowledge.

Funding
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a 30-minute Control (no emissions) and two Experimental (exposure 0.5 and 1.5) sessions, in a 35m3 room. Impulse Oscillometry (IOS) parameters Impedance, Resistance, Reactance, Resonant Frequency (fres), Frequency Dependence of Resistance (fDR=R5-R20) and Reactance Area (AX) as well as Fractional Exhaled Nitric Oxide (FeNO) were measured pre and post sessions. T-tests and Wilcoxon signed rank tests were used to compare differences between pre and post measurements and Analysis of Variance (ANOVA) for multiple comparisons between sessions.

**Results**

IOS and FeNO parameters showed no significant changes during the Control session. For IOS during the exposure 1.5 session, fres increased significantly post exposure from 11.38 Hz to 12.16 Hz (p<0.05). FeNO decreased significantly from 24.16 ppb to 22.35 ppb immediately post exposure in the exposure 0.5 session (p=0.006).

**Conclusions**

A 30-minute passive exposure to e-cigarette emissions revealed immediate alterations on respiratory mechanics and exhaled biomarkers expressed as increased fres and reduced FeNO.

**Funding**

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 681040.


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**Passive exposure to electronic cigarette aerosol in Italy: data from the TackSHS pan-European survey**

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Milan, Italy

**Introduction**

Passive exposure to electronic cigarette aerosol, which contains various toxic chemicals, has potential adverse health effects in non users. The aim of this study was to quantify such passive exposure in different European countries.

**Methods**

Within the TackSHS project, we are conducting a face-to-face cross-sectional study on adults in 12 strategically selected European countries (i.e., Bulgaria, England, France, Germany, Greece, Ireland, Italy, Latvia, Poland, Portugal, Romania, and Spain). The survey includes a specific section on electronic cigarette use and passive exposure to its aerosol. The fieldwork has already been conducted in Italy on a sample of 1059 individuals, representative of the population aged ≥15 years (52.4 million).

**Results**

Overall, 1.1% of our Italian population were current electronic cigarette users. Among non-users, 13.7% have been daily exposed to electronic cigarettes in various indoor settings, with a median exposure time around 1 hour and half/day. The proportion of non-users who observed (the last time over the previous 6 months) people using electronic cigarettes was 25% in bars, 20% in restaurants, 18% in disco clubs, 21% in indoor train/metro stations, 20% in airports, 13% in private vehicles (7% in presence of a minor). It was frequent to observe people vaping in several outdoor settings, including restaurant or bar patios (43%), outdoor areas of hospitals (41%) and schools (33%), children’s playgrounds (28%), and also while driving motorbikes/scooters (21%), in violation of the traffic laws.

**Conclusions**

Current use of electronic cigarette is still relatively low in Italy, but passive exposure to its aerosol is far to be negligible. Our data suggest that, in indoor settings, more than 7 million Italians are daily exposed to the aerosol exhaled by less than 600 thousand electronic cigarette users. Data from other 11 European countries on the issue will allow cross-country comparisons.

**Funding**

European Union’s Horizon 2020 Research and Innovation Programme (The TackSHS Project; grant agreement: 681040).


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**What is the content of the electronic cigarette liquids according to their flavor? An evaluation in nine European Union countries before TPD implementation**

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**Introduction**

Safety data on the chemical content of the electronic cigarette liquids depending on their flavors are scarce. Aims and objectives: This study aimed to identify and evaluate the content of e-liquids according to their flavor in the most common e-liquid products in the EU.

**Methods**

Within the Horizon2020, EUREST-PLUS study, 122 of the most commonly sold e-liquids in 9 European Countries (France, Poland, Germany, the Netherlands, United Kingdom, Spain, Romania, Hungary and Greece) were randomly selected and purchased. E-liquids were then divided into 7 groups according to their flavor. These groups are: Tobacco (35), Fruits (44), Menthol-mint (9), Non-alcoholic drinks (10), Alcohol (5), Desserts-sweets (11) and other flavors (8). A qualitative chemical analysis was performed using gas chromatography-mass spectrometry technique accompanied with solid phase microextraction (GC-SPME-MS), while the identification of the compound was done by NIST or Wiley library.

**Results**

After analyzing the total number of the samples, 232 compounds were detected in total. The 101 of these compounds were detected in Fruit flavor, 52 in the Tobacco flavor, 30 in the Non-alcoholic drinks flavor, 26 in the Desserts-sweets flavor, 24 in the alcohol flavor, 12 in the other flavors category and 15 in menthol-mint flavor. Of the detected compounds, Nonanal and Ozone-methyl-oxy-phenyl were the most frequently detected compound (15 and 14 times in tobacco flavor respectively) and also present in all flavors. These compounds are strong irritants to skin and eye. Additionally, banana oil, which was detected in 12 Fruit flavor samples and in most flavors, can cause skin, eye and respiratory irritation, narcotic effects and damage to organs through prolonged or repeated exposure.
Monitoring nicotine intake in human volunteers transitioning from cigarette smoking to e-cigarette use

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Introduction
Use of electronic cigarettes (ECs) has increased rapidly since they were introduced in Europe in 2006, especially in the UK. Claims have been made for a role in tobacco harm reduction and smoking cessation. Key to these claims is the ability of EC to maintain nicotine levels to limit cravings, withdrawal and nicotine dependence. Therefore, the aim of the current study is to monitor nicotine intake in heavy smokers (>10 cig/day, n=13 completed) transitioning from cigarette smoking to EC-only use whilst collecting psychometric data on nicotine dependence (Fagerstrom), withdrawal (Minnesota), anxiety, depression and sleep quality.

Methods
Urine and saliva samples as well as psychometric questionnaire data were collected at baseline (visits 1 and 2) and at days 3, 7, 21 and 28 following start of EC use. An UHPLC-HESI-HRMS method was developed, validated and applied to the determination of nicotine and its main metabolite cotinine in urine and saliva.

Results
The baseline median (interquartile range) urinary nicotine and cotinine levels were determined as 1534 ng/ml creatinine (317-2478) and 2082 ng/ml creatinine (1727-3632), whereas salivary nicotine and cotinine levels were 145 ng/ml (26-265) and 329 ng/ml (198-440), respectively. One-way repeated measures ANOVA demonstrated a significant decrease in urinary nicotine and cotinine concentration from baseline at 3 post-transition visits. A significant reduction was also observed in salivary nicotine levels on days 3 and 21 after EC transition and in salivary cotinine levels at each post-transition visit compared to baseline. Both urge and strength of urges to smoke were significantly decreased by 28 days compared to baseline.

Conclusions
These findings offer support that EC can be effective in reducing nicotine consumption and cravings for cigarettes, suggesting the potential use of EC as a smoking cessation tool. However, the inability to achieve levels of nicotine comparable to smokers may contribute to relapse.

Conclusions
To our knowledge, this is the first study to examine the chemical content of the most common e-liquids in the EU depending on the flavor, indicating that several flavors could be more hazardous. Stricter strategies for these products are necessary.

Funding
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Funding
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Use of e-cigarettes and second-hand exposure to their aerosols in Europe: findings from the ITC 6 European country survey (EUREST-PLUS project)

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Introduction
To describe the prevalence of e-cigarette use and exposure to e-cigarette aerosols in public settings in 6 European countries

Methods
We used baseline data (2016) of the International Tobacco Control 6 European (ITC 6E Country Survey) under the EUREST-PLUS Project and part of the larger ITC Project, conducted in national representative samples of 1,000 adult smokers per country in Germany, Greece, Hungary, Poland, Romania, and Spain. This analysis focuses on participants’ awareness of e-cigarettes (n=4,142). We described the prevalence of e-cigarette use in different settings as seen by participants in the last month (general public places, indoor settings banning smoking cigarettes, and workplaces) overall, by socio-demographics and according to participants’ e-cigarette use. We described how frequently non-users felt exposed to e-cigarette aerosols by independent variables, and how comfortable users felt using e-cigarettes around other people, overall and by country.

Results
31.0% of participants had seen people using e-cigarettes in general public places (from 12.3% in Spain to 55.2% in Greece), mainly among men, participants aged 18-24, highly educated, and current e-cigarette users. Overall, 19.7% of participants had seen using e-cigarettes in indoor places where smoking cigarettes was forbidden and 14.5% in workplaces. Among non-users seeing others using e-cigarettes in public places (n=3,979), 3.6% reported feeling exposed to e-cigarettes’ aerosol “frequently” and 33.1% “occasionally” (lowest in Spain and highest in Greece). Among 109 e-cigarette users, 43.1% felt comfortable using them around other people, 48.1% felt neutral, and 8.8% felt uncomfortable.

Similar trends were observed by country, except in Greece and Romania, where highest prevalence was observed in those feeling comfortable (59.1% and 48.7%, respectively).

Conclusions
Prevalence of use and exposure to e-cigarettes as seen by European smokers is variable among countries. The perception of exposure to aerosols is high.

Funding
The EUREST-PLUS Study takes place with the financial support of the European Commission, Horizon 2020 HCO-6-2015 program (EUREST-PLUS: 681109; C. Vardavas) and the University of
Monitoring the transition from cigarette smoking to vaping using exposure, biochemical, brain dynamics and psychometric markers: The SmokeFreeBrain Study

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Introduction
This project aims to monitor human volunteers as they switch from heavy (>10 cigarette/day) tobacco smoking to electronic cigarette (EC) use. Monitoring of markers will comprise expired carbon monoxide, DNA methylation, oxytocin, cortisol, nicotine cotinine and tobacco specific nitrosamine levels in urine and saliva together with psychometric data. In addition, electroencephalography will be used to search for electrical changes in the brain correlated with changes in the above markers after transition to EC use.

Methods
Volunteers were recruited and consented at St George’s University of London. Volunteers were allowed to select their own EC and e-fluid including nicotine concentration. Blood, saliva, urine and buccal cell samples and questionnaire data (nicotine dependence, withdrawal, anxiety, depression, mood, quality of life and sleep quality) were collected at baseline (day-2 and day-1) and throughout the 28-day EC trial (days 3,21,28) and EEG data (eyes open-eyes fixed-eyes closed, each 3 x 30s) were collected at baseline (day-1) and on EC day 21. Nicotine, cotinine, NNK, NNAL and NNN were determined by UHPLC-HESI-HRMS, 5methyl cytosine by HPLC and oxytocin and cortisol by ELISA.

Results
Urinary and salivary nicotine, cotinine and tobacco specific nitrosamines and expired carbon monoxide decrease significantly following transition to EC. Behavioural data have revealed modest changes in nicotine craving, nicotine withdrawal symptoms, social anxiety and sleep quality following the transition to e-cigarettes. Preliminary comparison of regional spectral power extracted from EEG data collected pre- and post-transition to e-cigarettes use has identified significant changes in specific spectral bands across the brain.

Conclusions
Switching to EC quickly induces beneficial changes in exposure to toxicants and psychometrics. Changes in regional spectral power observed by EEG vary will be correlated to these other biomarkers.

Funding
This work is supported by H2020 funding from the European Union and by a PHE-funded PhD studentship.

Research capacity in the field of tobacco control in Central and Eastern Europe

Research activities in the field of tobacco control in Poland

Krzysztof Przewozniak1, Jakub Lobaszewski1, Marta Manczuk1, Joanna Didkowska1

Implementing a recipe for success in smoking cessation

Successful implementation of the smoking cessation services in France

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Twenty years ago there were only a few dozen of services dedicated to the care of smokers in France. In 1999, the Minister of Health (Bernard Kouchner) created the smoking cessation services (consultation de tabacologie) in France with the obligation to have a tobacco cessation service in all hospitals with more than 500 beds and at least one tobacco cessation service and in each of the 99 French departments. Training of doctors and nurses was organized through 5 university diplomas for tobacco control and smoking cessation. Some of the trained students used this training for their general daily practice; others become doctor in smoking cessation services. Adequate funding has been implemented. Gradually more than 650 tobacco cessation services were set up, including one-third of private (unfunded) smoking cessation services and 2/3 of public smoking cessation services (hospitals, city clinics, Non-Governmental Organization). Over time private services have almost all disappeared because the price paid by smoker (23€) was not suitable for long consultation.

Today there is no formal network of tobacco cessation service, but the Respadd regarding the health facility side and the French-speaking tobacco society play this role. These smoking cessation services are all equipped with inspiratory CO analyser. A common paper file for smoking cessation services has been set up with validation of the French speaking society of tobacco science. A few years later, an online computer file has been set up for all centres with an immediate anonymization system. Statistics comprising more than 250,000 patients are accessible online (everyone may consult http://www.cdtnet.fr).

The varenicline is totally free of charge for patients. In the same time the acceptance of this drug by health professional and smokers improved dramatically.

Since some weeks a generic nicotine gum 2mg and 4mg and nicotine patches 16 h are free of charge for smoker as all effective usual medication. All nicotine replacement therapies will be reimbursed by the end of 2018 and the non-effective a posteriori services have almost all disappeared because the price paid by smoker (23€) was not suitable for long consultation.

The efforts of some to integrate the treatment of smokers within addiction general services don’t succeeded so smoking cessation service still remains largely independent.

The tobacco cessation service network remains weak and if the political willing declines, and the-funded system remain not enough efficient a risk exist to decrease the efficacy of tobacco cessation services.

Research activities in the field of tobacco control in Poland

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Co-funded by the
Health Programme of the European Union
Introduction
Aim: To evaluate the research capacity and challenges in Poland.

Methods
Analysis of tobacco control studies conducted in Poland in the years 1923-2017 includes: 1/ studies of tobacco market, 2/ descriptive epidemiological studies on smoking-attributable incidence and mortality, 3/ analytical epidemiological studies on the healthy risk of tobacco use; 4/ toxicological studies on harmful substances in cigarettes, 5/ studies on bio- and environmental markers of exposure to tobacco smoke among different targets and environments, 6/ nation-wide questionnaire surveys on smoking behaviors and attitudes in various populations, 7/ national surveys on attitudes toward tobacco control programs and policies, 8/ qualitative studies on tobacco use and control, 9/ studies on economics of tobacco use, 10/ clinical studies on safety and efficacy of smoking cessation aids.

Results
Monitoring and surveillance of tobacco use and tobacco control is well evaluated by WHO. Poland disposes a broad spectrum of studies and long-term database on tobacco-related problems. Data on cigarette consumption are collected since 1923 and surveillance on smoking behaviors in adult population is conducted since 1974. Age-specific data on lung cancer incidence and mortality in Poland are available since the beginning of 1960s. However, there are some gaps in monitoring tobacco use, its health consequences and tobacco control programs and policies in Poland. The main problem is a lack of long-term strategy for research capacity building in tobacco control and the low level of funding for such studies. Most of studies are conducted by various public stakeholders and within different public health programs. There is also a lack of periodic studies among health professionals and school teachers and none nation-wide survey was conducted among public persons, including politicians and journalists. Studies on marketing strategy of country-based tobacco industry are fragmentary. Future state research strategy should be also more focused on tobacco control challenges, including changes on tobacco market (ENDS, hot-not-burn and other novel tobacco products) and tobacco end-game.

Conclusions
Although there are a lot of studies on tobacco use, risk and control in Poland, it is an urgent need to develop the national research capacity building strategy that will ensure sufficient funding for tobacco control studies and take into account current and future challenges in tobacco control.

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Examples regarding research in the field of tobacco control in Georgia
Bakhturidze George

Introduction
No tobacco control research capacity existed in Georgia until second part of 90s. The first epidemiological study conducted in 1998 by UNICEF support. The Implementer organization was National Tobacco Counter Center. Afterword the FCTC Implementation and Monitoring Center (FCTCIMC) continued work on the field and conducted several independent and joint studies on several directions of tobacco control. Other institutes which also organizes some studies related to tobacco are Institute of Public Health and National Center for Diseases Control (NCDC).

Methods
We used scientific articles, reports, web site and Conference resources to analyze existed work done in tobacco control research direction in Georgia. We systematized scientific or relevant work through different topics of tobacco control.

Results
In General, few studies conducted and researched during last two decades. Most work was done by NCDC and FCTCIMC, which have more capacity to conduct appropriate studies. But, due to financial problems and lack of funding from Governmental or Donor organizations sources above mentioned institutions unable to organize periodical surveys or studies.

Conclusions
No sustainable surveillance systems exists in Georgia to analyze and compare results from different period of time. There are needs to use local scientific capacity and strengthen them through National research funding schemes or any other relevant donor organizations, which have no conflict of interest with tobacco industry.

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Research in the field of tobacco control in Central and Eastern Europe: case studies from Romania
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Introduction
The objective of this paper is to present the landscape of research in the field of tobacco control from Romania in the last 25 years.

Methods
The paper highlights the following issues 1. Training, capacity building, national and international cooperation for enhancing research in the field of tobacco control in Romania 2. Research activities which allowed the collection of data regarding tobacco use prevalence and factors which influence it 3. Research regarding development, implementation and evaluation of smoking prevention and cessation programs as well as monitoring and evaluation of tobacco control policies. The data are based on data from literature, as well as the experience of the author in this field.

Results
The paper presents different national and international projects which made possible research in the field of tobacco control in Romania, underlining the lessons which were learned. It includes implementation of Global Youth Tobacco Survey, Global Adult Tobacco Survey, Health Behavior in School aged Children study, Eurest-Plus project as well as several projects for smoking prevention and cessations such as Smoke Free Class Competition, Quit and Win, Adolescent Smoking Cessation, I do not smoke - a peer led smoking cessation project for adolescents, Development of the first computer tailored smoking cessation program for Romanian adults, Tobacco Cessation Guidelines for High Risk Population.
Conclusions
The paper analyzes strengths and weaknesses of research in the field of tobacco control in Romania and explores possibilities for continuing and enhancing activities in this field.

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The role of ENSP and European cooperation for improving research in the field of tobacco control in Central and Eastern Europe
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Tobacco control is a global activity which can be fueled by joining local and global efforts. Within this presentation we outline the activities that are being performed to strengthen tobacco control in Central and Eastern European region countries. Such activities rest on three pillars. Firstly, through educational activities such as conferences and capacity building events. Secondly through the participation in joint research projects including EUREST-PLUS and EPACTT, two projects that span more than 17 Central and Eastern European Countries and have provided evidence based tobacco control measures and thirdly, the role of communication across and between European Region countries in the form of “train the trainer” programmes.

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International cooperation for improving research in the field of tobacco control
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Background
The activity of tobacco companies in any one country can potentially be felt globally (e.g., internet-based marketing activities, for which U.S cigarette manufacturers spent $27 million in 2015). The uniqueness of certain regions’ markets (e.g., heat-not-burn or other emerging products), or tobacco control experiences, further underscores the importance of shared learning for a more preemptive tobacco control strategy.

Approach
Opportunities exist to share data, expertise, experiences, and training/mentorship opportunities. These could include initiating multi-institutional studies, joint sponsorship/funding of major research, or sharing/disseminating opportunities for fellowships, and visiting scholar programs. Collaborations could be between individuals, academic institutions, or governmental agencies in relation to research, surveillance, and programmatic activities. Inter-disciplinary collaborations can deepen our understanding of the clinical, social, economic, and behavioral aspects of tobacco use and its consequences.

Potential outcomes
Collaborations can result in greater efficiency and more preemptive tobacco control strategies, as mistakes can be avoided and successes replicated without “re-inventing the wheel”. Scientifically, international cooperation can help in standardizing outcomes and measures in surveillance and research studies to facilitate comparability of results.

Conclusions
The fast evolving tobacco control landscape, and the global burden of tobacco use underscore the importance of an integrated tobacco prevention and control approach.

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Challenges in the field of research regarding tobacco control-opportunities for future cooperation
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Tobacco control research presents several challenges that have to be considered according several dimensions and factors that may condition it, such as 1) the capacity of individual scientists, research teams, and institutions; 2) the local or global typology of the research itself; 3) the specific field of research within tobacco control: from population-based and public health oriented to clinical research; and 4) the availability of funding at the local or international level. In this framework, collaborative research is not only possible but desirable because collaboration between research groups and institutions across Europe may favour and trigger the above-mentioned factors. Opportunities for tobacco control research include mainly dissemination and implementation research of evidence-based interventions to prevent smoking among adolescents and young people and promote cessation among disadvantaged groups; and on policies on how to warn the public on the risks of smoking and especially on the use of novel tobacco products; and also observational research on the impact of smoke-free legislation and the attitudes and beliefs of smokers and non-smokers towards a smoke-free society, as well as the evaluation and sharing of good practices.

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Taxation, illicit trade and revision of EU Directive 2011/64

Global Tax Revenue Shortfalls due to Corporate Income Tax Avoidance, Evasion, and Illicit Trade: Evidence from the Tobacco Sector
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Introduction
The production of tobacco is concentrated among a handful of very large transnational tobacco corporations (TTCs) that operate simultaneously in several countries. These companies do not pay their fair share of corporate income taxes to the societies in which they generate profits due to three main reasons: (1) tax minimization strategies that take advantage of the complexities of international tax laws; (2) tax competition between countries, which drives down nominal corporate income tax rates worldwide; and (3) illicit trade of these products manufactured by these companies. This paper uses detailed company data in the tobacco industry to illustrate how multinational corporations fail to contribute their fair share of direct corporate income tax remittances to the countries in which they generate profits.

Methods
This paper combines several data sources to empirically evaluate the amount of corporate income tax revenue lost worldwide due
to these three sources during 2007-2016.
We present and estimate the three main drivers of CIT revenue losses—tax minimization, tax competition, and illicit trade, respectively. We combine various databases to estimate the size of CIT revenue losses attributable to these three aspects from the four largest transnational tobacco companies over the past decade.

Results
Preliminary Results: We find that the tax revenue foregone from the four largest TTCs alone in the order of US$ 30.8 billion, representing almost 44 percent of the companies’ tax revenue remittances over the period. Almost half of the CIT tax revenue loss was due to illicit trade, almost one third to tax minimization strategies, and the rest to international tax competition.

Conclusions
Based on our findings, we discuss current reform efforts to address these loopholes in the international tax system and lack of international cooperation, and conclude by suggesting policy measures to appropriately tax companies.

Funding
The research had no funding.

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Illicit tobacco sales trends in the European Region in 2009–2016
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Introduction
Aim: Tobacco companies claim that high taxes increase cigarette smuggling. European countries have high tobacco taxes and many of them increased tax rates recently. The aim of this paper is to estimate the trends of illicit tobacco consumption in the European Region in 2009-2016.

Methods
Trends in illicit tobacco trade in the European countries were estimated using reports produced by the governmental bodies and those (with caution) commissioned by the tobacco industry.

Results
In the UK, the Revenue and Customs reported that estimated volume of the illicit cigarette and hand-rolling tobacco market decreased by 36% in 2009-2016. In Ireland, the Revenue Commissioners estimated that the volume of illegal cigarettes decreased by 51% in 2009-2016. In Norway, as the KPMG report estimated, the illicit cigarette consumption decreased by 48% in 2014-2016. All three European countries with the highest tobacco taxes experienced a decline in illicit sales.

According to the KPMG estimates, volumes of contraband and counterfeit cigarettes in the EU decreased in 2009-2016 from 61 billion to 48 billion cigarettes. Cigarette contraband to the EU countries from Russia, Ukraine, Belarus and Moldova combined declined from 21.6 billion to 12.8 billion cigarettes in 2009-2016.

The Euromonitor reported that volumes of illicit cigarette trade in 2010-2015 fell by 25% in Eastern Europe and by 4% in Western Europe.

Conclusions
Total illicit cigarette turnover decreased in the European Region. Volumes of illicit tobacco trade declined in most countries with high tobacco taxes owing to the reduction of the smuggled cigarettes inflow, and in most countries with low (but increasing) tobacco taxes owing to the reduction of the smuggled cigarettes outflow. Most illicit cigarettes in the European countries are those cigarettes which are produced and taxed in another European country.

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Estimating costs for modelling return on investment from smoking cessation interventions
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Introduction
Aim and objective: Modelling return on investment (ROI) from smoking cessation interventions requires estimates of their costs and benefits. This paper describes a standardized method developed to source both economic costs of tobacco smoking and costs of implementing cessation interventions for a Europe-wide ROI model (EQUIPTMOD).

Methods
Focused search of administrative and published data on adult population (15+ years) in Hungary, Netherlands, Germany, Spain and England. For passive smoking related costs, child population (0-15 years) was also included. A standardized checklist was developed in order to ensure consistency in methods of data collection. Costs of treating smoking attributable diseases; productivity losses due to smoking attributable absenteeism; and costs of implementing smoking cessation interventions were measured.

Results
Annual costs (per case) of treating smoking attributable lung cancer were between €5,074 (Hungary) and €52,106 (Germany); coronary heart disease between €1,521 (Spain) and €3,955 (Netherlands); chronic obstructive pulmonary disease between €1,280 (England) and €4,199 (Spain); stroke between €1,829 (Hungary) and €14,880 (Netherlands). Costs (per recipient) of smoking cessation medications were estimated to be: for standard duration of varenicline between €225 (England) and
Tobacco taxation policy in Slovenia in 2018

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In 2012, Slovenia changed its structure of the cigarette excise tax by greatly increasing the specific excise rate, but decreasing the ad valorem excise rate. The reform was very beneficial for public health as it increased the price of the cheapest cigarettes disproportionately and thus decreased tobacco consumption within the country (by 20% in 2012-2014), and limited switching down to cheaper cigarettes outflow out of the country. However, the ad valorem excise decrease seems to be unreasonably high, and it was one of the causes that tobacco excise revenue did not increase in 2012-2015. Countries with mixed tobacco excise systems should be careful when changing their excise structure. While a large increase in the specific excise rate is the most beneficial change regarding health, ad valorem rates do not necessarily need to be reduced. Slovenia has a great opportunity to increase tobacco excise rates next year, which will be beneficial for both public health and governmental revenue.

In 2018, we want to achieve the implementation of the Draft Law amending and supplementing the Law on tobacco excise duties. Article 1 of the Draft foresees an increase in the excise duty for cigarettes from €106 to €132 for 1000 pieces. This measure would significantly contribute to public health, and would nearly equalize tobacco prices in Slovenia and in other European Union Member States.

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Cost-effectiveness of alternative smoking cessation scenarios in Spain: results from the EQUIPTMOD

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Aim and objective
To assess the cost-effectiveness of alternative smoking cessation scenarios from the perspective of the Spanish National Health Service (NHS).

Methods
We used the EQUIPTMOD a Markov-based state transition economic model, for an Spanish adult smoking population (16+ years), to estimate the return on investment (ROI) of: (a) the current provision of smoking cessation services (brief physician advice and printed self-helped material + smoking ban and tobacco duty at current levels); and (b) four alternative scenarios: coverage of proactive phone calls; nicotine replacement therapy (mono and combo) (Rx NRT); varenicline (standard duration); or bupropion; to complement the current provision. A rate of 3% was used to discount lifetime costs and benefits. The measures used were healthcare costs associated with treatment of smoking attributable diseases (lung cancer, coronary heart disease, chronic obstructive pulmonary infection and stroke); intervention costs; quality-adjusted life years (QALYs). Costs and outcomes were summarized using various ROI estimates.

Results
The cost of implementing the current provision of smoking cessation services is about €61 million in the current year. This translates to 18 quitters per 1000 smokers and a lifetime benefit-cost ratio of 5, compared to no such provision. All alternative scenarios were dominant (cost-saving: less expensive to run and generated more QALYs) from the lifetime perspective, compared to the current provision. The lifetime benefit-cost ratios were: 1.87 (proactive phone calls); 1.49 (Rx NRT); 2.40 (varenicline-standard duration); and bupropion (2.18). The results remained robust in the sensitivity analysis.

Conclusions
Analysis based on the EQUIPTMOD has provided Spanish decision-makers with policy options for tobacco control. It would be cost-effective to expand the reach of GP brief interventions to all areas of Spain, provide proactive telephone support and reimburse smoking cessation medication to smokers trying to stop. Over a lifetime, these policies would be cost-saving.
Funding
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Price and Affordability of Cigarettes among 14 European Countries
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Introduction
The aim of this study was to explore price and affordability of cigarettes and make comparisons across 15 European partner countries (Albania, Armenia, Belgium, Bulgaria, Georgia, Greece, Italy, Kosovo, Poland, Romania, Russia, Serbia, Slovenia, Spain, Ukraine) of EPACTT2 (EuroPean Accreditation Curriculum on Tobacco Treatment) project that aims to develop and expand an accredited curriculum for tobacco treatment delivery.

Methods
The structured 8-item self-administered questionnaire in English was distributed among partner country representatives. The questionnaire covered Marlboro and local cigarettes prices, as well as country profiles. To make comparisons across countries we converted local currencies into international dollars using the country specific purchasing power parity (PPP) conversion factor. Affordability was assessed by the relative income price (RIP) of cigarettes, which is the proportion of per capita GDP required to purchase 100 cigarette packs. Lower RIP corresponds to higher affordability.

Results
Overall, fourteen countries (4 lower-middle income, 5 upper-middle income, and 5 high-income) participated in the online survey in 2017. The mean price of Marlboro was higher in high income countries compared to upper-middle and lower-middle income countries (6.65$, 6.02$, and 5.15$, respectively). Similar tendency was observed regarding to the mean price of local cigarette (5.83$, 3.96$ and 3.75$ in high, upper-middle and lower-middle income countries, respectively). However, in high income countries average RIP was lower than in upper-middle and lower-middle income countries: for Marlboro 1.88%, 3.45% and 5.52%, and for local cigarettes 1.66%, 2.49% and 4.07%, respectively.

Conclusions
Although, cigarettes were more expensive in high income countries they were about two times more affordable than in upper-middle and about three times more affordable than in lower-middle income countries. Thus, financial burden of smoking on households is more pronounced in the countries with more limited resources.

Funding
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SILNE-R School Tobacco Policies
Does “de-normalization” change? Trends in the de-normalization of smoking in German adolescents
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Introduction
The de-normalization of smoking remains a “catch-all” diagnosis for societal norm changes with regards to tobacco. However, indicators and dimensions of these changes have been insufficiently studied from a theoretical and empirical view. The aim is to analyze trends of tobacco de-normalization processes in the triad of family, friends’, and school context.

Methods
Data was obtained from two waves of the cross-sectional SILNE-R-Surveys (2013 & 2017) including 14-16 year-olds (n=1.902) from 20 German schools. Social inequalities with respect to smoke-free (SF) homes, social proximity to smoking friends, and perceived visibility of smoking students were analysed in logistic regression models regarding different aspects of the socioeconomic status (SES: subjective SES, parental education, school type). Gender, migration background and differences in individual and parental smoking, perceived smoking norms, and school tobacco policies (STPs) were included as further independent variables.

Results
Weekly smoking among adolescents decreased between 2013 (10%) and 2017 (5%). Still, two thirds of the sample reported (2013: 64%; 2017: 62%) not living in a SF home. Social proximity towards smoking friends was reported by a small and shrinking minority of less than 10%. Perceived visibility of school smoking has decreased between 2013 (42%) and 2017 (22%). The multivariate analyses show a significant trend of convergence of low and high SES with regards to SF homes, although parental smoking decreases the likelihood. No significant inequalities in social proximity to smoking friends were found, but an influence of friends’ norms and individual smoking status. About 41% perceived STPs as weak, while such STPs increased significantly the likelihood of smoking visibility. Low SES schools are at a
The impact of school anti-tobacco policies on adolescent smoking behavior: a collective lifestyles perspective

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Introduction
School anti-tobacco policies (SAPs) that limit smoking during school hours are increasingly common. Notwithstanding, adolescents may continue smoking by adapting the patterns in where, when and with whom they smoke, and the social meanings about why. We therefore aimed to identify and understand which patterns occur and how these collective smoking lifestyles may contribute to persisting smoking at schools implementing SAPs.

Methods
A qualitative design was used to compare two Dutch vocational schools with a contrasting smoking prevalence. Four focus group discussions were held with adolescents who smoke or were susceptible to smoking. Fourteen interviews were held with individual adolescent smokers. The analysis focussed on identifying the collective smoking lifestyles in each school.

Results
The high prevalence, in contrast to the low prevalence, school implemented strict SAPs and adolescents perceived a strong anti-smoking norm. Two collective smoking lifestyles at the high prevalence school were identified. ‘Dependent smoker’: smoking in a large group at the official smoking area helps to deal with stress and nicotine addiction. ‘Rebellious smoker’: smoking in friendship groups outside the school premises expresses toughness. Three collective smoking lifestyles at the low prevalence school were identified. ‘Social bonding smoker’: boys’ daily smoking outside the premises is an indispensable part of group membership that creates a smoking-tolerant environment. ‘Good smoker’: girls’ occasional smoking outside the premises for so-called personal pleasure prevents others from thinking they are addicted or smoke to impress. ‘Smoking-friendly event smoker’: adolescents smoking only after school hours at smoking-friendly events makes them feel free to smoke without risking social consequences.

Conclusions
Collective smoking lifestyles may decrease SAPs’ impact by allowing adolescents to collectively adapt their smoking patterns and the social meanings for justifying these patterns. These collective smoking lifestyles are less persistent when SAPs limit adolescents’ opportunities to adapt their smoking patterns and adolescents perceive a strong anti-smoking norm.

Do school tobacco policies contribute to smoking inequalities within and across schools? An international cross–repeated study

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Introduction
Despite the evidence of the adverse health effects of smoking, more than one in five adolescents in Europe still smokes in 2015. In order to reduce this high smoking rate, tobacco control policies have been put in place, including school tobacco policies (STPs). The few studies that assessed the equity impact of tobacco control policies, showed either a negative or a neutral effect on equity across socio-economic status (SES), and only one study on STPs addressed smoking inequalities. Therefore, our aim is to determine whether STPs are equally effective, first, among adolescents of different SES groups within a school, and second, across different schools, according to the school SES status.

Methods
A cross-repeated study was carried out in 2013 and in 2016 in 38 schools from six European countries. A questionnaire was completed by 18,500 adolescents from 3rd and 4th grades and another one by school staff members. We conducted multilevel logistic regression analyses to estimate the effects of STPs on various smoking-related outcomes and stratified by SES. School was used as random effect and we controlled for age and parental smoking.

Results
A higher score of STP was associated with lower odds of smoking on school premises for both SES groups. However, STP was not associated with smoking just outside school premises, nor with smoking intention. Among low SES adolescents, a higher score of STP was associated with lower odds of being a weekly smoker. A higher score of STP was associated with lower odds of smoking on school premises among both high SES schools and low SES schools. STP was not associated with smoking just outside school premises, expect in high SES schools, where a higher score of STP lead to higher odds of smoking just outside school premises.

Conclusions
Gaining understanding of who is affected by STPs is important in order to protect the most vulnerable groups.

Stigmatization of smokers: the role of School Tobacco Policies

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Background
Stigmatization when components of labeling, stereotyping, separation, and discrimination occur together in a power situation. This may apply to smoking, a behavior being increasingly denormalized. However, it is unknown whether School Tobacco Policies (STP) may lead to the stigmatization of adolescent smokers. Our aims are (1) to measure the magnitude of each stigmatization’s components and (2) to assess how STPs influence them.

Methods
Data on 11,493 adolescents in 43 schools in 7 European countries
were used (SILNE R-survey, 2016). Dependent variable was Stuber’s scale to measure stigmatization with four items: most people think less of person who smoke, believe that smoking is for losers, most non-smokers would be reluctant to date someone who smokes and would not hire a smoker to babysit children. Independent variables were: being a weekly smoker, having friends smoking, parental smoking and the score of school tobacco policies (STPs). We performed multilevel regressions which include interactions between weekly smoking and other independent variables.

Results
The most frequent stigmatization components were related to discrimination such as “not to hire a smoker as a babysitter” (77%) and not “dating a smoker” (55%). Smokers always reported less stigmatization compared to non-smokers. Differences between smokers and non-smokers were more pronounced for “not to hire a smoker as a babysitter (62% versus 80%, Chi²= 182, p<0,001) and less so for stereotype: “most people think less of person who smokes” (Smokers: 45%; non-smokers: 52%, chi²= 15, p<0,001). Multilevel regression showed that stigmatization was lower in smokers, increased with none of my friends being smokers, decreased with parental smoking. In addition, smokers felt more stigmatized in schools with higher STPs score.

Conclusion
Smoking is associated with a loss of status. STPs increase stigmatization within school while social environment (friends and family) decrease stigmatization. This suggest that social ties may reduce the effect of stigmatization on smoking behavior among adolescents.

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Costs and cost-effectiveness of youth smoking prevention policies across seven European countries
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Introduction
Tobacco consumption remains one of the most important risk factors of mortality and morbidity, worldwide and in Western Europe. Despite knowledgeable about the dangers of tobacco, a third of European adults, and 12% of US, Canadian and European adolescents still smoke. In order to reduce the smoking prevalence and its consequences, smoking prevention policies have been suggested, but some are not implemented at a large scale due to concerns of high costs and limited effectiveness. In this study we aimed at estimating the costs and cost-effectiveness of five smoking prevention policies (bans on smoking in public places, bans on sales to minors, bans on point-of-sale advertising, bans on smoking at school premises, and school prevention programs), implemented in seven European countries (Finland, Ireland, Netherlands, Belgium, Germany, Italy, and Portugal) in 2016.

Methods
We retrospectively collected costs related to (1) the inspection activities and legal procedures related to public bans, (2) the monitoring of the school bans and sanctioning of non-compliant students, and (3) education activities related to smoking prevention programs. We used an “ingredients-based” approach, identifying each resource used, quantity and unit value for one full year, under the State perspective. Costs were measured at national, local, or school-level, and were complemented with qualitative data on how these activities were performed in reality. Cost estimates were estimated at a 17-years’ time horizon to reflect the total number of years of implementation done in the cohort (to cover all groups that have 0 to 17 years old at year 0), discounted at a 3.5% annual rate.

Effectiveness was estimated using the DYNAMO-HIA tool, departing from data on short-term prevalence reduction, collected from the literature. The simulation followed the whole population since year 0 until when the last person of the cohort died, estimating the number of healthy life years gained by each intervention, comparing with a no-intervention scenario. Cost estimates were then divided by the total number of healthy life years (QALY) gained by the cohort after the implementation of these policies.

Results
Costs varied between from €0.02 to €0.74 per person for public non-school bans, €0 to €0.48 for school bans, and €0.65 to €5.12 for school programmes, accordingly to the number of person-hours allocated to the implementation of these policies. If effectively implemented, all policies would be cost-effective in all seven countries and levels. School bans would be the most cost-effective interventions, with €0 to €347.50 per QALY. Public non-school bans would cost €0.96 to €1911.18 per QALY, and school programmes would cost €7.08 to €4546.07 per QALY, which are substantially lower than the thresholds proposed by the literature.

Conclusions
Smoking prevention policies targeting adolescents are low cost and highly cost-effective interventions. Investing in these policies and implementing them effectively can tackle one of the main causes of morbidity and mortality in Western Europe.

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Trends in adolescents smoking in 6 countries
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Introduction
Adolescents smoking has decreased steadily in the last decades. Yet, this decrease has been uneven across areas and across socioeconomic groups. It is unclear which groups have been the least responsive to changes in smoking outcomes. We identify the levels and the groups associated with changes in smoking outcomes and in unequal change of smoking.

Methods
The SILNE-R study performed a repeated full network cross-sectional study in schools from six European cities. Fifty schools initially recruited in 2013 were recontacted to participate three years later and 38 accepted to reparticipate.

Results
Tampere largely succeed in reducing both ever try and weekly smoking rates, Coimbra has particularly decrease the ever trying rate, and Hanover the weekly smoking rate. Yet, all other cities
also acknowledge a significant decrease in their rates, but Latina, who both rates do not significantly decrease between the two waves. Absolute inequalities went down for all socio-economic groups and the decrease was more or less of the same magnitude across socio-economic groups. Friends smoking was a major contributor to smoking inequalities and to the slowing down of the smoking epidemic.

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**Emerging Issues in Tobacco Control in the Balkans: Hot Topics for Better Health**

**One Step Forward & Two Steps Back:** Liberalization of Tobacco Use Laws in Macedonia

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**Aim and Objective**

Tobacco has been consumed in the region of Macedonia ages ago. Over the years, the characteristics and the profile of the smokers have changed, but the smoking rates remain high. Smoking is not just a bad habit in Macedonia. Tradition of raising, processing and consuming tobacco is also involved, as well as social and cultural aspects. A lot of Macedonian families earn their living from cultivation and processing tobacco. Numerous tobacco factories worked with full capacity in the past. Part of them have been closed or repurposed during the past decade, but tobacco industry is a powerful enemy, managing to keep the high rate of smokers in Macedonia.

**Methods & Findings**

In 2013, 46.6 % of the male and 26.8% of the female population in Macedonia were active smokers, rating Macedonia to the highest places in Europe. Up to two decades ago, smoking was allowed everywhere in the country, actually, there was no smoking ban whatsoever. The first law for protection from smoking was passed in 1995, with seven changes and additional laws in the following years. In 2013, smoking was forbidden in all public and indoor places. This regulative lowered slightly the number of smokers, but the accomplished results are far from the desired ones. A great portion of the population does not confine to the laws.

**Conclusion**

Unfortunately, in October 2017, the Parliament of the Republic of Macedonia, passed an amendment, allowing smoking in outdoor spaces of the restaurants and pubs, even if they were closed with barriers from all sides. In order to give our contribution to the reduction of tobacco consumption in Macedonia, we have been working on a program for education of doctors and health workers for smoking cessation. The project represents a partnership between the Medical faculty in Skopje and the Henry Ford Health System from Detroit, Michigan, USA.

**Funding**

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**Hot Topics of Tobacco Control in Bosnia and Herzegovina**

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**Aim and Objective**

Legislation about protection from exposure to tobacco smoke in Bosnia is very much supported by the European (EU). Policy of tobacco control in Bosnia on a state level should be more reliable to ensure the chance to secure the EU funds needed for the implementation of Framework Convention on Tobacco Control.

**Methods & Findings**

Prevalence of smoking is higher than in EU: in adults (15-49 years) and in 66.8% and in youth (13-15 years) is 26.7%. Progress during last 3 years: prohibition of smoking in public places have been adopted; there is a ban on advertising cigarettes in mass media, as well as ban on sponsorship by the tobacco industry; cigarettes are becoming less affordable due to the price increase twice a year; health warnings on cigarette packages are present; 5. awareness of smoking harm is rising. Hot problems in Bosnia are: the prohibition of smoking in public places is not implemented almost in general; sale of tobacco to persons under the age of 18 is still present; daily illegal tobacco sales in public places are ineffectively sanctioned; nargile bar increasingly occur; they are increasingly popular among youth; their services to persons under the age of 18 are unpunished; there are no effective centres for smoking cessation; doctors and medical staff are not sufficiently or not at all trained in the treatment of tobacco dependence.

**Conclusion**

Proposed activities: more rigorous implementation of smoking prohibition on public places; organisation of massive smoking cessation programs; education of health workers in treatment of tobacco dependence; regulations on transfer of cigarettes taxes in health care sector; more active role of international organizations and civil society in tobacco control.

DOI: 10.18332/tpc/91065

**Tobacco control in Serbia – what control?**

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**Aim and Objective**

Tobacco smoking is the world-wide health problem, with about billion smokers worldwide, over 6 million deaths caused by smoking only in 2016 and estimated 100 million deaths caused by smoking since end of WW II. In Serbia, smoking is also widespread poor habit. Over 34% of adult population actively smokes and more than half of overall population is exposed to tobacco smoke.

**Methods**

Estimated cigarette consumption of cigarettes in Serbia is 2924 per year, which places it on second place in Europe. About 58/100 smokers per year die from cardiovascular event and 17/100 from malignancy. Public awareness about health problems caused by smoking is very high, with 87% of active smokers agree that smoking is cause of serious health. But, majority of them is still reluctant to accept smoking banning from public places, such as public sport places, pools and even children playgrounds.

**Findings**

Tobacco control in Serbia is regulated by Law on population...
protection from tobacco smoke. National office for tobacco prevention, which works in the Institute for Public Health of Serbia is responsible to lead and coordinate smoking cessation and prevention activities in Serbia. Several Departments for smoking cessation exist in major health institutions in Serbia, and occasionally major public campaigns are launched nationally wide. Unfortunately, the Law is not strictly enforced, or not enforced at all, and itself has several concessions to restaurant and bar owners. Inefficient implementation of the Law together with general poor attitude of population in upholding the regulations and lowest prices of cigarettes in Europe are cause of above mentioned data.

**Conclusion**

Stricter implementation of regulation, sharp increase in taxes on tobacco products and persistent activities on rising public awareness of health problems caused by smoking are some of the measures that could, at least, reduce the consumption of tobacco products in Serbia.

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**Treating Tobacco Dependence in the Romanian Context: Emerging Solutions**

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**Aim and Objective**

Romania has a population of 19.5 million. Smoking rates are 37% men and 16.7% women. According to WHO figures, 77% of all deaths in Romania in 2008 were caused by diseases for which tobacco smoking is the main risk factor.

**Methods & Findings**

The World Health Organization (WHO) has called for smoking cessation to be integrated into primary healthcare globally, as it is the most suitable health system ‘environment’ for providing advice and support on smoking cessation. This requires that primary care professionals are motivated to provide smoking cessation advice and treatment and have the capacity, capability and opportunity to do so. It also requires that they are able to prescribe pharmacotherapy for nicotine addiction, are knowledgeable about the medications and can support patients with their use of them. However, several studies describe the professional behavior of Romanian family physicians (FPs) toward smokers and highlight the lack of engagement in smoking cessation activities.

**Conclusions**

Emerging solutions to address this include teaching and developing a sustainable network of primary care teachers, skilled in the management of tobacco dependence. To support these teachers in developing and implementing country based programs and to spread this knowledge in the on-going education of primary healthcare professionals, there can be more done to adapt existing resources on the treatment of tobacco dependence to the local context. Additional solutions include increasing the capacity of a range of primary healthcare professionals, including GPs, nurses and community pharmacists, in treating tobacco dependence. This will improve the health outcomes of patients with tobacco dependence seen in primary care by increasing the number of quit attempts and the number of successful quits.

**Funding**

Results from this study are part of an ongoing project under the auspices of the International Primary Care Respiratory Group and funded by a Pfizer/Global Bridges grant.

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**SATURDAY 16 JUNE**

**SHS exposure: Oral Presentations**

**Nicotine in sports: past, present and future**

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In the last years, literature provided evidence supporting an increase of nicotine - the psychoactive drug present in tobacco - use in sport and administered by smokeless tobacco. Currently the use of nicotine is not prohibited by the World Anti-Doping Agency although it is monitoring patterns of use. This keynote lecture will provide an overview of the current literature and highlight important avenues for future research. Particularly, we would like to present data collected in northern Italy - a country where there is not socio-cultural snus tradition - among winter sport athletes showing that nicotine use in regular snus-users induces greater satisfaction and psychological reward than occasional users. Moreover, we would like to introduce that nicotine administered through snus increase cerebral oxygenation in the prefrontal cortical during submaximal exercise in non-tobacco user athletes, supporting the hypothesis that nicotine acting as a central stimulator. In addition, data collected with Transcranial Magnetic Stimulation (TMS) in order to check changes in cortico-motor excitability confirm the nicotine central effects increasing MEP amplitude and latency on primary motor area after submaximal exercise. On the other hand, we will present our results on footballer players where snus intake increase mental load, reduced perceived readiness level and heart rate variability. In conclusion, we will show that snus administration under abstinence condition (12h) increase time to exhaustion and cognitive performance on decision-making task in snus user athletes. Researchers, practitioners and regulatory authorities are the target audience and the content should appeal to scientists and social scientists alike.

**Funding**

The research projects under nicotine abstinence / satiety condition have been carried out with the support of World Anti-doping Agency (WADA). All others studies were funded by the University of Verona, Italy.

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**Tobaccofree Sports Stadia: European Policies and Guidance**

Matthew Philpott 1

1European Healthy Stadia Network, Liverpool, United Kingdom

Over 20 million people – including many children and young people - attend professional football matches across Europe each week, with many more attending other professional and amateur sports fixtures. The vast majority of European sports venues take place in semi-enclosed structures with roofed stands, and yet there are still very low levels of smokefree and tobaccofree policies
in operation.

Building on research findings that only 10 out of UEFA’s 54 European countries have football stadia that operate completely tobaccofree policies, Healthy Stadia has worked with UEFA and World Heart Federation to develop new guidance materials for clubs, multi-purpose stadium operators and governing bodies of sport to assist in the development and enforcement of strong tobacco control policies. This presentation will give a benchmark of current policies in place, support offered through the new guidance materials, and advice on how sports organisations can go beyond national tobacco control legislation to implement tobaccofree policies. Further information will be provided on the launch of a Europe-wide Tobacco-Free Stadia Declaration that will be launched in conjunction with European governing bodies of sport in Autumn 2018.

Funding
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Second-hand smoke exposure in private and public places in Italy: data from the TackSHS pan-European survey
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Introduction
Aim: Exposure to second-hand smoke (SHS) has serious adverse health effects, causing more than 600,000 deaths among non-smokers each year worldwide. Following the recommendations of the World Health Organization, most European countries adopted - more or less comprehensive - smoke - free legislations. Our aim was to quantify SHS exposure among non-smokers in selected European countries.

Methods
Within the TackSHS project, we are conducting a face-to-face survey, including information on exposure to SHS in selected private and public indoor places, and outdoor places. The fieldwork has already been conducted in Italy in December 2016 on a representative sample of 1059 Italians aged ≥15 years, and will soon be conducted in other 11 European countries (i.e., Bulgaria, England, France, Germany, Greece, Ireland, Latvia, Poland, Portugal, Romania, and Spain).

Results
In Italy, 81% of survey participants were non-smokers (n=859). Of these, 27% were daily exposed to SHS in indoor places for a median time of 2 hours/day. The proportion of non-smokers reporting to have seen people smoking in indoor public settings was 23% in restaurants, 20% in indoor train stations or subway stops and 17% in disco clubs, and was 20% in private vehicles without minors, and 14% in presence of minors. A high proportion of non-smokers reported to have seen people smoking in various outdoor settings, including beaches (79%), outdoor areas of hospitals (71%) or schools (58%), and parks (68%).

Conclusions
More than one out of four Italian non-smokers is daily exposed to SHS. We recognize the dramatic fall in SHS exposure thanks to the comprehensive Italian smoke-free legislation adopted more than 10 years ago. This notwithstanding, it is still not rare to observe people smoking in violation of the current legislation in Italy. Data from other 11 European countries with different smoke-free policies will allow cross-country comparisons.

Funding
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Attitudes of the Greek Public towards the implementation of the smoking ban law
Marina Demi1,2, Vergina-Konstantina Vyzikidou2, Stephanie Teloniatis2, George Matiampa3, Vaso Evangelopoulou2, Constantine Vardavas1,2, Anna Tzortzi1,2, Panagiota Behrakis1,3,4
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Introduction
Introduced in Greece in 2009, the smoking ban law was never fully implemented in indoor public spaces. This study aimed to explore exposure to secondhand smoke (SHS) in Greece and, to investigate the public opinion regarding the non-implementation of the smoking ban law.

Methods
A cross sectional survey on exposure to SHS and attitudes of the Greek public towards the non-implementation of the smoking ban law, was conducted in June 2017 by the Institute of Public Health-American College of Greece. A nationally representative sample of 2,054 adults from 13 regions in Greece, were interviewed through using computer-aided phone interview (CAPI).

Results
The majority of Greek citizens (88.1%) responded that they consider the national aim for smoking reduction as important or very important. Almost all Greek people (96.6%) reported that they were exposed to SHS in the past year. 74.2% reported being upset whenever they visited an indoor public space where the smoking ban law was violated. 76.1% of the Greek public reported being upset that Greece is the only European Union Member State that has not comprehensively enforced the smoking ban law. 93% of Greek people did not believe that the State has done everything in its power to enforce the smoking ban law in hospitality venues. Furthermore, 83.8% of Greek citizens consider the smoking ban violation as a sign of cultural decline in Greece.

Conclusions
In addition to the supportive legal premise for implementation of the smoking ban law, the current study on the attitudes of the Greek public showed that the necessary supportive cultural context also exists for the Greek State to successfully enforce the smoking ban law in all public spaces.

Funding
This work is supported by a George D. Behrakis Foundation Grant.

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burden of disease due to second-hand smoke exposure: a systematic review within the TackSHS project

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Introduction
To provide a systematic review on the existing literature on the population burden of disease due to second-hand smoke (SHS) and to identify methods, diseases, and outcomes for estimating mortality and morbidity attributable to SHS exposure in the 28 European (EU) Countries within the Project “Tackling second-hand tobacco smoke and e-cigarette emissions: exposure assessment, novel interventions, impact on lung diseases and economic burden in diverse European populations” (TackSHS) funded by the European Union’s Horizon 2020 Research and Innovation Programme.

Methods
We performed a literature search in PubMed and SCOPUS with the eligibility criteria of selecting original publications evaluating the burden of disease due to SHS exposure published after 1 January 2007 in English language. PRISMA recommendations were followed. We identified 505 studies; 434 relevant after screening; 79 eligible.

Results
We included 62 studies. Twenty-three were carried out in EU countries, 13 in the US, 15 in China and other Eastern countries and the remaining in Australia, New Zealand, Morocco, and Israel. Almost all studies were based on the comparative risk assessment method. SHS exposure was mainly assessed through surveys asking for SHS exposure in home or workplace, in some cases also exposure in car or public places was considered, and in 6 and 5 studies exposure was respectively cotinine-measured and modelled. The diseases mainly studied were: lung cancer, ischemic heart disease, and stroke in adults; low birth weight, sudden infant death syndrome, lower respiratory tract infection, otitis media, and asthma in children. The outcomes were number of cases and deaths, disability adjusted life years, and costs.

Conclusions
Although outcomes and diseases change depending on the objective of each study, the CRA methodology and the household or workplace SHS exposure assessment using surveys are used by almost all the studies and they will be adopted also in TackSHS.

Funding
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Smoke free environment policies at municipal level in Wallonia: orienting vulnerable populations

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European Union Member States are implementing at present the European Tobacco Directive 2014/40. More, the WHO Framework Convention on Tobacco Control (FCTC), gives them relevant tools on policies for signatory countries. Local authorities can mobilize considerable resources and skills in protecting citizens from tobacco. Security and waste on public roads are often hot topics in municipalities, smoking representing a long-term problem, that can constantly mobilizes families, schools, sports associations, employers, businesses, etc., It is there possible to reach people directly in their day-to-day life, for example at school, at their work place, social centres or in the recreational areas.

Also, when conditions are created they can promote tobacco-free living spaces, protect residents from passive smoking and help ensure that the absence of tobacco is considered the norm. Regarding the different competences municipalities in health, the presentation proposes to explore different aspects and opportunities of tobacco control at local level.

A white book, reporting a two years consultation of experts, deciders, professionnals and citizens and exploring different tobacco control possible measures will be presented. It include a self-evaluation tool for municipalities.

Funding
Research and service funding comes from the Walloon Plan against Tobacco (Official Belgium regional Health public sector).

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Outdoor hospitality venues: A real challenge for tobacco control policies

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Introduction
After the implementation of smoke-free policies in indoor hospitality venues, smokers may have displaced to their outdoor areas. Authors aimed to describe smoking visibility and second-hand smoke exposure in outdoor hospitality venues.

Methods
An observational study was conducted in Madrid city, Spain, in 2016. We collected information on signs of tobacco consumption on entrances and terraces of hospitality venues. We also measured vapor-phase nicotine and particulate matter 2.5 (PM2.5) in terraces with monitors by active sampling during 30 minutes. We calculated the medians and the interquartile ranges (IQR) of nicotine and PM2.5 concentrations, and computed multivariate analysis to characterize their determinants.

Results
We characterized 174 outdoor main entrances of hospitality venues between May and September 2016. We found signs of...
Do European smokers opt for partial or total bans on smoking in homes and cars? Findings from the ITC 6 European country survey (EUREST-PLUS project)

Marcela Fu1,2, Olena Tigova1,2, Yolanda Castellano1,2, Thomas Agar3, Geoffrey Fong4, Anne CK Quah3, Constantine Vardavas5,6, Esteve Fernández1,2, on behalf of the ITC and EUREST-PLUS projects

1Catalan Institute of Oncology (ICO), 2Bellvitge Biomedical Research Institute (IDIBELL), 3University of Waterloo, Canada, 4Ontario Institute for Cancer Research, Canada, 5University of Crete, Greece, 6European Network for Smoking and Tobacco Prevention (ENSPI), Belgium

Introduction

Aim: While smoke-free policies in Europe are well-established for public places, private settings are mainly not regulated and are thus an important source of second-hand smoke exposure. We aimed to describe and characterise smoking rules in homes and cars of smokers from 6 European countries.

Methods

We used baseline data (2016) of the International Tobacco Control 6 European (ITC 6E Country Survey) under the EUREST-PLUS Project and part of the larger ITC Project, conducted in national representative samples of 1,000 adult smokers aged ≥18 per country in Germany, Greece, Hungary, Poland, Romania, and Spain. We analysed information about smoking rules in their homes and their cars with children, including: no rules, partial rules, and total ban. We described and compared weighted prevalence of smoking rules by country and several sociodemographic (sex, age, education, partner’s smoking status, having children) and smoking characteristics (cigarettes smoked daily, dependence) using prevalence ratios (PR) with 95% confidence intervals (95%CI) from logistic regression analyses.

Results

In homes, 71.2% of smokers had some type of smoking ban: 26.5% had total bans (from 13.1% in Spain to 35.5% in Hungary) and 44.7% had partial bans (from 41.3% in Spain to 49.9% in Greece). Overall, prevalence of total ban in cars with children was 60.9% (from 51.8% in Greece to 67.7% in Germany). The characteristics associated with not restricting smoking in homes and cars included: low education (PR=1.51; 95%CI:1.20-1.90 and PR=1.55; 95%CI:1.09-2.20), smoking >30 cigarettes daily (PR=1.53; 95%CI:1.10-2.14 and PR=2.66; 95%CI:1.40-5.05) and no attempts to quit ever (PR=1.18; 95%CI:1.06-1.31 and PR=1.28; 95%CI:1.06-1.54).

Conclusions

Most European smokers opt for partial smoking ban in homes and total smoking ban in cars with children. Prevalence of total bans in their homes is relatively low. Further education and policy initiatives are necessary to reduce this important public health threat.

Funding

The EUREST-PLUS Study takes place with the financial support of the European Commission, Horizon 2020 H2020-6-2015 program (EUREST-PLUS: 681109; C. Vardavas) and the University of Waterloo (GT. Fong). Additional support was provided to the University of Waterloo by the Canadian Institutes of Health Research (FDN-148477). GT. Fong was supported by a Senior Investigator Grant from the Ontario Institute for Cancer Research.

International tobacco control actions: Oral Presentations

Report "Tobacco, alcohol and illicit drugs in the Russian Federation: use, impact, sources and control policies"

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Introduction

Aim: To present a report comparing tobacco, alcohol and illicit drugs in the Russian Federation it terms of use, impact, production and supply, economic aspects, prevention and control policies, in order to provide evidence for more effective prevention and control of these major addictions, taking into consideration gender aspects.

Methods

Review of available statistical data, official publications, research evidence.

Results

In spite of popular opinion on illicit drugs as the main threat, in general, tobacco use prevention and control based on WHO FCTC compliance, is of primary importance for the Russian Federation in terms of impact on population health. Based on IHME sources, in 2015 313,683 individuals of all ages died because of tobacco...
use, including 31,104 from second hand smoke (23,863 of these – women). Alcohol use was the cause of death of 223,556 individuals, including 89,840 women. Illicit drugs use killed 41,351 (including 31,909 men). Gender difference is profound: men have much higher risk of dying from each of three addictions; at the same time for women alcohol use is still more important as cause of death, compared to tobacco use.

According to available estimates, about 45% of total social costs (direct costs – medical + non-medical and indirect – premature deaths, disability) attributed to three addictions were related in 2008 to alcohol issues, about 30% - to illicit drugs use and 25% - to tobacco use. This is in part explained by various degree of criminalization of three addictions. Previous governmental tobacco control strategy expired in the end of 2015, and revised strategy had to be approved in early 2016, and it is still a draft. Among probable explanations of the delay is that tobacco industry is pushing for promotion of "alternative approaches of nicotine use - nicotine containing products with lowered risk” into this strategy, involving business associations, medical associations, and State Duma as a platform and a vehicle. Policy on tobacco, alcohol and illicit drugs is increasingly formulated at the supranational level of the Eurasian Economic Union, where industry position is dominating public health concerns. Russian Federation is insisting on criminalization of illicit drugs use, does not accept harm reduction approach to drug use issues, and this might be linked with continuing HIV epidemic.

Conclusions
Russian Federation example suggests that it is appropriate to consider three major addictions together to prevent/correct possible bias in assessment of impact and allocation of resources aimed at prevention and control of disease and premature death.

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The great socioeconomic smoking divide: is the gap widening in Australia, and why?
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Introduction
Smoking is undoubtedly one of the major markers of and contributors to social disadvantage, and reducing smoking-related disparities is a priority for tobacco control. This research explores changes over time in smoking prevalence and quitting by socioeconomic status (SES) in Australia, and whether there are current disparities in uptake, quitting, and use of cessation aids.

Methods

Results
Since 2001, there has been a significant linear decline in smoking prevalence for all SES groups, and the absolute gap in smoking prevalence between the most and least disadvantaged stayed fairly constant for the decade 2004–2013 at about 14%, before narrowing to about 12% in 2016. While there has been a significant increase in never smoker prevalence among all groups, the proportion of adult ever-smokers quitting has significantly increased in all groups except the most disadvantaged quintile. In 2016, although the most disadvantaged smokers were equally likely to make a quit attempt, and equally or more likely to use quit aids, success was significantly lower than among more advantaged groups. Further, the most disadvantaged ex-smokers took significantly longer to quit after taking up smoking, placing them at greater risk for smoking-related disease.

Conclusions
Withuptakedecreasingamongallgroups,socioeconomicdisparities in smoking appear to be explained by disadvantaged smokers taking longer to quit, or not quitting at all. Low socioeconomic groups are having less success quitting, despite being just as likely to attempt to quit, and just as likely to use cessation aids. More intensive and/or extended cessation interventions, and continuing with evidence-based population-wide strategies that reduce socioeconomic inequalities in smoking, may be required to assist such smokers.

Funding
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Cancer Council Research; and for policy research provided to Quit Victoria by VicHealth (the Victorian Health Promotion Foundation).

**Non smoking week. Spanish Society of Family and Community Medicine semFYC**

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**Introduction**

The Spanish Society of Family and Community Medicine semFYC decided in 2000 to organise its first “No Smoking Week” (NSW) in the last week of May, this week is held to coincide with the World Health Organization’s “No Tobacco Day” on 31 May. Eighteen NSW have been held so far. The last No smoking week between 25-31 may 2017 “Less tobacco y more exercise”. More information in the web http://semanasinhumo.es/. NSW is a community prevention and intervention campaign aimed at healthcare professionals, as well as at the general public. Activities are organised with a view to informing the public and raising their awareness of the consequences of smoking, of the advantages of not smoking, of the possible therapies available to help smokers give up, and of citizens’ rights and need to be able to breathe smoke-free air.

**Methods**

1. To make the general public aware of the risks that smoking poses to health, and encourage smokers visiting primary health centres to take steps towards giving up.
2. To inform smokers of the range of treatments available to give up smoking and the kind of help they can expect to receive from their general practitioner (GP).
3. To promote the involvement of GPs in tackling smoking from three different angles: as social agents; as a role model to be imitated by their patients; and as healthcare professionals offering treatment to help smokers give up.

**Results**

More than 2000 Primary Health Center of all Spain participated in the last edition of NSW with different activities.

**Conclusions**

The various NSW over the years have made the populace aware that we GPs are a resource capable of helping smokers to give up smoking. The NSW is a public manifestation of our responsibility to all those people around us who smoke and want to stop.

**Funding**

Non smoking week is founded by the Spanish Society of Family and Community Medicine semFYC and The Health Minister of Spain

**Towards a Smokefree Generation in the Netherlands: From campaign to social movement to an ambition embraced by the government**

Sanne Heijndijk¹
¹Alliantie Nederland Rookvrij (Dutch Alliance for a Smokefree Society)

In the early 2010s, the Netherlands was lagging behind in the area of tobacco control (TC). Dutch society was polarised on the topic and TC was not considered a key priority in the public and political domain. To change the pace of TC, the Dutch Cancer Society, Heart Foundation and Lung Foundation joined forces. In November 2015, they launched the campaign “Towards a Smokefree Generation” (SFG). The objective is to allow parents to raise their children free from exposure to tobacco smoke and the temptation to start smoking. So that all children who are born from 2017 onwards, will choose to never start smoking. A common roadmap, following the
Turkish Green Crescent Society, Istanbul, Turkey

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of second hand smoke.

improved on and non-smokers must be reminded of the harms

Therefore, the non-smokers are still subjected to second-hand

violated at public places such as restaurants and cafes. The ban

Tobacco control legislation in Turkey is aligned with

international standards. However, rights of non-smokers are

Conclusions

Turkish Green Crescent Society

Introduction

This study assessed the correlation between tobacco control

media campaigns and tobacco control violations reporting by

people.

Methods

Study data derived from the user and violation reporting numbers

gathered from Green Detector Mobile Application which is has

been designed in such a way that enables the users to report a

violation without having to use his/her name. Weakly changes in

these figures are compared with media campaigns aiming at rising

awareness on tobacco control.

Results

Change in the number of downloads and users is in positive

correlation with the broadcasting of the public ads on the tobacco

control.

Cessation 2: Oral Presentations

Firsts results and effectiveness National Smoking cessation service in Ukraine

Otto Stoyka1, Kateryna Rymarenko2

1Kyiv City Health Center, 2NGO “Life”

Introduction

Smoking cessation service was officially launched on June 20, 2017,
in Ukraine. It was initiative antitobacco activists with the support of

WHO Country office and Swiss Agency for Development and

Cooperation and in the line with the WHO European Region


Methods

We analyzed call data from telephone line customers using surveys

used by consultants at each consultation. We also evaluated our

customers’ data through website self-assessment questionnaires.

Then we summarize the key indicators that give quantitative and

characteristicis. Period of analyzed June-December 2017

Results

The total numbers of outgoing calls are 1686. The numbers of

full consultations are 708. The average duration of consultation is

15 minutes. There were 4 times more men than women among

smokers and 0.6 times more women than men among relatives/

friends of smokers who called. The most of clients were 50-59

years old (22.1%), the least of them were of age 80 years and

over (0.5%) and less than 20 years old (1.5%). More than 40% of

smokers and 0.6 times more women than men among relatives/

friends of smokers who called. The most of clients were 50-59

years old (22.1%), the least of them were of age 80 years and

over (0.5%) and less than 20 years old (1.5%). More than 40% of

Smoking cessation after acute myocardial

infarction, is relapse predictable?

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Introduction

Taking into account the burden of tobacco in cardiovascular

prognosis, smoking cessation should be a priority in secondary

prevention programs. We analysed the predictors of relapse after

a smoking cessation intervention in coronary disease patients.

Methods

448 smoker patients (85,5% male) referred to a cardiac

rehabilitation program after a recent admission for acute

myocardial infarction were analyzed. Most of them were heavy

smokers (mean consumption of 24,5 cig/day, 41,2 pack-year). The
intervention was based in an average of 3 individual visits during the first 3 months, one group session, and one follow-up visit after 6 months. Diet and exercise counselling was given. First line smoking cessation pharmacotherapy was offered to all patients as a possibility. Smoking abstinence was confirmed with co-oximetry at 3 and 6-month follow-up visits. A multivariate analysis was performed in order to study the predictors of relapse.

**Results**

Mean age was 53.6, 57% were hypertensive, 23% diabetic, 60% dislipidaemic, 27% obese and 7% had previously been diagnosed with chronic obstructive pulmonary disease (COPD). Pharmacotherapy for smoking cessation was requested in 31%, varenicline was used in 57% of them, nicotine replacement therapy in 33% and bupropion in 10%. Patients lost to follow-up (3% at month 3, 6% at month 6) were considered as having relapsed. Abstinence rate was 76.6% at month 3, and 71% at month 6.

Following a multivariate analysis, the predictors of relapse were found to be the number of cigarettes smoked per day, the number of pack-year, the use of smoking cessation drugs, dropping out of the program, and having a previous condition of COPD.

**Conclusions**

Smoking cessation interventions after an acute myocardial infarction are effective. A high degree of motivation facilitates the abstinence even in the absence of pharmacotherapy. A high degree of addiction and dependence, the need of smoking cessation drugs, lack of adherence and a previous condition of COPD were predictors of relapse. A more intense intervention is probably needed in patients with these features.

**Funding**

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**Effectiveness evaluation of the National telephone quitline in the Kyrgyz Republic**

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¹Republican Centre for Health Promotion of the Ministry of Health of the Kyrgyz Republic, Bishkek, Kyrgyz Republic, ²Public Health Protection Foundation, Bishkek, Kyrgyz Republic

**Introduction**

Goal: to conduct evaluation of effectiveness of the National telephone quitline in the Kyrgyz Republic on smoking cessation

Methods

Were analyzed data of 5823 smokers (94.3% men and 5.7% women) who received consultations during up to 2 years (in 2016 - 2017).

Since 2016 the Tobacco control unit of the Republican Health Promotion Centre of the Ministry Health (MoH) is providing smoking cessation consultations and information for Kyrgyz population by telephone (quitline). Link to the quitline website and telephone number 2103 were displayed on 12 Pictorial Health Warnings on cigarette packages, which were implemented in Kyrgyzstan since January 2016. Quitline (only 2 telephone line) work from 9 a.m. till 9 p.m daily, except Sunday and national holidays.

During February-December of 2017, quitline service consultants made proactive calls to the telephone subscribers, who received consultations in same period of 2016 for conducting monitoring of work. 894 people were interviewed.

**Results**

99% of respondents of quitline would like to quit smoking, but a strong motivation had only 21% of men and 23% of women; 67.0% of men and 63.2% of women had a middle motivation to stop smoking. 47.8% of smokers had 3rd degree of tobacco addiction
Almost daily smokers: a specific phenomenon or a distinct phase
Tatiana Andreeva¹
¹ADIC, Ukraine

Introduction
The phenomenon of light and intermittent smoking is still under debate as the one which can be a specific smoking pattern or a transitional phase to a more established tobacco use. To date, most of the related studies originate from the US. We explore characteristics of ‘almost daily’ smokers in Ukraine.

Methods
The analysis is based on the data of the survey which explored quitting needs and histories in a nationally representative sample of 1400 Ukrainian smokers. For about half of the survey time, only ‘daily smokers’ were recruited. Later on, the invitation to participate was addressed to ‘daily or almost daily’ smokers. We explore the difference between the two subsamples to characterize the group of intermittent smokers.

Results
Among both men and women, intermittent smokers were less dependent on nicotine as they responded that they do not typically smoke within one hour after wake-up; for future quit attempts, they more likely planned unassisted quitting. Among men, ‘almost daily smokers’ more likely responded about their willingness to use self-help materials, email-based quitting means and quitlines in their future quit attempts. Among women, intermittent smokers were less likely planned to use medicines or other suggested means.

Conclusions
The phenomenon of light and intermittent smoking is still under debate as the one which can be a specific smoking pattern or a transitional phase to a more established tobacco use. Up to date, most of the related studies originate from the US. We explore characteristics of ‘almost daily’ smokers in Ukraine.

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Tatiana Andreeva¹
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Results
Among both men and women, intermittent smokers were less dependent on nicotine as they responded that they do not typically smoke within one hour after wake-up; for future quit attempts, they more likely planned unassisted quitting. Among men, ‘almost daily smokers’ more likely responded about their willingness to use self-help materials, email-based quitting means and quitlines in their future quit attempts. Among women, ‘almost daily smokers’ more likely were younger than 25 and without access to modern communication means. They reported past abstinence periods of months and years, expressed willingness to quit but not in the near future and less likely planned to use medicines or other suggested means.

Conclusions
The aim of the study was to find out if the extreme number of cigarettes smoked per day by the patients with tobacco dependence corresponds with their clinico-genetic characteristics. Clinical and genetic study was conducted in 50 patients with high level of tobacco dependence (K. Fagerstroem). They were divided into 2 groups: the main group (n=24) with an extreme number of cigarettes - ≥ 40 cigarettes/day (47±5,1), age 48.5±2.5 years, and the control group (n=26) – up to 20 cigarettes/day(25.2±2.6, P<0.01), age 45.3±2.4 years. All the patients of the main group had pharmacological resistance to Varenicline, Nicorette, Citizine and never stopped smoking. In the control group the patients had several affective quit attempts. The genetic study included identification of polymorphism (variations) of the gene nicotinic receptor rs578776 and COMT gene rs4680 in all the patients.

Results
Clinical evaluation of Craving for Smoking syndrome: 3.75±0.96 (of 4 balls maximum) in the main group; 1.67±0.083 balls – in the control. Emotional-personality features, examined by Toronto Alexithymics test: the average index value of alexithymia in the main group significantly surpassed the similar indicator of the control group (77.0±2.1 compared to 66.1±1.5 p<0.01). Homozygotes for valine (COMT) in the main group - 22 (9.6%), in the control - 2 (7.7% - X2=5.78, p=0.0109). Rs578776 polymorphism: the main group - 21 (87.5%), the control-3 (11.5%).

Conclusions
The patients with the extreme number of cigarettes smoked have the great difference in genetics background, clinical features and emotional-personal properties compared to the persons with “normally hard” tobacco addiction, and need individualized therapy approach.

Funding
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Tobacco epidemic trend among Almaty teenagers
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Introduction
Tobacco smoking reduction is the focus of the Almaty Smokefree program which performed a survey to investigate the trends in tobacco use among 13-15 aged.
Methods

The express survey used the GYTS (Global Youth Tobacco Survey) methodology and self-administered standard questionnaire which consists of 59 questions. Anonymous interviews were conducted among students in 6 to 9 grade in schools which were randomly selected from the general list of schools in the of Almaty. Sampling covered 3210 between 2013 and 2015.

Results

13% of respondents had ever smoked shisha in 2013 and 16.5% in 2015. Boys (20%) smoked shisha more than girls (13.2%). Prevalence of ever smoking cigarettes remained at 9% level in both years, but consumption of smokeless tobacco products decreased from 2% to 1% in 2013 and 2015 respectively. The vast majority of shisha smokers believe that shisha is less harmful than cigarettes and easier to quit. The majority of shisha smokers did not have any desire to quit in the future (71% in 2013 and 56% in 2015) and made no efforts to quit smoking during the previous 12 months (82% in 2013 and 65.4% in 2015). At the same time, more than half of the teenagers who smoked cigarettes mentioned that they would like to quit smoking and made efforts to quit smoking during previous 12 months. Shisha smoking session is associated among teenagers as relaxing, socially enjoyable event which improves group communication.

Conclusions

GYTS based surveys on 2013 and 2015 revealed an increase in shisha smoking among Almaty teenagers to 3.5% within 2 years, although it was insignificant. Such a growth calls for urgent introduction of complete smoking ban in public places and information campaign to address knowledge gap and myths.

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Increase tobacco prices: health and cost saving in Italy

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Even though the prevalence of smokers in Italy has decreased in the last thirty years (constant in the last decade), about 92,000 people die each year from tobacco-related disease, and causes a burden of disease of approximately 1,650,000 daly’s each year. The International Agency for Research on Cancer (IARC) review of more than 100 econometric studies confirmed that tobacco taxes and consumption are strongly inversely related. In Italy an increase of 20 % of the tobacco prices (from 5 euro to 6 euro per pack) this would result in a prevalence of smoking reduction of 6.8% and a reduction of related diseases of 6%. Implementing a similar price-policy in Italy, could mean avoiding about 9,500 deaths and about 98,000 DALY’s each year (in range period of 1-15 years).

Using the amount of funding for the Italian National Health System in 2016, corresponding to about 111 billion euro, it is roughly estimated that the increase of one euro in the tobacco prices would save in terms of health costs about 600 million euro each year in Italy.
generate data. Also, Focus Group Discussions were adopted to ascertain the validity of the data.

Results

1 Data collectors went to a total of 246 retailers
   • 65% of the retailers that were visited sell tobacco products
   • 35% of the retailers that were visited did not sell tobacco product

2 Different forms of advertising were observed
   • 47.1% Tobacco Product Displays
   • 32.3% Tobacco brand markings on Physical Structures
   • 16.7% Posters/signs
   • 2.7% Stickers

3 “Open space traders” This study found that the TI gives people free branded umbrellas to serve as roof over any available “open space” where goods are sold. Branded tobacco umbrellas were found primarily at the 2nd most observed store type. The pervasiveness of this form is an inadvertent form of advertising which assists the TI in promoting tobacco products without selling them. By having branded umbrellas around the cities, this form of advertisement promotes brand recognition and normalizes smoking.

Conclusions

TI has grown beyond the old forms of advertising to adopting new strategies to get their products sold. They target children and young adults through the use new and social media and also engage in corporate social responsibility projects aimed at influencing policy makers and government decisions. Efforts to combat this ugly trend must be sustained.

Funding

CTFK provided the funding for TAPS assessment study held in Lagos State Nigeria.

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Environmental tobacco smoke exposure in childhood cancer survivors

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Introduction

Survival rates of childhood cancer have increased in recent decades to reach 80% in high-income countries. At the same time, the appearance of late effects derived from the treatments has been increasing, estimating that up to 70% of childhood cancer survivors (CCS) will experience some late effect throughout their life. Exposure to environmental tobacco smoke (ETS) will increase the likelihood of these late effects. Therefore, it is an important mission in long-term follow-up programs to address smoking status in all household members.

Aim

To present the prevalence of exposure to ETS in a group of CCS who attend a long-term follow-up program and observe the differences at one year after a brief tobacco intervention.

Methods

Descriptive cross-sectional study. Smoking status was analyzed in the cohabitants of 135 CCS (7 - 34 years) who attend the Long-Term Follow-Up Program in the Clinical University Hospital Virgen de la Arrixaca (Murcia, Spain) between January 2016 and December 2017 after a brief tobacco intervention.

Results

In the first visit, 52.6% of CCS lived with a smoker in the home. 37.7% of mothers and 33.6% of fathers were smokers. In 8.9% of households there were other smokers. One year after the first visit, exposure to ETS in the houses decreased to 43.7% (30% mothers, 27.8% parents, 8.9% others).

Conclusions

The parents of CCS smoke more than the national average, exposing their children to the harmful effects of tobacco. However, it is observed that it is a population group with a strong motivation to abandon consumption. More intensive interventions are needed to increase the dropout rate.

Funding

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Smoking in adolescents and young adults childhood cancer survivors

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1Pediatric Environmental Health Speciality Unit, Department of Paediatrics, Laboratory of Environmental and Human Health (A3) Institute of Biomedical Research, IMIB-Arrixaca, Clinical University Hospital Virgen de la Arrixaca, University of Murcia, Murcia, Spain.

Introduction

It is estimated that 70% of childhood cancer survivors (CCS) will present a late effect derived from the treatments used during the acute phase of cancer throughout their life, some of them potentially serious as cardiac dysfunctions or subsequent neoplasms. Smoking may increase the frequency and severity of these late effects.

Aim

To present the prevalence of smokers in adolescents and young adults attending a long-term follow-up consultation in a Mediterranean Region.

Methods

Descriptive cross-sectional study. Smoking status was analyzed in adolescents and young adults CCS attending the Long-Term Follow-Up Program in the Clinical University Hospital Virgen de la Arrixaca (Murcia, Spain) during 2017.

Results

113 adolescents and young adults were analyzed (54.9% males) with ages between 15 and 34 years (median = 20 years). 14.2% of the CCS were smokers (11.5% daily smokers and 2.7% occasional smokers) with a median consumption of 32.5 cigarette/week; 2.7% were ex-smokers. The average age of onset in smoking was 16.4 years. In their residence, 52.2% were exposed to environmental tobacco smoke, with 36.6% of mothers and 34.6% of parents smoking.
Conclusions
The percentage of smokers in our group is similar to that of other studies in CCS (8 - 29%) and is below the Spanish average. However, in a group so sensitive to the harmful effects of tobacco, it is essential to carry out intensive interventions in order to eliminate consumption. The prevention work in children and non-smokers is basic to prevent them from starting the consumption.

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The authors received no specific funding for this work.

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"If I had known..." – a theory-informed systematic analysis of missed opportunities in optimising use of nicotine replacement therapy and accessing relevant support: A qualitative study.
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Introduction
Nicotine replacement therapy (NRT) is often used sub-optimally in smoking cessation attempts, especially when purchased over-the-counter (OTC). Previous research has focused on cognitive and attitudinal factors as potential reasons for low adherence to NRT. This study drew on theoretical frameworks of behaviour to comprehensively explore smokers’ NRT use to identify new intervention targets and improve the support offered to NRT users.

Methods
Semi-structured face-to-face interviews were conducted with 16 adult UK-based smokers and recent ex-smokers who used NRT during quit attempts in past five years. The COM-B (Capability, Opportunity, Motivation, Behaviour) model and the Theoretical Domains Framework (TDF) informed the topic guide and analyses. Data were analysed using framework analysis in Nvivo 11.

Results
Two related behaviours were identified relevant to optimal NRT use: use of NRT per se (B1), and engaging with information and support with NRT use (B2). A meta-theorem of ‘missed opportunity’ identified instances when smokers had a chance to use NRT or get access to support, but did not or could not engage in these behaviours. For B1 these included limited ability to use and apply NRT, low motivation to optimise use, and lack of role models. For B2 they included low awareness of optimal NRT use techniques, selective information-seeking, low expectations, limited exposure to guidelines, deficient advice from healthcare professionals, and suboptimal product display. Participants often mentioned their prior suboptimal experience negatively affecting subsequent use and views. Participants expressed a need for more accessible and comprehensive guidelines on NRT.

Conclusions
There appear to be important missed opportunities for optimal use of Nicotine Replacement Theory both in terms of use itself and access to and use of information on optimal use. These missed opportunities appear to arise from a range of capability, motivational and opportunity-related factors.

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A tobacco counseling training program for Macedonian physicians: Data from 6 months’ of process and outcomes evaluation activities
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Introduction
Macedonia has one of the highest rates of tobacco use in the world. An estimated 37% of the adult population are tobacco consumers (46.5% for men and 26.7% for women). Tobacco is inexpensive and is a part of the socio-economic life for a significant number of Macedonian residents. The country lacks the public health and clinical infrastructure needed to deliver effective tobacco cessation counseling. To address this critical medical, training, and education gap, we implemented a comprehensive, culturally appropriate modified Certified Tobacco Treatment Specialist (CTTS) training program for Macedonian physicians.

Methods
Utilizing formative qualitative data, the CTTS program was adapted to meet the context of tobacco use and access to preventive measures (e.g., counseling, pharmaceuticals) in Macedonia. An evaluation survey was developed based on a ‘systems model for clinical care’. Evaluation data were collected at baseline, two days post, and six months post. Process evaluation includes physician log-books for recording weekly encounters with patients who are former or current smokers.

Results
Macedonian physician champions and US partners trained 97 physicians in the counseling methodology. Statistically significant improvements (p<0.001) in knowledge over six months were demonstrated on multiple topics, including health risks, nicotine knowledge, addiction behavior, and vulnerable populations. Provider self-efficacy scores for conducting counseling activities increased by over 50%. Patient-level perception and outcome data are currently being collected and will be reported. To date, over 20,000 counseling sessions have been reported, lasting on average 8.3 minutes, which represents 45% of an entire visit’s length.

Conclusions
The aCTTS training filled a critical gap by equipping physicians with tools to address the profound tobacco use prevalence in Macedonia. Results indicate both a desire and readiness on the part of physicians to learn and implement clinical changes to reduce tobacco use and improve the health of their patients and themselves.

Funding
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Characterising Tobacco Industry Interference Tactics in the Philippines towards Preemptive Advocacy and Policy Design
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1HealthJustice Philippines

The Philippines has been documented to have the “strongest tobacco lobby in Asia,” with tobacco industry interference (TII) in local and national policy-setting and implementation an important roadblock to tobacco control (TC). Characterising TII tactics allows for the design of advocacy strategies and government policies to prevent TII and strengthen TC and regulation, especially with the 4.7% increase in youth smoking prevalence from 2011 to 2015 and the continued heavy burden of tobacco-related deaths in the local healthcare system. To disaggregate and identify TII modalities, a 3-year (2015-2017) survey of published newspaper reports and advertisements was conducted, utilising the Campaign for Tobacco Free Kids-supported Orendain Monitoring Reports. Major TII incidents identified included use of front groups to conduct corporate social responsibility (CSR) (especially donations to local governments); use of public relation (PR) tactics to circumvent tobacco advertisement ban in mass media; and meddling with political and legislative processes. Triangulation through TC CSOs and community consultations yielded reports of tobacco industry-initiated litigation and legal intimidation in various cities and municipalities. Violations of existing civil service rules were reported through complaints to the country’s Civil Service Commission (CSC) and case studies were developed as inputs to the ongoing revision and restructuring of the current prosecutorial/investigative instrument, the Joint Memorandum Circular 2010-10 of the CSC and the Department of Health. The survey highlighted the continued strong influence of the tobacco industry in Philippines across economic and political spheres and the necessity for concerted TC advocacies to denormalise CSR and PR engagements that serve their interests.

Funding
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Pre-testing mHealth interventions: a case report
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Introduction
Smoking is one of the most important risk factors of non-communicable diseases. Even if most pregnant women are aware of the risks of smoking during pregnancy, many of them do not stop smoking, or if they do, they have a quick relapse after birth. The aim of this study was to assess the feasibility and acceptability of a mHealth couple intervention for preventing smoking relapse after birth.

Methods
Based on a pre-set interview guide, we conducted and analyzed 12 interviews with women who just gave birth, who have quit smoking during pregnancy and remained smoke-free. The women were presented screenshots of an early version of the smoking relapse prevention app and samples of the text messages that are going to be used during the intervention. We transcribed and analyzed the interviews, to assess the feasibility and acceptability of the program.

Results
The subject’s mean age was 30 years-old and the mean age at smoking onset was 18 years-old. Most of the women (10/12) had a positive opinion about the intervention, without major concerns. When asked about their partner’s participation in the program, they either said that they do not know how their partner would react (3/12) or they thought the partner would not be interested in the program (6/12). Most found the text messages to be motivating (11/12) and all of them thought the messages were easy to understand (12/12), stating that they would not mind receiving them three times per day, five days per week.

Conclusions
Overall, most of the women would accept to participate in a mHealth couple intervention for preventing smoking relapse after birth. Additional efforts may be needed to engage life partners in the intervention. Technology-based interventions could represent a major step forward improving public health in Romania.

Funding
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To quit smoking successfully: Former smoker’s testimonies sharing knowledge to promote quitting tobacco
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Introduction
Quitting tobacco is a complex procedure which involves other factors than those strictly medical, such as: personal, emotional, social... Smokers need encouraging messages to make the final decision to quit. At this point, the active participation of the patients themselves in their own health is changing the perspective of the medical attention provided so far. This is why sharing ex-smokers successful experiences could change the way of managing these patients. We are designed a website, www.historiesdexfumadors.cat, where former smokers experiences can be posted, so that they can be a role model that inspires other smokers to choose the same path. Afterwards, the effect of these recommendations would be evaluated.

Methods
Promotion of the website within health professionals, social media and social networks. Collection of former smokers stories. Revision of the content and post of the stories with a score scale. Reward the best story to promote participation.
Results
In 18 months the website has received 30 stories of former smokers, and 343 visits had read and evaluated them.

Conclusions
The use of this website is low due to the dependence of publicity of such services. An increase of visibility and knowledge about smoking and TB. This study aims to investigate Armenian TB physicians’ perspective on the association between smoking and TB. The overwhelming majority of TB physicians knew about the negative association of smoking on TB treatment.

Introduction
Aim: Tuberculosis and smoking are two colliding epidemics which independently pose a significant threat to global health. There is consistent epidemiological evidence of the association between smoking and TB. The study team implemented the qualitative study through in-depth interviews (IDIs) and focus group discussions (FGDs) with TB physicians.

Methods
The study team implemented the qualitative study through in-depth interviews (IDIs) and focus group discussions (FGDs) with TB physicians. Study participants were from in-patient and outpatient healthcare settings from Yerevan (the capital city), Syunik and Gegharkunik marzes. Semi-structured guides were used for moderating the IDIs and FGDs. The snowball sampling technique was utilized to identify 21 TB physicians.

Results
The overwhelming majority of TB physicians knew about the influence of smoking on TB treatment and agreed that TB patients need to quit smoking. Improved TB treatment outcomes, accelerated recovery, and decreased risk of TB relapse were identified as the most common positive effects of smoking cessation among TB patients. Some physicians mentioned other benefits of quitting smoking which were not directly linked to TB treatment, such as improved health outcomes related to communicable and non-communicable diseases, improved metabolism, and stronger immune system. However, a few TB physicians were skeptical about smoking adversely affecting the TB treatment process and outcomes. They commented on the shortage of statistical data supporting the direct effect of smoking and the perception that smoking harms the body but does not specifically impede the process of TB treatment demonstrating their doubts regarding the adverse effects of smoking.

Conclusions
The acknowledgment of negative association of smoking on TB treatment process and outcomes could facilitate provision of smoking cessation interventions by TB physicians and ultimately address the dual burden of TB and tobacco in Armenia.
cessation programs and clinics with specially trained staff should therefore be introduced to maternity hospitals in Greece.  
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Smoking Cessation on Pregnant women with gestational diabetes mellitus

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Introduction

Despite the fact that the association between smoking and Gestation Diabetes Mellitus (GDM) is not clear, it is evident that pregnant smokers have 2h lower plasma glucose after an Oral glucose tolerance test and a higher HbA1c. Active maternal tobacco smoking and second hand smoke exposure during pregnancy is certainly the most important preventable cause for a variety of unfavorable pregnancy outcomes.

Aim

Our study aimed at exploring potential new strategies in performing smoking cessation on pregnant women with GDM.

Methods

Our study was a review of the international bibliography on Smoking Cessation on Pregnant women with GDM.

Results

Smoking cessation programs in pregnancy are effective and should be implemented as part of routine care for every pregnant smoker. Especially on pregnant smokers with GDM, emphasis should be laid on the fact that provided they quit, there is a good possibility that they might also benefit from needing fewer insulin doses or a less strict diet to follow. It is therefore considered essential for Maternity clinics to have a health professional specially trained in smoking cessation who can provide behavioral support on women who want to quit. Since quitting smoking may be incredibly difficult for a considerable amount of pregnant smokers and since relapses are frequent, the support provided to women in their effort to quit should be continuous throughout pregnancy. The classical 5A’s approach could be shortened into just 3A’s: Ask, Advice, Act. Cognitive behavioral support, motivational interviewing and structured self-help represent for pregnant women their best chance for quitting. Also, from the pharmaceutical treatment perspective, only NRTs could be used in pregnancy.

Conclusions

Pregnant smokers with GDM have more complicated pregnancies because of both smoking and gestational diabetes risks. Regardless, all pregnant smokers should be encouraged by knowing that help is always available and that quitting is always feasible.

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The Impact of Indonesia’s Tobacco Control Policy on Cigarette Smoking Among Indonesian Adults: A Longitudinal Study

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Introduction

The Indonesian government has introduced tobacco control policies corresponding to MPOWER since 2007. However, the impact of these measures on trends of cigarette smoking behaviour among Indonesian adults remains scarcely investigated. This study assessed the changes in smoking cessation and initiation among Indonesian adults and identified associated socioeconomic determinants before and after the adoption of MPOWER in Indonesia tobacco control strategy.

Methods

A longitudinal study was conducted to analyse Indonesian adults (aged 15 years and above) data from two waves of Indonesian Family Life Survey (IFLS) in 2007 (n= 13,535 households; 44,103 individuals) and 2014 (n=16,204 households; 50,148 individuals). Regression analyses were performed to identify the socioeconomic factors associated with the change in smoking status - quit smoking and smoking initiation - occurred between 2007 and 2014.

Results

There were 22,765 followed-up respondents identified as longitudinal sample. A significant rise in the current smoker prevalence from 30.6% in 2007 to 31.0% in 2014 (p<0.01) was observed. The proportion of smokers in 2007 who quit by 2014 was 8.0% while the proportion of non-smokers in 2007 who initiated smoking by 2014 was 6.4%. Smoking cessation between 2007 and 2014 was positively associated with education (aOR:2.14; 95%Ci 1.43, 3.06 for university graduates) and wealth (aOR: 1.60; 95%Ci 1.23, 2.09 for the richest group) while, conversely, those with higher education levels and wealth status had lower odds (aOR: 0.81; 95%Ci 0.63, 1.02 and aOR: 0.49; 95%Ci 0.41, 0.57 respectively) of initiating smoking within the period.

Conclusions

The implementation of tobacco control measures in Indonesia was unsuccessful to reduce the cigarette use among adults between 2007 and 2014. Furthermore, the policies have unequally affected subgroups of the population. Therefore, the government is urged to formulate target-specific tobacco control efforts.

Funding

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Risk factors for postnatal smoking relapse among Romanian women

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Introduction
Smoking during pregnancy is a factor which increase health risks to the fetus and causes numerous health problems to the mother. Many women know the risks associated with smoking but find it difficult to quit smoking: smoking relapse after birth is common among those who quit before or during pregnancy. The aim of this study is to explore risk factors for postnatal smoking relapse in a sample of Romanian women.

Methods
Based on a pre-set interview guide, we conducted twelve semi-structured face-to-face interviews (Oct-Dec 2017) in two Obstetrics-Gynecology Clinics in Cluj-Napoca, with 12 women who recently gave birth and quit smoking before pregnancy or during pregnancy. The interviews were audio recorded and transcribed. Data were coded separately by two coders and the final coding system was developed through a consensus process.

Results
The average age of the women we interviewed was 30 years and the average age when they started smoking was 18 years. Three themes emerged from the analysis: (1) most women cited “stress”, “future baby’s health problems”, “the other smokers”, “smoker partner” as the main risk factors for relapse, (2) many women (7/12) said they relapsed smoking in the first days after birth because of the stress accumulated during their stay in the clinic, and (3) factors like “weight loss” were present too when the women talked about relapse.

Conclusions
Common risk factors for smoking relapse after pregnancy include: stress, possible baby’s health problems, a smoker partner and factors that have to do with body image, like weight loss. New mothers need support after the birth. The postpartum smoking relapse is a complex issue, and understanding risk factors at multiple levels (e.g. personal, social and cultural background) may represent the best approach for prevention.

Funding
This work was supported by a grant of Ministry of Research and Innovation, CNCS - UEFISCDI, project number PN-III-P4-ID-PCE-2016-0632, within PNCDI III.

Depressive symptoms, cigarette dependence and craving in a sample of relapsed smokers from the general population: a mediation model
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Introduction
Aim: Smoking relapse is a frequent phenomenon, in which depressive symptoms, cigarette dependence, and craving play a significant role. Previous studies have shown that people with depressive symptoms have greater cigarette dependence and craving, and that greater cigarette dependence is related to craving intensity. The aim of this study was to explore whether depressive symptoms mediates the association between cigarette dependence and craving, among a sample of Spanish relapers from the general population.

Methods
Participants included 775 relapsed smokers recruited among the general population using a snowball method between January 2014 and December 2015. Inclusion criteria required: smoking ≥ 10 cigarettes per day, and an abstinence period of ≥ 30 days in the last ten years. Participants completed a survey including sociodemographic, smoking and psychopathological variables. We used the Fagerström Test for Cigarette Dependence for the assessment of cigarette dependence, the Beck Depression Inventory for depressive symptoms, and the Questionnaire Smoking Urges-Brief for craving. Bivariate correlations were performed to examine the associations between study variables, including sex and age. PROCESS, a statistical macro to test indirect effects, was used to conduct mediation analyses.

Results
Participants’ mean age was 42.01 (SD = 11.3), and 53.2% were female. Bivariate correlations were statically significant between depressive symptoms and sex, and cigarette dependence and craving. Cigarette dependence was significantly correlated with craving and age, but not with sex. Results of mediation analysis showed a significant direct effect of cigarette dependence on craving (a*b = 0.175, SEa = 0.065; 95% CI [0.069-0.335]), after controlling for sex and age.

Conclusions
These findings suggest that the relation between cigarette dependence and craving may be partially explained by depressive symptoms in this sample of relapsed smokers. So, depressive symptoms should be taken into account during smoking cessation interventions.

Funding
This research was supported by the Spanish Ministry of Economy and Competitiveness (Project reference: PSI2015-66755-R) and co-financed by FEDER (European Regional Development Fund; pluri-annual plan 2014-2020).

Smoking cessation, depression, and Myosin Storage Myopathy. Case report
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Introduction
We report the evaluation and psychological intervention to quit smoking of a 41-year-old male with depression and Myosin Storage Myopathy (MSM) caused by a genetic mutation in MYH7. MSM is a congenital skeletal muscle disorder which the
main manifestation is muscle weakness especially in limb-girdle or scapuloperoneal muscles. The MSN had caused him an important physical impairment and psychological distress.

**Methods**

JG was remitted to the Smoking Cessation and Addictive Disorders Unit by his primary care physician, due to the recent detection of polyglobulia, and the cardiovascular risk associated. JG smoked an average of 15 rolled cigarettes a day, and obtained a score of 3 in the Fagerstrom Test for Cigarette Dependence (FTCD). He presented moderate depressive symptoms [score of 23 in the Beck Depression Inventory (BDI-II)].

We adapted a standardized smoking cessation cognitive-behavioral intervention, which was delivered across eight 50-min individual sessions. The principal intervention components were therapeutic contract, cigarettes self-report, information about tobacco, nicotine fading, stimulus control, strategies to prevent nicotine withdrawal symptoms, physiological feedback of cigarette consumption through CO assessment, training in relapse prevention strategies, and mood management strategies.

**Results**

At the end of the intervention JG quit smoking and remained abstinent at 3, and 6 months follow-ups. In addition, he reported a physical improvement and a reduction in depressive symptoms (from BDI-II scores of 23 at pretreatment to 10 posttreatment, and 11 at 3 and 6 months follow-ups).

**Conclusions**

In this case, depressive symptoms were an important barrier to achieve tobacco abstinence, due to JG used to smoke to alleviate psychological distress related to his physical disease. This reveals the importance of addressing both smoking and depression, in order to achieve and maintain not only tobacco abstinence, but also a better physical and psychological health.

**Funding**

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**Quit Together: A Smoking Cessation Intervention Using Pregnancy as a Window of Opportunity**

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**Introduction**

Maternal smoking is one of the most modifiable factors with clear adverse effects for the fetus and the entire family. This study culturally adapted, enhanced, and is currently testing in a randomized controlled trial (RCT) the efficacy of an evidence-based pregnancy and postnatal couple intervention for smoking cessation.

**Methods**

Quit Together is an ongoing partnership between US and Romanian research institutions, obstetrics and gynecology clinics in Cluj-Napoca, Romania, and SAMAS, a non-profit organization providing information and support to parents and parents-to-be in Romania. The study builds on the Motivation and Problem Solving (MAPS) approach, a novel strategy successful in preventing smoking relapse postpartum in the US, enhanced by targeting
the couples’ smoking behavior and focusing on dyadic efficacy for smoking cessation. The smoking prevention randomized controlled trial intervention begins during pregnancy, includes a postpartum component, and targets pregnant smokers and their partners. The primary outcome is maternal smoking cessation.

**Results**

During the intervention formative phase, 15 interviews were conducted with pregnant smokers and ex-smokers and revealed a wide range of partner involvement and support with quitting, ranging from not at all involved to extremely supporting partner. In addition, 155 pregnant smokers (74) and ex-smokers (81) completed a questionnaire detailing their pregnancy history, social support, tobacco smoking, motivation, importance, and confidence related to quitting, emotional health, details about the relationship with the partner, partner smoking status, and partner and couple behaviors related to the pregnancy smoking. The RCT is actively enrolling participants since 2017.

**Conclusions**

Quit Together has a large potential for dissemination and adoption into smoking cessation programs that include a quitline. We anticipate strong potential for the future adoption of proactive counseling for couples referred by prenatal health providers, as an extension of the existing quitline in the Romanian universal public health system.

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**Impact of an online training program in hospital workers’ smoking cessation interventions in Bolivia, Guatemala and Paraguay**

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**Introduction**

Tobacco cessation training programs are scarce in Spanish speaking low-income countries. The Fruitful Study adapted, implemented and evaluated an online smoking cessation training addressed to workers from Bolivia, Guatemala and Paraguay. The aim of this study is to examine changes in hospital workers’ interventions before and after the online training.

**Methods**

Pre-post evaluation of the self-reported performance of the 5A’s by hospital workers from the three involved organizations. We assessed individual, behavioral, and organizational-level factors through a questionnaire that included 43 items (0=none to 10=most possible) completed before and six months after the training. Medians and interquartile ranges were computed.

To examine changes, the non-parametric test for paired data (Wilcoxon) was used.

**Results**

202 professionals (76 in Bolivia, 79 in Guatemala, and 47 in Paraguay) finished the course, of them 99 (28, 42, and 29 respectively) completed both questionnaires before and after the training. Overall, there was an increase in the performance of the each of the 5A’s components [Ask (7.5 to 9); Advise (7 to 9); Assess (6 to 8); Assist (2 to 7); and Arrange a follow up (0.5 to 5); all p <0.001]. Doctors, former smokers, and those from Paraguay obtained higher scores. The level of perception of the participants degree of preparedness, level of competence and, familiarity with resources increased (p <0.001).

**Conclusions**

The online training had a positive impact in the implementation of the brief intervention. Online education in tobacco cessation is feasible and effective to improve tobacco cessation interventions in these countries.

**Funding**

This study has been funded by Global Bridges Mayo Clinic (Pfizer Medical Group; GB-13520139: Development and Dissemination of a Tobacco Cessation Training Program for Healthcare Professionals in Spanish-speaking Countries). Moreover, CM and EF are also funded by the Spanish Government (Instituto de Salut Carlos III, grant PI15-00875) and the Catalan Government (Xarxa Catalana d’Hospitals sense fum, Agència de Salut Pública de Catalunya, contracte N° 2015VAR171)


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**Evaluation success rate of quit smoking among referral patients to our Anti tobacco clinic Since 2013 to 2015 based on new approach**

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**Introduction**

This study aimed to evaluate achieving success in patients referred to IRANIAN Ant tobacco Association clinic(NGO) represents an appropriate sample of IRAN ‘S Population in comparison with universal organization during 2013-2015. Since failure to quit will occur in a high percentage of patients stricken with smoking we intended to examine our approach for quit in comparison other universal approach.

**Methods**

In this cohort study patients between 20-65 years that referred to our clinic were included. After questioned filled out for each patients, so patient filled out demographic properties in another
form, after that co test was done. Quit smoking which were based on private counselling at our first step for 45 minutes and medication (drug, gums, skin patch) was perscribed. Those patients that high risk for CVD and Pulmonary disease and peripheral vascular disease refers to subspecialty center. After 3 weeks sharing idea in group classes were done FOR 2-3 HOURS, and we explain patient problems, difficulties, experiences, reasons of failure to quit and reasons of success, and help to patients that refuse of medication. Then patient followed after 1, 3, 6, 12 months after first visit.

**Results**

Among 388 patients (313 males, 75 females) participated in this study. 134 males (42.8%) 26 females (34.6%) qitted smoking successfully. Overall (males and females) percent of success rate was 41.2% after 12 months follow up.

**Conclusions**

We demonstrate private counselling with patients at our first step, then sharing idea in group class were of higher efficacy & satisfactory results in comparison to those applied by other general universal organizations and clinic and we saw increased percent of quit smoking and success rate.

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Effectiveness of a chat bot for smoking cessation: a pragmatic trial in Primary Care. (Déj@lo)

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Objective: To evaluate the effectiveness of an intervention to help people to quit smoking throughout an chat bot compared with usual assistance to increase long-term rates of nicotine abstinence in smoking outpatients with biochemical validation at 6 months. Design: Pragmatic, randomised, controlled and multicentric clinical trial. Six months follow-up. Setting: Health Care centers of Madrid Health Service. Participants: Smoking outpatients eighteen years and older who came to Health Center and accept help to quit in the next month. N = 460 smokers (230 in each arm), who will be recruited before randomization. Interventions: Intervention group: Use of an evidence-based Chat bot for smoking cessation. Control group: Usual care (Madrid Health System Portfolio). Main Measure: Continuous tobacco abstinence at six months biochemically validated (carbon monoxide in exhaled air). Analysis: With intention-to-treat principle. Proportion difference of continuous abstinence at 6 months between groups with 95% confidence interval. Logistic regression model dependent variable.

**Monitoring the transitioning from cigarette smoking to electronic cigarette use on cardiovascular outcomes, psychometric parameters and relapse rate.**

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Aim

To monitor how switching to e-cigarettes from cigarette smoking affects psychometric and clinical parameters and relapse rate over a period of 4 weeks.

**Methods**

Heavy smokers (≥10 cig/day) attended 6 visits where psychometric parameters associated with craving, nicotine withdrawal symptoms, sleep and quality of life were monitored using well validated questionnaires. Heart rate and blood pressure were also measured at each visit. Visit 1 and 2 were baseline visits where smokers continued to smoke and then asked to quit and transition to e-cigarette use. The subsequent visits occurred 3, 7, 21 and 28 days after the quit date. Compliance was monitored via exhaled CO. Completed participants received weekly questionnaires for 12 months and two follow up calls 6 and 12 months after their final visit to monitor for relapse.

**Results**

One month relapse rate amongst eligible participants (n=29) was 28%. At 6 months (n=5), 40% used either e-cigarettes or nothing (non-relapers) and 60% partially relapsed or were dual
Effects of nicotine and E-cigarette fluids on cytochromes P450 in hCMEC/D3 blood-brain barrier cell line

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Introduction

Electronic cigarettes (EC) represent a safer alternative to tobacco, however, there is limited information on adverse health effects, especially after long term use. Among potential harmful constituents of EC aerosols nicotine is the major addictive chemical and is a precursor for carcinogenic tobacco-specific nitrosamines (TSNAs). Multiple studies have highlighted the ability of nicotine to compromise blood brain barrier (BBB) integrity, altering transport and receptor systems. One knowledge gap is the effect of e-liquids on enzymes responsible for metabolism of toxicants including carcinogens, Therefore, the aim of this study was to examine the effect of nicotine and e-fluid on the expression of cytochrome P450 enzymes (CYPs) in an in vitro model of human BBB, the hCMEC/D3 cell line.

Methods

The hCMEC/D3 cells were used to investigate time and dose-dependent responses of nicotine or e-fluid and EC aerosol condensate (normalised to nicotine concentration). High quality RNA was extracted and analysed by qRT-PCR for the expression of genes encoding enzymes involved in nicotine metabolism and bioactivation of procarcinogens (CYP1A1, CYP1A2, CYP2A6, CYP2E1, CYP2A13, CYP3A4) and recently described extrahepatic CYP isoforms (CYP2U1 and CYP2S1), which are highly expressed in BBB.

Results

qRT-PCR results were normalised using UBC reference gene and expressed as a fold change between non treated and treated cells (n=3, p<0.05). Initial analyses revealed a time-dependent increase in mRNA expression levels of CYP2A6, CYP2U1, CYP2E1 and CYP2S1 following exposures with the highest fold change values after 24h. There was no expression of CYP3A4, CYP1A2 or CYP2A13 in hCMEC/D3 cells.

Conclusions

Significant induction of mRNA expression for CYP2A6, CYP2E1, CYP1A1 and CYP2S1 following treatment with nicotine and e-fluid, suggests that BBB may play an active role in nicotine metabolism and possibly contribute to the bioactivation of procarcinogens.

Funding

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The Impact of Tobacco Taxes in Kenya on the Decision to Smoke and Long Term Health Outcomes
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Introduction
Objective: Tobacco use causes severe diseases that can lead to premature deaths. However, those who stop smoking are likely to recover a better health in the years that follow cessation and later in life, and the rapidity of smoker’s recovery generally increases when they stop at younger ages. Tax policy aimed to significantly reduce the affordability of tobacco products is the most effective policy tool to encourage cessation and therefore to improve health status of quitters both in the short term and later in life.

This paper analyzes tobacco tax reforms enacted in Kenya up to 2017 and empirically evaluate the effectiveness of tax and price changes over time to reduce tobacco use and improve health outcomes, especially among vulnerable groups, and for quitters or starters, due to changes in affordability. We also evaluate the ability of policies aimed to reduce illicit trade to improve the efficiency of tobacco taxation.

Methods
We use individual data from the 2014 GATS and combine them with external data on tobacco taxes, prices, and policies. We trace the smoking history of current or past smokers to link the change in the affordability of tobacco products to their smoking decision. We use propensity score matching to match each smoker to a non-smoker in order to identify the causal effect of tax changes to the decision to smoke from a robust group of counterfactuals.

Results
We show that changes in both the design and tax rates in Kenya up to 2015 have had little impact on tobacco use and health outcomes, especially among vulnerable groups, and for quitters or starters, due to changes in affordability. We also evaluate the ability of policies aimed to reduce illicit trade to improve the efficiency of tobacco taxation.

Conclusions
We evaluate recent reforms in the tax system and tax administration and provide recommendations.

Funding
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Primary report of first national study on merging smoking cessation with drug abuse treatment in welfare organization, Iran 2017
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Introduction
Tobacco smoking is very common in drug abusers and here is a challenge to accept that smoking cessation can be added to treatment for it. The aim of this study was to present efficacy of merging smoking cessation with drug abuse treatment nationally.

Methods
This was a cross sectional study of merging quit smoking intervention with behavioral therapy and medication in 24 drug abuse treatment centers at welfare organization in 6 districts of Iran in 2017.

Results
More than 2000 male clients were involved with age over 18. 78% of them were satisfied with this new treatment and after 6 months 23% of them quit smoking, in 46% smoking less than half amount at first was seen and 31% were smoker while they had their maintenance medication on addiction.

Conclusions
Smoking cessation intervention was acceptable and can have a significant impact on the general health of drug abusers.

Funding
None
Burden due to second-hand smoking exposure in children in Europe in the last decade: first results form the TackSHS project

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Introduction

Aim: To explore the last decade’s trend in mortality and morbidity attributable to second-hand smoke (SHS) exposure in children from the 28 European Countries within the Project “Tackling second-hand tobacco smoke and e-cigarette emissions: exposure assessment, novel interventions, impact on lung diseases and economic burden in diverse European populations” (TackSHS) funded by the European Union’s Horizon 2020 Research and Innovation Programme.

Methods

We identified the diseases causally linked with SHS exposure in children and we estimated the burden attributable to household SHS exposure using the comparative risk assessment methodology. We estimated the population attributable fractions (PAFs) selecting relative risks (RR) of mortality/disease from the most recent meta-analyses and estimating the prevalence of household SHS exposure from the Eurobarometer surveys (2006, 2010, 2012, 2014) in a multiple imputation framework. The burden due to SHS exposure was estimated applying the PAFs to the observed number of deaths extracted from the Eurostat website and to the disability adjusted life years (DALYs) estimated by summing the Global Burden of Disease estimates of years lived with disability and the Eurostat observed years of life lost.

Results and Conclusion

The diseases causally linked with SHS were low birth weight, sudden infant death syndrome, lower respiratory infection, otitis media, and asthma. The trend in the PAFs and in the number of deaths and DALYs attributable to smoking and SHS exposure for the 28 European Countries will be presented.

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Exposure to second-hand smoke at work in the European Union, 2006–2014

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Introduction

Aim: After the classification of second-hand smoke (SHS) as a known human pulmonary carcinogen by International Agency for Research on Cancer, most Countries of the European Union (EU) introduced smoking ban at workplaces and public places. Main aim of this study was to study trend of SHS exposure at work, 2006-2014.

Methods

Figures were collected in four cross-sectional surveys representative of population of each EU Country. Surveys were conducted in 2006, 2010, 2012, 2014 (Eurobarometer 66.2, 72.3, 77.1, 82.4) in all 28 EU Countries. The question on SHS exposure at work was recorded in both smokers and non-smokers: “How long are you exposed to tobacco smoke at your workplace?” Possible answers were: <1 hour a day; 1-5 hours; >5 hours a day; Never or almost never; don’t know. In the 2012 and 2014 surveys a new category was added: “occasionally exposed”.

Results

Prevalence of exposure to SHS at work decreased by around 70% from 2006 to 2014. The drop was recorded since 2010 for
exposures for ≥1 hour per day, whereas the exposure to <1 hour per day dropped in the 2012 survey. In 2012 and 2014 17% of participants reported to be exposed occasionally, not on a daily basis. Occasional exposure at work was not recorded in previous surveys.

Figures of SHS exposure for each EU Country will be presented also the year of implementation of smoking ban per each Country.

**Conclusions**

SHS exposure at work dropped in 28 EU Countries after the implementation of nationwide smoking bans.

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**The need for independent traceability**

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At a press conference on January 9, 2018 the Collegiate Medical Organization (OMC) and the National Committee for the Prevention of Smoking (CNPT) representing more than 30 organizations involved in the prevention and control of smoking in Spain held a meeting with the main political groups (PP, PSOE, Ciudadanos, Podemos) to which they proposed a series of measures to improve the current Tobacco law.

Of the 10 proposed measures, the two related to traceability have special relevance:

1. Avoid the interference of the tobacco industry in tobacco control policies. There is a clear conflict of interest between the interests of the tobacco industry and those of public health. The contacts with the tobacco industry must be transparent, and in no case should they give the industry a leading role in tobacco control policies.

2. Establish a system of independent traceability of tobacco products, which in no case should be designed or controlled by the tobacco industry. The traceability solutions that are not independent of the Industry mean not only an alteration of the spirit and the commitments already acquired by the ratifiers of the WHO FCTC, but also open the door to a parallel market driven in large part by the Tobacco companies themselves.

Only by leaving the traceability system in the hands of a truly independent company, outside the tobacco interests, can the true spirit of the European Tobacco Products Directive (TDP) be applied and the WHO FCTC protocol be complied with.

What does Spain expect to firmly support the right of citizens to health?

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**Clusterin as a potential biomarker of tobacco dependence / addiction**

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**Introduction**

Previous preclinical and clinical data from our research group strongly suggest that the multifunction protein clusterin can be considered a candidate biomarker of addiction. Based on these antecedents, we have studied clusterin levels in saliva from smokers under cessation therapy to set up novel starting points for the development of new potential methods for the diagnosis and follow-up of tobacco addiction.

**Methods**

Preliminary findings of a prospective ongoing cohort study are presented. Up to the date, 51 patients (20 men, 31 women; 32-85 years of age) have been recruited for an ambulatory smoking cessation program that involved the use of pharmacological and behavioral therapy. The subjects underwent clinical and psychological assessment (including Fagerström tests for nicotine dependence as well as DAST-20 and ASSIST for addiction).

Saliva samples were collected at the start of the program and after six months of smoking discontinuation. A comparative study of different analytical tools was performed to finally select a non-competitive ELISA sandwich assay (Invitrogen, Spain) for quantifications. Clusterin concentrations were then compared intra and inter-subjects by using ANCOVA and Wilcoxon statistics.

**Results**

Clusterin concentrations significantly correlated with the duration of tobacco consumption, ranging from 6.3 ± 1.0 ng/ml (mean ± SEM) in patients with up to 25 years of tobacco use to 11.0 ± 2.1 in patients exceeding 40 years of consumption (p < 0.05). Clusterin levels subsequently decreased in each patient after 6-months of smoking cessation (from 8.4 ± 1.3 to 4.3 ± 0.5, p < 0.05).

**Conclusions**

These preliminary results agree with the idea that clusterin levels might be associated to the degree of tobacco dependence / addiction, which remains to be further established by increasing patient recruitment. According to the biological roles attributed to clusterin, these levels may parallel tissue injuring caused by the current tobacco consumption.

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**Changes in lung cancer mortality by sex, age and education in Poland in 1994–2012**

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**Introduction**

The aim of this study is to assess the changes in lung cancer mortality in Poland, being one of the highest in Europe, in relation to changes in smoking prevalence by the level of education.

**Methods**

Data come from the Central Statistical Office. Data on education are collected during the census surveys and covers years 1994-2012. The standardized mortality rate ratio (SMRR) is used...
Tobacco use still poses a serious challenge to the people of the Gambia and their dream to attain their right to health despite all the efforts of tobacco control advocates especially among the youth folks. Studies have shown that, the use of tobacco is still on the increase in the Gambia especially among the youth folk of the populace. Also, the single most preventable cause of death and disease in the Gambia is due to tobacco use. Several diseases due to which most people die such as cancer, heart diseases, high blood pressures and chest infections are found to be mainly directly related to tobacco use and related lifestyle habits in the Gambia.

Several studies were conducted over the years to determine the prevalence of tobacco use in different contexts showed interesting revelations. The International Organization of Good Templars (IOGT) conducted a survey in Banjul and Kanifing Municipality on smoking prevalence in the Gambia in 1999 shows that 43% of the males sampled (216) ever smoked cigarettes and the majority (66%) of this number fell within the age group 20-39 years. Correspondingly, out of the 144 females sampled, 21 (14%) ever smoked cigarettes and the majority of this (6.9%) fell within the age group 20 – 39 years. Even though this was a more localized study, these results indicated that smoking is indeed a cause for concern in the younger population, particularly those aged 20 – 39 years.

The Global Youth Tobacco Survey of 2008 has also indicated a 24.5% prevalence of tobacco use among young people aged 13 – 15 years, with insignificant difference between boys and girls that have ever used tobacco (28.6% for Boys and 20.3% for Girls).

A national population-based survey, the STEPS Survey (2010) has also revealed interesting and useful information on the level and dynamics of tobacco use among adults in the Gambia. The survey indicated that, overall, 16.3% of the adult populations aged 24 – 64 years reported being users of tobacco, and about 15% of these were daily users. Prevalence of daily tobacco users was reported to have been higher among men (29.4%) than in women (1.9%). When compared by age group, daily tobacco use is also higher among men of all age groups than women but highest among 25-34 and 35-44 years for men, 31.0% and 31.1% respectively.

Can Miguel Delibes change the opinion about tobacco?
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Miguel Delibes (1920-2010) was a Spanish writer. Between his books we highlight the short-story “El Primer Pitillo”. In this tale, the author describes the happiness of smoking again after two weeks without having done it. The investigation will realize a poll on the students of the Centro Universitario Ciudad Vieja (Guatemala) about their opinions on tobacco. After that, the students will read Delibes’ tale. At the end, the students have to complete the same poll once again.

The results of the first poll show how little awareness there is in Guatemala about the tobacco and its effects. However it is striking to see how the answers against tobacco of the first poll turn in the second poll into more permissive answers after having read the short-story. There is a huge difference between the rich and poor regions in Guatemala and their students’ awareness on this subject. Because of this the students from poor region have a more favourable opinion about tobacco and their answers vary more after reading “El primer Pitillo”.

Youths and Tobacco Prevention and prevalencethe Gambia
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Role of Tobacco Processing Companies in Spreading Tobacco Cultivation in Bangladesh
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Introduction
Tobacco is socially undesirable as it hurts health and reduces food production. Many stakeholders including WHO and governments are taking initiatives to reduce its cultivation. Bangladesh is an agro-based country where agriculture confronts so many challenges. Despite some anti-tobacco campaigns, tobacco is being cultivated for few decades in some selective regions of Bangladesh. Though there is a skipping trend in tobacco cultivation, new farmers are also entering into this cultivation as well. Some tobacco processing companies (TPCs) are also located at selective tobacco cultivating regions.
Objective
This study attempted to identify role of tobacco processing companies in spreading tobacco cultivation.

Methods
The study used primary data collected from 285 tobacco farmers and 174 alternative crop growers, selected randomly from Kushtia, Chuadanga, and Jhenaidah districts of Bangladesh in 2015. Logistic regression was done to identify factors liable for tobacco cultivation over traditional crops. Results_ Result showed that TPCs grabbed some typical limitations of traditional agriculture. TPCs made formal agreement with farmers intend to grow tobacco, and offered them stimulus packages to cultivate tobacco. Statistically significant variables increasing probability of tobacco cultivation over traditional crops were TPCs offered sales guarantee, input subsidy and farming assistance, price stability which all are generally lack in tradition crops. These incentives led higher profitability in tobacco cultivation also. Farmers were also motivated for getting handsome sales earning at one time offered by TPCs. Farmers were motivated by very high sales-production ratio, as nothing is leaked for household consumption. Farmers overlooked health cost, unpaid family labor use and other negative costs for enjoyed mentioned incentives provided by local TPCs

Conclusions
The factors behind turning a farmer into a tobacco grower such as unstable price and volatility in sales guarantee in the alternative crops should be taken care by the authority to discourage tobacco cultivation.

Funding
The research was funded by Institute for Global Tobacco Control (IGTC) based at the Johns Hopkins Bloomberg School of Public Health, Baltimore, USA in 2015. The project was selected through open competition under ‘BCCP Tobacco Control Research Grant Program 2015’. It was managed by Bangladesh Center for Communication Programs (BCCP), Dhaka, Bangladesh in collaboration with the Institute for Global Tobacco Control based at the Johns Hopkins Bloomberg School of Public Health, Baltimore, USA.

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Are tobacco and cancer control strategies in Poland consistent, harmonized and comprehensive? Results of two-round Delphi study
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Introduction
Aim: To evaluate whether tobacco and cancer control strategies are consistent, harmonized and comprehensive in Poland.

Methods
A Delphi two-round survey was conducted between February and July 2017 to seek opinions of Polish experts on consistency and comprehensiveness of the National Tobacco Control Program for years 2018-2024 and the Cancer Control Strategy for Poland in years 2015-2024. Experts were asked to rate and make consensus whether both documents are consistent and comprehensive in terms of their objectives and activities and assumed results, accordance with MPOWER strategy and consideration of tobacco control needs and new challenges in Poland. 28 of 128 (22%) invited high and middle-level experts completed the first round 8-question survey questionnaire and 24 of them (86%) agreed to also fill out the second round 5-question study questionnaire.

Results
Main tobacco control objectives defined in both documents were deemed to be compatible by the study experts. However, 75% of experts underlined the need of comprehensive and measurable tobacco control indicators in the Cancer Control Strategy and 71% indicated that the strategy needs to be more focused on protection from secondhand smoke, tobacco control education and policy regulations such as tobacco ad ban or progressive tobacco taxes. Experts gave low ratings to both documents when asked to evaluate challenges in tobacco control (i.e. ENDS and HNB products). They also underlined the need to strengthen public-NGO-business collaboration in tobacco control and to increase the innovativeness of tobacco control activities. In their opinion, children, youth, women and low educated persons should be the priority target groups for all future tobacco control activities.

Conclusions
Although both analyzed strategies are comprehensive and consistent in terms of tobacco control approach, objectives and main activities, there are still specific activities that need to be harmonized and adapted to new challenges in tobacco control.

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Smoking prevalence in Georgian adults: results of non-communicable disease risk factors STEPS 2016 survey
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Georgia has one of the highest smoking prevalence among the European countries. Cigarette smoking alone kills 8000 to 11 000 (22% of all death cases) people per year in the country. According to the STEPS 2010 and 2016 smoking prevalence has increasing trend - 33.7% (30.3% in 2010) of Georgian adult population are current smokers, among them about 57% (55.5% in 2010) are men and 7% (4.8% in 2010) are women. According the results of the urine cotinine test that was done for the first time under the STEPS 2016 the real prevalence of smoking in women is 12.2% while in men it shows the same result. 15.8% of adults were exposed to tobacco smoke at the workplace and 43.0% at home. Cigarette smoking is almost the exclusive form (98.6%) of smoking tobacco; mean number of manufactured cigarettes smoked per day is 21.3. Just 3 in 10 current smokers
have tried to stop smoking in the last 12 months and only 40% were advised by a health care provider to stop smoking. Average monthly expenditure on manufactured cigarettes was 81 GEL (USD 35).

In order to address this devastating health and economic burden of the growing tobacco epidemic amendments to the Tobacco Control laws have been adopted by the Parliament of Georgia. Despite the efforts of strides of the Georgian Government tobacco industry interference in law implementation remains a big challenge.

Given this situation, some of the vitally important tobacco control policies are being prioritized: implementation of FCTC Article 5 obligations, strengthening implementation of time bound articles of the WHO FCTC, strengthening tobacco control law enforcement and strengthening of tobacco taxation. These measures will contribute to full implementation of the WHO FCTC, thus also advancing the achievement of SDG targets related to tobacco control.

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Youth tobacco use and key tobacco control indicators in Georgian youth
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The Global Youth Tobacco Survey (GYTS) is a global standard for systematically monitoring youth tobacco use and tracking key tobacco control indicators. GYTS in Georgia was conducted in 2017 by National Center for Disease Control and Public Health in 13 to 15 years old students. The overall response rate was 78.7%. 15.4% of students (20.6% boys, 9.6% girls) currently used any tobacco products. 12.6% (16.9% boys, 7.6% girls) currently smoked tobacco; 8.4% (12.3% boys, 4.4% of girls) currently smoked cigarettes; 4.4% (5.0% boys, 3.2% girls) currently used smokeless tobacco. 13.2% (17.3% boys, 7.7% girls) currently used electronic cigarettes. More than 6 in 10 current smokers bought cigarettes from a store, shop, street vendor, or kiosk. Among current cigarette smokers who tried to buy cigarettes, 49.4% were not prevented from buying them because of their age. More than 6 in 10 students noticed anti-tobacco messages in the media; almost 5 in 10 noticed tobacco advertisements or promotions when visiting points of sale; more than 1 in 10 students had something with a tobacco brand logo on it. 79.4% definitely thought other people’s tobacco smoking is harmful to them and 83.9% favored prohibiting smoking inside enclosed public places.

In order to increase access to effective and comprehensive educational and public awareness programs on health risks including the addictive characteristics of tobacco consumption and exposure to tobacco smoke and about the benefits of the cessation of tobacco use and tobacco-free lifestyles guideline for teachers have been elaborated and printed; training selected teachers is in process.

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World No Tobacco day, Strategies for smoking prevention: primary care initiatives
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Introduction
- To inform our community of World no tobacco day and the harmful effects of its consumption.
- To prevent smoking in Primary Education.
- To offer help to quit smoking.
- To involve the intersectoral agents.

Methods
- Drawing contest to prevent smoking under the motto: “How healthy living without smoking is”.
- Broadcasting colloquium in radio stations. We inform about the interventions that are carried out, the harmful effects of smoking and the available resources to quit smoking.
- Information table in Primary Care Centers: brochures, bookmarks, motivational posters, brief health advice, the Fageström test and Prochaska stage on smokers (previous broadcast on local stations and registration).
- Intersectoral agents were implied.

Results
- The community was informed about World no tobacco day and harmful effects on radio stations (survey 490 patients 58% over 60)
- 1,937 children took part. Drawings were awarded and displayed in the primary care center.
- 996 people asked for information (382 medium-high nicotine-dependent smokers).

According to Prochaska: 10% pre-contemplation 31% contemplation 12% preparation 9% action.

- 439 people requested detoxification (total abstinence: 239; consumption reduction: 68; relapses: 32).
- To prevent smoking (quality indicator primary care nurses and doctors 96% in 2015 and 100% in 2016)
- It was possible to involve all the intersectoral agents: the educative community, the town hall, a public health technician, the Tajo Hospital, the local Primary Care centers.

Conclusions
With these interventions our population knows us, listens to us on the radio, encourages us to go on doing these initiatives, expresses its gratitude for having helped them to quit smoking and it gives visibility to Primary Care staff.
Children enjoy watching their drawings and help their relatives to quit smoking.
The educational community encourages us to make the contest.

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Characteristics of patients admitted to a detoxification unit interested in tobacco cessation
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Introduction
The prevalence of tobacco use is high in patients with other addictions. Morbidity and mortality associated with smoking are often higher than those produced by the “principal” drug. The Tobacco Detoxification-Mental Health Program (PDT-SM) is carried out in a smoke-free-inpatient detoxification unit of a general hospital. The intervention begins during hospitalization and continues for patients who wish to maintain cessation after discharge.

The purposes of the intervention are to increase awareness of tobacco risk, reinforce motivation for cessation and guarantee the continuity of smoking cessation in an outpatient setting.

Methods
Population: Smokers admitted for inpatient detoxification of other substance (October 2013-December 2017). At admission, data regarding smoking history and carbon monoxide (CO) in exhaled breath is obtained. Nicotine substitution is offered. During the hospitalization, weekly motivational group is carried out. Interested patients are referred to an outpatient specialized facility. They continue a free pharmacological and psychological treatment for one year.

Results
166 patients were interested (14.5% of all smokers admitted), 66.3% men, mean age 46.5 years (SD 10). Patients with alcohol (46.4%) and cocaine (17.5%) addiction were the most interested.

Depressive Disorder (18.1%) was the principal comorbidity. Average age of onset of tobacco use was 16 years old. 62% had prior quit attempts. Average number of cigarettes was 26.2 (SD 11.3), mean Fagerström test 6.9 (SD 2.1).

94% patients accepted nicotine substitution and assisted to group therapy. The level of CO decreased from an average of 19.3ppm (admission) to 1.8ppm (discharge).

Conclusions
The results highlight that motivational interventions during admission in a detoxification unit could be effective to increase the awareness of tobacco risks, the self-efficacy of patients, and to increase the produced organizational changes and the usefulness of intervention. Data for 2013-2017 inpatients is presented.

Professionals involved in the program, assessed their implication, the produced organizational changes and the usefulness of intervention. Data for 2013-2017 inpatients is presented.

Results
12 participating hospitals: psychiatric units (28.7%) and detoxification (68.2%).

315 included patients: 60.8% males, age: 46.7 (SD 10.0). Tobacco variables: Cig / d 26.5 (SD 12.4). Fagerström test 6.8 (SD 2.3). Richmond test 8.4 (SD 1.5). Carbon monoxide: 18.5 ppm (SD 14.4).

Main admission diagnoses were: 48.6% alcohol, 16.8% cocaine, 11.7% affective disorder, 10.4% psychotic disorder.

Pathological antecedents: 35.8% respiratory, cardiovascular or oncological pathology.

At discharge 48.2% patients were derived to outpatient specialized smoking units.

Follow-up results: 67.6% abstinent first week, 45.4% first month, 25.1% third month, 14.4% 6th month and 9.8% in a year.

Professionals evaluated the intervention very positively and an increase in awareness to smoking intervention was observed.

Conclusions
Programs as PDT-SM facilitate to perform actions in order to promote smoking cessation in psychiatric units. And even more important, mental health professionals are more aware about the psychiatric inpatient unit. A good place for smoking cessation?

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Features of tobacco abuse in regions with various characteristics in Macedonia: Results from a pilot windshield survey

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Introduction

Aims and objectives: Ascertain a basic understanding of the prevalence of tobacco use and policies in representative municipalities in Macedonia.

Methods

We conducted a windshield survey of six predefined regions in Macedonia with diverse socio-economic, geographic, and environmental characteristics. Windshield surveys are a qualitative research tool for rapid systematic collection of observational data. A project-specific community-based formative research toolkit was created with a dedicated observation form encompassing demographic, organizational data, community identity, economic elements, and use of tobacco in various socio-cultural settings, and personal perception of researchers.

Observations were conducted by teams of two researchers by site: one detecting micro focus data (i.e. looking at particular individual’s actions and characteristics) while the other focused on a broader macro perspective (i.e. larger focus on environment and total big-picture numbers).

Results

The research has shown that in 6/6 (100%) regions, outdoor smoking was present around public places, immediately outside and surrounding the health and educational facilities, in open balconies of restaurants and cafés, public transportation, and in private vehicles. In 2/6 regions (33.4%), researchers detected smoking indoors (shops and restaurants). No significant differences in smoking habits were observed based on site type (urban/rural) or demographics characteristics (e.g., gender, age, socio-economic status). Tobacco products were readily available in all regions in local markets, grocery shops and newsstands. Although tobacco advertising is forbidden, in one site there was an advertisement in front of a shop. Tobacco products were easily visible in the retail locations. In 5/6 (83.3%) regions, people stated it is very difficult to fight tobacco abuse efficiently.

Conclusions

In Macedonia, tobacco is cheap, easily accessible, and a part of local cultures. These observations were combined with qualitative interview data to adapt the Certified Tobacco Treatment Specialist program for Macedonian physicians and the associated evaluation tools.

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The role of smoking intention in an effective intervention for Spanish adolescents

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Introduction

Aim and objective: Motivations that lead adolescents to consume substances are diverse and include the interaction of genetic and environmental factors. Project EX program has shown substantial evidence of efficacy for quitting smoking among adolescents, and is the only empirically-validated school-based smoking-cessation intervention for adolescents in Spain. Motivation, self-efficacy, and nicotine dependence have proven to be mediators of the efficacy of Project EX to reduce and quit smoking. However, more evidence is needed on what mechanisms are underlying this intervention’s effects in the long-term. This longitudinal study aimed to test smoking intention as a mediator of Project EX’s intervention efficacy to reduce tobacco use in Spanish adolescents.

Methods

Six high Spanish schools were randomly selected to participate in the program condition or the waiting-list control group with baseline, immediate-posttest, and 12-month follow-up assessments. At baseline, 685 adolescents aged 14-20 years (mean age: 14.87; SD = .92; 47.4% were females) were evaluated using self-administered tests of tobacco, and smoking intention. A biomarker of smoke inhalation, a measurement of exhaled carbon monoxide (ECM), was used. Mediation analyses were conducted using the PROCESS v2.12 macro for Windows.

Results

Project EX had a significant effect on smoking intention. Indirect effects indicated that Project EX reduced the ECM level, and number of cigarettes used.

Conclusions

Interventions that reduce consumption intention at short-term are more likely to be successful in decreasing tobacco consumption in the long-term.

Current status of evidence-based smoking prevention and cessation programs for Spanish adolescents

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Introduction

Aim and objective: International studies have reviewed the prevalence of smoking cessation in retrospective reports. Nevertheless, to optimize program’s practical resources it is necessary to find evidence of the most effective prevention and cessation programs currently. In Spain, there is no published evidence regarding the long-term efficacy of prevention and cessation programs among adolescent smokers. Thus, the objective of this study was to examine the status of evidence-based smoking prevention and cessation programs for adolescents and young adults in Spain.

Methods

Eight studies that evaluated tobacco prevention and cessation programs in Spanish adolescents, and met the selection criteria, were identified.

Results

An in-depth analysis of evidence-based school programs is provided. The published programs implemented in Spain have some strengths: the programs show short-term effectiveness in reducing tobacco consumption, and are described in detail regarding the number of sessions and components, which implies that they can be easily replicated. However, the implemented programs also have certain weaknesses: the efficacy of tobacco-prevention programs conducted in Spain is rarely evaluated, and only Project EX program assessed in a controlled school-based clinical trial for adolescent tobacco-use cessation.

Conclusions

It is possible to determine the need for more rigorous evaluations of prevention and cessation interventions to establish useful programs for Spanish adolescents.

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Exposure to e-cigarettes in Russia: Results from Russian Tobacco control policy Evaluation study
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Introduction
Electronic Nicotine Delivery Systems are not regulated at the moment under the current comprehensive Tobacco Control Law in Russia, so the popularity of those as well as their marketing and promotion are increasing. Very little is known about the situation with ENDS in the Country.

Aim
To assess the exposure of population to electronic cigarettes in Russia, both active and passive.

Methods
Data from Russian Tobacco Control Law Monitoring and Evaluation Survey (June – August 2017) were analysed. 11699 randomly selected respondents from 4320 households in 5 Subjects of Russian Federation were interviewed and a stratified sample (n = 5289 aged ≥18 years) of smokers (n = 3228), former smokers (n = 1012) and never smokers (n = 1049) participated in the survey.

Results
34% of the respondents were familiar with e-cigarettes; 11.9% had tried e-cigarettes, and 25.8% of those were regular users. 69.2% of smokers, who used also e-cigarettes didn’t reduce the amount of smoked tobacco, 44.4% had made a quit attempt by means of e-cigarettes; of those 65.2% failed to quit smoking, and 75.3% could not quit neither smoking nor e-cigarettes for a long term. Only 18.7% e-cigarettes users agreed that e-cigarettes cause addiction, 35.8% - were not sure, and 45.5% even denied the fact.

Those were mostly the younger respondents aged 18-24 years (52.3%) significantly higher than in other age groups (p<0.05). 70% of respondents who were familiar with e-cigs one way or another said that vaping was not allowed in their household.

Mostly vaping was allowed at home of the current tobacco smokers (21.8%), compared to quitters in less than 3 years (13.2%) and more than 3 years (7.8%) and in the youngest age group 18-24 (28%) compared to the others. 90.3% said that the vaping was not allowed at the workplace. However vaping in public places is becoming a frequent practice: 64% of the respondents had seen people vaping e-cigs in public places, were smoking is banned: 43.2% had witnessed this several times and 20.8% - even more frequently in the past 30 days. 27.1% of 1827 respondents had witnessed vaping in restaurants and bars, 59.8% of 2006 respondents had been exposed to the vape in public places: 45.9% of those had found it annoying.

Conclusions
Strong legislation should be considered to regulate the use of ENDS and to protect people from the exposure of those.

Tobacco and anti-tobacco advertisement in Poland, 1989–2000
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Introduction
Smoking prevalence in communist Poland reached the highest level in the world in the 1980s. Despite the state-sanctioned anti-tobacco campaigns less than half of all Poles believed that smoking was a serious hazard to health. In 1989, as communism collapsed, transnational tobacco companies (TTCs) entered Poland. TTCs spent US$100 million annually on cigarette publicity, becoming the leading advertiser in the country. The TTCs predicted an increase in cigarette sales in Poland.

Instead, a rapid decline in smoking occurred in the 1990s. A
very active health advocacy movement developed, attempting to counteract the marketing efforts of TTCs, also through anti-tobacco advertising. By the end of the century cultural norms shifted - a European survey showed that by the late 1990s Poland had the highest acceptance of anti-smoking measures in Europe. The aim of this study is to explore how tobacco and anti-tobacco advertisement interacted to shape these changing cultural norms regarding smoking in Poland.

Methods
A thematic analysis of relevant advertising materials produced between 1989 and 2000 available in Polish media archives, collections of anti-tobacco advocacy groups, and tobacco industry websites, was conducted.

Results
After the collapse of communism both tobacco and antitobacco messaging in Poland focused around four major themes - the appeal of smoking to children, the use of historical and patriotic motifs, employing shock tactics, and the struggle over which lifestyle embodies ‘western’ values. Many of the anti-tobacco images were designed by Poland’s leading poster artists and were characterised by high artistic value.

Conclusions
Polish anti-tobacco advocates successfully reclaimed many of the themes and values used by the TTCs in promoting smoking. They challenged the industry’s attempts to portray smoking as a ‘western’ habit, employed patriotic tropes and shock tactics, and steered the debate towards the health effects of tobacco use.

Funding
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Prevalence, Price and Place of Selling of Cigarettes in Urban and Rural Lao People’s Democratic Republic (Laos)
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Aim and Objective
To determine the prevalence, price and selling place of cigarettes in both urban and rural Laos with the aim to provide the Government with evidence to raise tobacco tax rates for fiscal and public health gains.

Methods
A two-stage cluster, random sampling survey was conducted among cigarette retail stores in Vientiane Capital (urban) and Champasack Province (rural) from September 26 – October 19, 2016. Face-to-face interviews with retailers and direct observation were applied using questionnaire and checklist, respectively.

Results
Two hundred and eleven pairs of retail stores and informants were visited (103 in urban and 108 in rural areas). Thirty-one percent, 29% and 24% of stores were street-vendors, small groceries, and restaurants/coffee shops, respectively. Twenty-seven international/imported and 13 locally produced cigarette brands were recorded in the survey. The mean (95%CI) price per package of the most expensive cigarettes (in US$) was 2.1 (1.9-2.3) - [range=1.7-2.5] for imported; and 0.91 (0.90-0.92) – [range=0.78-1.25] for local brands. The cheapest price for both imported and local cigarettes per package was only 0.25 US$. The mean price of cigarette per package was significantly higher in rural compared to that in urban areas for both imported and local brands (p<0.05). By observation, the proportion of stores with prices displayed on the cigarette shelves was 33% (19% were shown for all brands and 14% for some brands only) and this was not significantly different between urban (35%) compared to rural (31%) areas (p=0.49).

Conclusions
Cigarette price in Laos is extremely low (<1 US$) and it is widely available. It is strongly recommended that excise or additional tax should be increased to the level that would reduce the affordability of the consumers.

Funding
This study was supported by Southeast Asia Tobacco Control Alliance (SEATCA).

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What is happening with the implementation of law on the protection of public health from tobacco products in Tirana, Albania?
Meggi Zhugli1
1Independent research

The aim of this writing is to tell the phenomenon that has begun to occur more and more in Tirana, Albania for several months. In Tirana, are set up new kiosks, where besides various products they trade as well tobacco products. What attracts attention in relation with the advertisement of tobacco products in these new kiosks is the fact that deliberately or unintentionally by lack of information, tobacco products are placed in such a way as to advertise tobacco products sold in kiosks.

I want to talk about that part of law that talks about the ban on the advertisement of tobacco products. As we know, Law No. 9636, ‘On the protection of public health from tobacco products’, in force in Albania since May 2007, forbids the advertisement of tobacco products in any form whatsoever may appear.

To explain better, I will make as well a poster presentation taken at various kiosks in Tirana where, tobacco products are placed in the interior of the kiosk and are sold by the seller of the kiosk, or these products are located in the outer parts kiosks which are not intended to be sold but simply to make tobacco products visible. In addition to the above fact that in violation of the law, in some kiosks is also noticed another violation; tobacco products placed on the outside of the kiosk contain / exhibit on their background clearly parts of the brand, that are directly related to the tobacco product that is traded in the kiosk. Item 9 of Article 3 provides that “Brand” implies distinctive signs attached to tobacco products to indicate their type, quality and the manufacturer including their names, letters, numbers, symbolic signs, combination of colours or shades as well as a combination of them. As a result I want to raise awareness of this phenomenon to end the violation of this
part of the law, and to share this in this conference with all that really cares in stopping and fighting tobacco.  
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**Group consultation for smoking cessation in pediatrics**  
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**Introduction**  
Health being long before birth. Exposure to tobacco smoke (active or passive) is one of the leading causes of pregnancy complications and a risk factor for developing multiple pediatric diseases. The objective of this work is to explain how the consultation for smoking cessation of the Pediatric Environmental Health Unit works. This consultation focuses on pregnant couples although smoking cessation is also offered to parents with children diagnosed with respiratory diseases as well as parents of survivors of pediatric cancer.

**Methods**  
The consult has a group structure (although in exceptional cases is done individually) and is divided into 5 in-person and 5 telephone sessions. The main actions developed in the consult are the control of nicotine dependence, and above all, behavioral and emotional dependence to tobacco. Smoking cessation consultation in pediatrics is aimed at pregnant couples or both parents (if both are smokers).

**Results**  
During 2016/2017, we have developed 7 therapy groups with a mean of 5 patients per group. The individuals who have not attended all sessions and also do not respond to the telephone calls are excluded from the results. Cessation rate until the end of pregnancy is 60%.

Emotional and behavioral control is very important during pregnancy and in relatives of sick children. The inclusion of the partner in the process is very important so that the cessation is long-lasting, while also promoting a smoke free childhood environments.

**Conclusions**  
The strengths of group therapy are that individuals with the same characteristics (feelings, fears, motivations ...), also avoid feeling lonely during the process. The group can solve doubts and questions (fears, shyness ...) that otherwise would not be resolved. It helps us to establish pertinent emotional linkages among patients within the group. The results indicate a strong adherence to treatment.

**Prevalence of tobacco at the beginning of pregnancy in 1500 pregnant couples of high risk**  
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**Introduction**  
Environmental consulting Nursing (Reproductive) is a clinical consultation detection, intervention and prevention of exposures to environmental hazards at critical periods of pregnancy (gametogenesis and pregnancy) with special attention to tobacco. The working tool is the “hoja verde”

**Objective**  
The objective of this work is to identify the prevalence of tobacco at the beginning of pregnancy and in the 12th week of gestation in pregnant couples at risk in the HCU Virgen de la Arrixaca.

**Methods**  
Descriptive study using the Green Page among 1500 pregnant couples of high risk between November, 2009 to January, 2013 conducted during the first trimester of pregnancy screenings.

**Results**  
Average age (years) 34.1 (females) and 36.1 (males). 87% of the woman are native of Spanish origin. At the beginning of pregnancy 34.9% of women and 45% of their partners are smokers. Intrauterine exposure to tobacco is as high as 56%. In the 12th week of gestation the percentage decreased to 17.3%. In the couples there was little change (41.5%).

**Conclusions**  
Exposure to tobacco and other environmental health risk factors are elevated at the beginning of pregnancy. The approach of using “pregnant couple” in the Green Page is important for improving the overall quality of pregnancy by integrating the couple as an important part of the process.

Nurses and midwives, have a privileged and strategic role in the development of tasks related to environmental health during pregnancy.. It is necessary to improve the environmental health training and preparation of nurses and midwives from the undergraduate to postgraduate levels.

**Smoking Prevalence and Attitudes Toward Smoking Among Medical Doctors in the Republic of Macedonia**  
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**Introduction**  
Medical doctors play a key role in patients’ attitudes and behavior towards smoking. We aimed to estimate the current prevalence rate of smoking and determine the attitudes among doctors with regards to smoking and use of tobacco products.

**Methods**  
A self-reported survey was emailed to a random sample of 500 doctors employed in the state and private health system. Data from 247 respondents were used, majority or 65% were female and 35% were male.

**Results**  
Overall 29% of the doctors currently are smokers, 18.6% were former smokers. The prevalence of smoking was found to be higher among male doctors. Representation of smoking among
Macedonian doctors in comparison to the prevalence smoking rate among doctors reported in the neighboring countries (Greece:38.6%, Serbia:34%, Bosnia:40%) is lower.

Regard to attitudes, the majority of respondents, agreed that the doctors need to be role model and patients were more likely to quit cigarettes if their doctor advises them. However, 19% of the doctors have a negative attitude towards providing a smoking cessation advice and more than 46% have not received a formal training in tobacco cessation interventions.

The population of medical doctors-smokers reported more liberal attitudes with regards to the smoking ban in public areas, especially in bars.

Conclusions

Although the smoking prevalence among medical doctors in our country shows a positive trend of decreased frequency in the last 10 years, the prevalence is still high. Our study found the need to strengthen education on the Medical Faculty in the part of smoking prevention.

Funding

This survey was supported by the World Health Organization.

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The presence of tobacco specific nitrosamines in the urine and saliva of cigarette users transitioning to electronic cigarettes

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Introduction

The aim of this study was to quantify levels of carcinogenic tobacco specific nitrosamines (TSNAs) in human volunteers transitioning from tobacco use to electronic cigarettes (EC). ECs have increased in popularity, with consumers using ECs to aid with smoking cessation, reduce cigarette consumption, or to minimise withdrawal symptoms when smoking but not vaping is prohibited. There has been little investigation into the long term health impacts of ECs, but they are generally considered less toxic than conventional tobacco cigarettes. This is due to the absence or decreased levels of harmful chemicals commonly found in tobacco cigarettes. However, some studies have shown the presence of traces of TSNAs in e-liquid, and the endogenous nitrosation of nicotine to TSNAs in nicotine replacement therapies (NRT). These TSNAs include NNK, NNN, and NNAL, which are potent oesophageal and pulmonary carcinogens. Therefore, inhalation of these compounds may provide an added risk to the use of ECs, when compared to other NRT products.

Methods

Biofluids have been analysed for TSNAs in the urine and saliva of heavy smokers (>10 cigarettes/day) who quit and transition to EC use for 28 days. A solid phase extraction method using TSNA specific molecular imprinted polymers was used to concentrate samples, which were subsequently analysed using UHPLC-ESI-HRMS.

Results

Analysis of longitudinal urine and saliva samples (n=13) has shown a decrease in TSNAs levels over the period of transition from tobacco use to EC only use.

Conclusions

The findings are consistent with the notion that substituting conventional cigarettes with ECs significantly lowers exposure to carcinogenic TSNAs. Further work is needed to determine whether TSNAs present in urine and saliva represent continued low level exposure to TSNAs as contaminants in EC or markers of nitrosation.

Funding

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CESAR Programme. Qualification for providing smoking cessation service in Spanish community pharmacies

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Introduction

Community pharmacists must participate in prevention activities that promote public health and prevent disease. Smoking in Spain reaches a prevalence of 24%, causing high rates of morbimortality. Pharmacists play an important role in dealing with smoking.

SEFAC has launched different training programs to implement pharmaceutical services, one of which is the CESAR program.

Objectives

To offer a qualification to community pharmacists and promote training and practice.

To provide tools and interventional strategies to deal with patients who smoke.

To evaluate the number of pharmacists participating in the training, the attendees to the face-to-face sessions and the number of patients included and the successful at six months.

Methods

A descriptive, transversal and retrospective research.

CESAR program consists in an online course, a face to face practical workshop given by pharmacists and physicians on the implementation and management of smoking cessation service in community pharmacy and a record of clinical cases in a website.

A consensus document with Spanish Society of Pulmonology and Thoracic Surgery (SEPAR), Spanish Society of Family and Community Medicine (semFYC), Spanish Society of Primary Care Doctors (SEMERGEN), Spanish Society of Family Doctors and General Practitioners (SEMG) and Spanish Society of Smoking Specialists (Sedet) was designed to refer to physician.

Results

As of January 2018, there were 1660 registered pharmacists. The online course has exceeded 703, the face-to-face sessions 1757 (in 27 workshops) and 1329 clinical cases have been registered.

434 cases are in follow-up, 191 have left the program and 704 have already passed the six months of follow-up (634 continued without smoking and 70 had relapsed).
Conclusions
There is a demand for training among community pharmacists to help patients to stop smoking. The successful cases compared with those who withdrew indicate that the CESAR programme could be a useful instrument for promoting smoking cessation through community pharmacies.

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Impact of the pharmaceutical smoking cessation service on the Spanish community pharmacy
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Introduction
The smoking cessation services evaluated so far point out that pharmaceutical intervention in smoking cessation is cost-effective, that must be performed by health professionals and that it is more effective than medication together with advice. The community pharmacies are sanitary centres accessible to the entire population and this has to be taken advantage of to try to reduce the number of smokers in our population with the consequent improvement of patients’ health condition.

Objectives
To evaluate the impact of a smoking cessation service (CESAR) in the community pharmacy in comparison to the regular intervention in the rate of smoking cessation of smoking patients that go to the community pharmacies, as well as its cost-effectiveness and its cost-utility. To evaluate the improvement in the health-related quality of life of smoking patients.

Methods
Prospective, controlled non-randomized trial of 12 months of follow-up. 100 trained pharmacies will participate through the CESAR programme (intervention group) and 100 non-trained pharmacies (control group), that will recruit at least 5 patients per pharmacy. The trial has been classified as NO-EPA and approved by the Ethics Committee.

The group assigned to the CESAR programme will carry out an initial visit, follow-up visits at days 7, 15, 30, 60, 90 and 180, and a final visit at month 12. The control group will conduct an initial visit, a follow-up visit at day 180 and a final visit at month 12.

The endpoints of the trial will be: sociodemographic, motivation, dependence, cooximetry, quality of life, treatment adherence, direct and indirect cost of the health services used.

The data will be recorded in the web platform: investigacionsefac.org/cesacion/

The data analysis will be performed with the statistical package STATA v12.

Results
The effectiveness in the cessation will be evaluated, as well as the cost-effectiveness and cost-utility of the CESAR intervention, the first results being available in May 2018.

Funding
The study benefits from the collaboration of Pfizer without conflict of interest.

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Compliance with smoke-free legislation in six European countries (2016): findings from the ITC 6 European country survey (EUREST-PLUS project)
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Introduction
Aim: To describe the prevalence of smoking in workplaces and key hospitality venues in 6 European countries.

Methods
We used baseline data (2016) of the International Tobacco Control 6 European (ITC 6E Country Survey) under the EUREST-PLUS Project and part of the larger ITC Project, conducted in national representative samples of 1,000 adult smokers aged 18 and older per country in Germany, Greece, Hungary, Poland, Romania, and Spain. For each venue (workplaces, restaurants, bars/pubs, and discos), participants were asked if: (1) there were people smoking during their last visit and (2) whether they themselves had smoked. We report the weighted prevalence of seeing smoking and smoking in each venue overall and by country.

Results
Overall, prevalence of smoking as seen by participants was 18.8% in workplaces, with high variability among countries (from 4.7% in Hungary to 40.8% in Greece). Among participants visiting hospitality venues in the last year, 22.7% had seen smoking in restaurants (12.2% had themselves smoked), 33.9% had seen smoking in pubs/bars (20.4% had themselves smoked) and 44.8% had seen smoking in discos (34.8% had themselves smoked).

Conclusions
Compliance with smoke-free bans in public places is higher in workplaces than in hospitality venues in Europe, with high variability among countries. More extensive awareness campaigns are needed to increase the compliance of smoke-free regulations, especially in leisure facilities.

Funding
The EUREST-PLUS Study takes place with the financial support of the European Commission, Horizon 2020 HCO-6-2015 program (EUREST-PLUS: 681109; C. Vardavas) and the University of Waterloo (GT. Fong). Additional support was provided to the University of Waterloo by the Canadian Institutes of Health Research (FDN-149477). GT. Fong was supported by a Senior Investigator Grant from the Ontario Institute for Cancer Research.

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The role of an electronic Cigarette on smoking behaviour and harm reduction in smokers with schizophrenia spectrum disorders: A feasibility study
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Introduction
The negative effects of smoking seem particularly pronounced and challenging among people with schizophrenia (Kelly et al, 2011). For example, Callaghan et al. (2014) found that tobacco-related conditions comprised approximately 53% (23,620/44,469) of total deaths in those with schizophrenia. This included an increased risk of tobacco-related deaths from cancer (standardised mortality ratio (SMR), 1.30, 95% CI 1.3–1.4), cardiovascular disease (SMR 2.46, 95% CI 2.41–2.50) and respiratory diseases (SMR 2.45, 95% CI 2.41–2.48) (Kelly et al., 2011) in these groups. The scientific evidence indicates that ECs are much less harmful than conventional cigarettes (Farsalinos, Polosa 2014; Nutt et al., 2016). To observe cigarette use behavior and harm reduction impact among a group of cigarette smokers with a schizophrenia spectrum disorder diagnosis who smoked tobacco cigarettes daily, did not intend to reduce or quit smoking, and were invited to use an electronic cigarette (e-cigarette).

Methods
A prospective observational 3 month feasibility study including in-person study visits at weeks-4, 8, and 12 using convenience sampling. The participants were forty Caucasian smokers in out-patient treatment for schizophrenia spectrum disorders not motivated to quit smoking (≥20 cig die). Assessments included Blood Pressure (BP), Heart Rate (HR), Body Weight (BW), carbon monoxide in exhaled breath (eCO), e-cigarette use, Fagerstrom Test for Cigarettes Dependence (FTCD), Scale for the Assessment of Negative Symptoms of Schizophrenia (SANS), Scale for the Positive Symptoms of Schizophrenia (SAPS).

The study has been conducted at the “Centro per Prevenzione e Cura del Tabagismo (CPCT) Università di Catania at the Policlinico Vittorio Emanuele” Catania, Italy.

Results
Declines in cigarettes per day (cpd) use and eCO, BP and HR levels were observed at each study visits. Conclusions: In smokers not intending to quit, the use of e-cigarettes, decreased cigarette consumption and elicited Blood Pressure (BP), Heart Rate (HR) and carbon monoxide in exhaled breath (eCO) improvements without causing significant side effects.

Funding
No funding has been received to conduct this study.

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Steps taking towards for Smoke Free District
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Introduction
To make district a smoke model.

Methods
presentation and interaction
Introduction
To take action on TAPS through Police department as per law.

Methods
Case registered/ Removal of posters

Results
Retailers resist to paste posters at their shops

Conclusions
TAPS in control.

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Second Hand Smoke exposure and Prevention
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Introduction
To aware youth, women and general public on hazards of SHS.

Methods
Awareness walks, orientation sessions and distribution of my booklet to all groups

Results
Government colleges adopt 100% smoke free policy, all city District Government departments issue a circular All office files will move Carrying “No Smoking Signage”, City Police file record cases against violators and District Sessions Judge took four days action against violators in session court premises.

Conclusions
Public Places and Public Transports are being smoke free

Tobacco Control cell Pakistan and The Union
DOI: 10.18332/tpc/90368

Assessment of E-cigarette humectants exposure by quantification of 1,2-propileneglicol, 1,3- propileneglicol and glycerol in human urine and oral fluid
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In the last years, the use of e-cigarettes has significantly increased in some countries as an alternative to conventional cigarettes. Despite its success in the markets, to date, there is limited research on its safety and impact on human health. The objective of this work, beyond the quantification of nicotine, was the development and validation of an analytical procedure to quantify 1,2-Propyleneglycol, 1,3 -Propyleneglycol and and Glycerol, the main humectant components of e-cigarette liquids as potential biomarkers of exposure to e-cigarette emissions.

Methods
A volume of 0.1 mL of sample was derivatized with benzoyl chloride in alkaline medium, followed by a rapid simple extraction with hexane. The instrumental analysis was performed using gas chromatography coupled to mass spectrometry, with electron impact ionization and selected ion monitoring. The method was validated following European Medicines Agency guidelines.

Results
The method was validated in a concentration range of 3-700 μmol/L, showing good selectivity, linearity, precision and accuracy. It works properly for the quantification of the e-cigarette’s humectants uptake in human body. Concentration levels of all humectant components were significantly higher in samples from users than from nonusers as tested during method validation.

Conclusions
1,2-Propyleneglycol, and 1,3 -Propyleneglycol analysed in body fluids are good biomarkers to characterize the use of e-cigarette. They may be used for the study of the impact of e-cigarettes use on health.

Funding
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Profile, attitude and influence of health professionals in the user against tobacco in the area of health of Tenerife
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Introduction
Smoking is a chronic addictive disease and the first cause of avoidable death in the developed world. Several studies confirmed the significant impact of the health councilin the cessation of smoking and the great weight that the figure of the healthcareprofessional has in the prevention and approach to smoking, thus needing qualified health professionals to control this epidemic. To evaluate the knowledge and attitudes of health professionals regarding smoking and to know the perspective of the user about the role of the model in the health professional’s smoking.

Methods
Descriptive, observational and cross-sectional study (n = 204 healthprofessionals, 75 users). The data collection is carried out for 5 months and two questionnaire modelsare prepared: one with an online format for the health professional and another in paper format for the user, both of anonymous and voluntary nature.

Results
Health Professional:
- The prevalence of smoking in the sample studied is 22.66%
- The 62.56% of the intervention that is given, is level 1 (brief advice)
- The 30.40% still consider smoking as a vice instead of a chronic addictive disease
- Only 13.8% identify correctly the pharmacological treatments with scientific evidence for the approach to smoking.

User:
- The 76.68% receive anti-smoking advice from health personnel.
- The 66.5% consider that the health personnel should have a
Smokeless tobacco, ENDS and harm reduction: ¿trick or treat?

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Introduction
The harm reduction arises to reduce diseases related to tobacco or previous step to the abstinence. Historically, faced with the concern of its customers, the tobacco industry exploited this concept to promote cigarettes with filters, light cigarettes, etc. with the results already known. Old and new forms of not burn tobacco (snus, e-cigs, iQOS, Ploom, IFUSE) are presented as “almost innocuous”. They offer a treat for health and aims to obtain a “scientific” endorsement for its promotion. Recent literature review of smokeless tobacco and nicotine delivery devices (ENDS) and harm reduction.

Results
The snus increased the risk of diabetes, OR 1.42 (95% CI: 1.07-1.87) deaths due to myocardial infarction (MI), OR: 1.5 (95% CI: 1.01-1.30) and CVA, OR: 1.39 (95% CI: 1.29-1.49). In relation to e-cigs, the following has been observed: Users have fewer cessations, OR 0.72 (95% CI: 0.58-0.90). Gateway to cigarettes in youth is founded; OR = 6.31 (95% CI 5.38-7.39). Increase risk of MI, OR = 1.79 (95% CI: 1.20-2.66). Increase risk of asthma in youth OR = 2.74 (95% CI 1.30 - 5.78). iQOS generates 84% concentration of nicotine found in tobacco. All them contain carcinogenic substances without knowing the future risk. The promotion of these products may cause cigarettes to become socially acceptable again, thus undermining decades of tobacco control. Therefore, the precautionary principle must be invoked.

Conclusions
Smokeless tobacco and ENDS are toxic products, cause addiction and serve as a gateway to smoking. It could reduce the risks in some smokers at the expense of increasing the use of tobacco in the population. The scientific evidence on its usefulness for smoking cessation and on its safety is very weak. Probably, the concept of tobacco harm reduction is a great trick to hide the interests of tobacco industry.

Funding
This study has been founded by Tobacco Group of Spanish Society of Family and Community Medicine (SPAIN)

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Smoking Rooms are Dangerous for Health

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Introduction
The Kazakhstan Health Act, adopted in 2009, allows designated smoking rooms (DSR) in public eating places where food is served, while other public places must to be smoke free. The objective of our study was to assess the effectiveness of the current policy by means of air quality monitoring in both smoke free and non-smoke free venues.

Methods
A cross-sectional study of indoor air quality was conducted from September to October 2017, in Almaty, the largest city of Kazakhstan. A total of 29 restaurants, cafes, and bars were monitored: 5 were 100% smoke-free, 15 had designated smoking and non-smoking areas, and 9 allowed smoking throughout the location. The real-time measurement of particulate matter (PM) with 2.5 mm aerodynamic diameter was conducted by TSI SidePak AM510 Personal Aerosol Monitor. The findings were ranked using the WHO target air quality guideline and the Air Quality Index developed by the U.S. Environmental Protection Agency (U.S. EPA AQI rankings).

Results
The highest mean PM2.5 level was detected inside the DSRs (430.5 μg/m³), followed by places where smoking was observed throughout the venue (180.3 μg/m³). The third place is held by non-smoking areas of venues with DSRs (73.1 μg/m³). The lowest mean PM2.5 level was observed in 100% smoke-free venues (26 μg/m³). The results of both assessment guidelines indicated the similar trends.

Conclusions
The highest mean PM2.5 concentrations (dangerous level) obviously demonstrates that a partial smoking ban with DSRs significantly reduces any supposed benefits of adjacent smoke free areas, infringes on the fundamental right to be protected from second hand smoke, and severely impacts the country’s FCTC country agenda in general.

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Real-world effectiveness of national tobacco advertising bans among smokers – A comparison of six EU-countries (ITC 6 European Country Project) from the EUREST-PLUS Project

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Introduction
Comprehensive tobacco advertising, promotion and sponsorship (TAPS) bans are known to effectively reduce smoking prevalence. We aimed to study country-differences in self-reported exposure to tobacco advertising at different media (TV, radio, print, internet,
billboards, point-of-sale) in relation to national TAPS legislation in six EU countries.

Methods
We used data from the Wave I of the International Tobacco Control 6 European Country (ITC 6E) Project, comprising n=6000 adult smokers from Germany, Greece, Hungary, Poland, Romania and Spain. Country-specific prevalence and 95%-confidence intervals of tobacco ad exposure were examined in relation to national TAPS legislation. Sociodemographic and socioeconomic correlates were investigated using logistic regression in order to explore equity aspects.

Results
Overall, 34% (95%-CI: 33-36) of smokers reported to have noticed things that promote smoking (including advertising) in the last 6 months, with exposure varying from 15% (13-18) in Hungary to 53% (50-57) in Germany. Among this sub-sample, self-reported exposure to tobacco ads was highest at the point of sale (52%, 50-54) and lowest on the radio (10%, 9-11), with wide variation across countries. Exposure was correlated with TAPS legislation, i.e. higher in countries with less comprehensive TAPS legislation and vice versa. Smokers who were younger, from urban areas, and less heavy smokers tended to be more likely to report exposure to tobacco ads.

Conclusions
Exposure to tobacco ads varied widely between countries. Despite the cross-sectional design precluding causal conclusions, the findings indicate a negative association between comprehensiveness of TAPS legislation and exposure to tobacco ads. However, significant exposure was found even in countries with more comprehensive TAPS legislation, indicating a need for stronger enforcement and closing of loopholes.

Funding
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Counteracting tobacco industry interference on heat-not-burn tobacco regulation in Portugal: lessons learnt
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Introduction
Aim and objective: Most countries experience challenges to implement guidelines on tobacco industry (TI) interference in policy-making. Heat-not-burn (HNB) tobacco products (TPs) have been aggressively marketed and promoted by the TI as potentially reduced exposure products and harm reduction tools. HNB-TPs remain unregulated mostly due to scarce independent research to support evidence-base arguments regarding the regulation of these emergent products. In 2016, the Portuguese Government proposed a bill which would equate HNB-TPs to traditional TPs. We aimed to analyse the policy-making process regarding the political negotiation of HNB-TPs regulation.

Methods
We analysed the records of the parliamentarian audiences; media publications, policy makers and stakeholder’s interviews and declarations.

Results
This bill was directly discussed by the Parliamentarian Health Commission. Intensive hearings engaged different stakeholders. Notably, the first audience involved Philip Morris. The media followed with great interest the polemic debate between the health advocates, the TI and its allies: the main argument was the need for tobacco control (TC) harm reduction strategies. Finally, Portugal equated HNB-TPs to TPs applying similar measures to HNB-TPs regarding protection of environmental exposure, advertising and promotion. Advocacy strengths: engagement of national/international public health leaders/organisations; a priority-focus strategy; publicly denouncing TI interference; media interest and support. Challenges: poor capacity building due to limited partnership with the government; poor awareness of article 5.3 WHO guidelines; underfunding of advocacy activities; difficulty in counteracting harm reduction positions from more advanced TC countries and TI research published in prestigious scientific journals.

Conclusions
The scientific and public health schism on harm reduction may undermine TC in lower capacity building countries, i.e. those who have the most need to progress.

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Tobacco Tax Index 2017: Assessing implementation of WHO FCTC Article 6 in ASEAN Countries
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Introduction
Aim: This civil society survey aims to gauge the implementation of tobacco tax measures in 10 ASEAN countries in relation to the recommendations of the FCTC Article 6 Guidelines, which the FCTC Conference of Parties (COP) adopted by consensus “to assist Parties in meeting their objectives and obligations under Article 6 of the WHO FCTC,” drawing on the best available evidence, best practices, and experiences of Parties that have successfully implemented tax and price measures to reduce tobacco consumption.

Methods
The tobacco tax policy survey tool was developed based on the WHO FCTC Article 6 Guidelines to assess current tobacco tax measures and provide ASEAN governments with recommendations for strengthening their tobacco tax policies. The qualitative research method was applied while respondents were government officials and representatives from NGOs working on tobacco tax in 10 countries of Southeast Asia. An initial assessment was done in 2015 and repeated in 2017.

Results
Compared with 2015, the ASEAN region, as a whole, has seen
limited progress over the past two years. Most ASEAN countries still do not have long-term tobacco tax policies with consistent verifiable fiscal and public health targets. Key obstacles limiting effectiveness include tobacco tax structures, weak tax policy, as well as the tobacco industry’s interference in and obstruction of tax policy formulation and administration.

Conclusions
Tobacco Tax Index 2017 of SEATCA is the first civil society’s report to urge all ASEAN government to effectively implement the WHO FCTC Article 6. Nonetheless, the 10 target countries are lack of effective tobacco tax policy in terms of both tobacco tax rate increase and administration which is leading to the high tobacco consumption in this region. Therefore, the governments in 10 ASEAN countries need to urgently improve tobacco tax policy by applying the FCTC Article 6 Guidelines.

Funding
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Smoking prevention and cessation among Romanian young people – a review of the literature

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Introduction
Smoking among young people is an important public health problem.

Aim and objectives
This study has two objectives. The first one is to evaluate the status of the research concerning prevalence of tobacco consumption, factors which influence it and associated behaviors among Romanian youth. The second one is to present educational programs and tobacco control measures aimed at smoking prevention and cessation among Romanian young people developed in the last 13 years.

Methods
The information are based on data from literature such as articles published in peer-reviewed journals, national and international reports, legislation as well as experience in this field of the authors.

Results
There are several international studies which included also Romania regarding smoking behavior among youth (Global Youth Tobacco Survey, Health behavior in school aged children) as well as cross-sectional and longitudinal studies investigating the factors associated with smoking. There were several projects developed in the last years aimed at smoking prevention and cessation among different age groups of youth and one of them (I do not smoke) was also evaluated through a randomized controlled trial, showing positive results. Several tobacco control measures such as ban of smoking in public places, warning pictorials on cigarette packages, increase of the cigarette price were also noticed in the last years.

Conclusions
The review presents the context and challenges of smoking prevention and cessation for youth in Romania and makes recommendations for future actions in this field.

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Youth Opinion Survey on Cigarette Prices
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This report presents the findings from the Youth Opinion Survey on Cigarette Prices conducted by the General Department of Taxation, Ministry of Economy and Finance and Psychology Department, Royal University of Phnom Penh. The main purpose of the study was to determine the opinion among youth on the affordability of cigarette [and smokeless tobacco and ENDS] prices and their disposition toward higher taxes and prices on these products to protect them from tobacco harm. In this cross-sectional study, 813 respondents were interviewed to answer multiple choice and open-ended questions during March to June 2017. The sample was randomly selected from four Khans and three districts based on urban-rural stratification. The respondent criteria were Cambodia citizen aged of 18-24 years old and living daily in Cambodia. A total of 813 youths were approached for an interview (61.9% male, 38.1% female). A random of 813 youths selected in this survey (62.2% were in Phnom Penh, 37.3% were in Siem Reap). These findings show that overall prevalence of current smoking was 6.0%. The majority of respondents (48.7%) suggested that the prices of cigarette should be from 1.5 USD to 2.5 USD per pack. 90.2% of 813 youth respondents supported that when tobacco tax and cigarette prices increase it will reduce consumption in Cambodia. 98.4% of 813 youth respondents agreed that certain amount of tobacco tax should be dedicated to tobacco control/health promotion activity. Base on retail price, 61.1% proposed that tobacco tax rate should increase up to 40%-50% and 15.5% should be increase up to 25%-35%. Finally, the research findings revealed that 98.4% of respondents were able to understand the health impact from cigarette smoking and 90.2% of them also recommend that government should increase tax of cigarette.

Funding
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Quitting smoking among people dealing with cancer
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Introduction
It has been proven that tobacco is the most dangerous single risk factor for development of many chronic diseases, cancer or early death. Tobacco smoke has more than 7000 chemicals, at least 250 are known to be harmful and more than 50 are known to cause cancer. Although quit smoking medications – substitution therapy has...
been approved and officially acknowledged as well as programs for stop smoking, the smoking rate is still very high. More than 1/6 of world population (1.1 billion) are smokers. The aim of this work is to present the importance of carrying out stop smoking programs for patients dealing with cancer.

Methods
The analysis of epidemiological situation of malignant disease is based on information of incidence and mortality as well as on smoking impacts.

Results
Researches show that larger part of oncolgical patients recognizes smoking as harmless and determination of diagnosis motivates these patients to stop smoking. Estimations show that 38% to 65% of cancer patients stop smoking in the first year after confirming diagnosis. Quitting smoking during oncolgical treatment is related to: better treatment response, reduced risk of complications, better quality of life and reduced risk of disease progression. Quitting smoking among oncolgical patients will affect long-term health as well by reducing risks of development of other diseases (heart attack, stroke).

Conclusions
All patients disregarding the stage of disease during oncolgical treatment may benefit from smoking cessation and have a right to quitting smoking treatment. Health care workers may improve motivation and influence quitting by providing help, giving advice and prescribing medications.

Affordability and Youth's Opinion toward Cigarette Price and Tobacco Tax in Lao PDR (Laos)
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Introduction
Aim and Objective: To determine the perception among Lao youth on the affordability of cigarette [and smokeless tobacco and ENDS] prices and their disposition toward higher taxes and prices, and this study will help provide sufficient evidence to support the increment of excise tax rate in Laos aimed at reducing smoking among Lao youths.

Methods
A cross-sectional study with two-stage cluster, randomly selection was used to select villages and youths with age 13 to 24 years old. A structured questionnaire was applied for face-to-face interviews. Descriptive and comparative statistics were used.

Results
395 youths (98%) were studied. Respondents thought that cigarette price and tobacco tax is not high enough (46% and 47% respectively). The smoking prevalence among youths was high (14%) with both e-cigarette and smokeless users (30% and 10% respectively). Belief on smoking danger was significantly higher with both e-cigarette and smokeless users (30% and 10% respectively). Cigarette price (in LAK) per pack respectively). Belief on smoking danger was significantly higher (14%) with both e-cigarette and smokeless users (30% and 10% respectively). The smoking prevalence among youths was high (14%) with both e-cigarette and smokeless users (30% and 10% respectively).

Conclusions
Cigarette smoking is increased among Lao youth, because cigarettes become more affordability and availability due to low cigarette prices. Youth perceived that tobacco tax rate in Laos was not high enough to make cigarette unaffordable. This suggests that the government needs to take action to increase tax rates and prices urgently. Youth also strongly agreed on dedicating of certain amount of tobacco tax revenue to tobacco control/health promotion activities.

Affordability and Youth's Opinion toward Cigarette Price and Tobacco Tax in Lao PDR (Laos)
Sysavanh Phommachanh1, Soudavanh Soysouvanh1, Mick Soukavong2, Sonexai Kidoikhammuan2, Maniphanh Vongphosy3, Khatthanaphone Douangsy1, Mayfong Mayxay1
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Introduction
Aim and Objective: To determine the perception among Lao youth on the affordability of cigarette [and smokeless tobacco and ENDS] prices and their disposition toward higher taxes and prices, and this study will help provide sufficient evidence to support the increment of excise tax rate in Laos aimed at reducing smoking among Lao youths.

Methods
A cross-sectional study with two-stage cluster, randomly selection was used to select villages and youths with age 13 to 24 years old. A structured questionnaire was applied for face-to-face interviews. Descriptive and comparative statistics were used.

Results
395 youths (98%) were studied. Respondents thought that cigarette price and tobacco tax is not high enough (46% and 47% respectively). The smoking prevalence among youths was high (14%) with both e-cigarette and smokeless users (30% and 10% respectively). Belief on smoking danger was significantly higher with both e-cigarette and smokeless users (30% and 10% respectively). Cigarette price (in LAK) per pack usually the respondents bought was 7,000 (1,000-25,000) at the stores. 93.6% of respondents said that they would stop smoking if the cigarette price (LAK) per pack is 50, 000 (2,000-900,000). 79% of respondents strongly agreed that increasing cigarette tax would help to reduce cigarette consumption. 94% of respondents supported if certain amount of tobacco tax is dedicated to tobacco control/health promotion activities.

Conclusions
Cigarette smoking is increased among Lao youth, because cigarettes become more affordability and availability due to low cigarette prices. Youth perceived that tobacco tax rate in Laos was not high enough to make cigarette unaffordable. This suggests that the government needs to take action to increase tax rates and prices urgently. Youth also strongly agreed on dedicating of certain amount of tobacco tax revenue to tobacco control/health promotion activities.

Analysis of the tobacco chain (tobacco production chain) in Côte d’Ivoire, for an adequate surveillance (outline for a counter-attack of the strategies) of the firms.

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The Republic of Côte d’Ivoire is party to the WHO Framework Convention on Tobacco Control (FCTC) by ratifying it on January 28, 2010. The knowledge of the tobacco industry, its tactics of interference and marketing, its allies and products in Côte d’Ivoire will improve this process. The purpose of this study is to present the mapping of the tobacco industry.

The purpose of this study is to understand the tobacco industry’s situation and tobacco control intervention strategies in Côte d’Ivoire to help the country’s tobacco control actors implement effective strategies, monitoring and reporting. Through an investigation method dominated by a documentary review and a survey-interrogation with resource persons. The work described the tobacco production chain and highlighted the positions and roles of each link in the production chain. In particular, it was necessary to determine the entities of the tobacco industry operating in Côte d’Ivoire throughout the production, processing and distribution chain. Among other things, it helped to identify the main strategic issues facing the tobacco industry and to reveal the subversive activities of tobacco companies. Ultimately, the contribution of the study in tobacco control is to avoid renewing old mistakes and thus developing effective public policies against interference by tobacco companies.

What do young French people know and believe about e-cig?
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Introduction

The growth of Electronic Nicotine Delivery System (EC) has led many policymakers to worry about regulating it even though we still know little about the short and long term public health consequences of its use. Today, an estimated 25% of the French population has tried EC and 6% of the 15-75 years. A qualitative study was realized with the objectives to document youths’ experiences, knowledge and beliefs about e-cigs.

Methods

We conducted 50 individual interviews with 16-17 years old and 10 focus groups with 13-15 years old from February to July 2017. The sample includes teens leaving in 3 different French regions, different size of the living area, female / male; and tobacco smokers /nonsmokers. The interviews were conducted by a medical anthropologist. The data was collected analyzed following the grounded theory methodology, so that each successive interview is guided by an analysis of previous ones.

Results

The majority of 13-15 years old didn’t have any experience of EC, whereas 90 % of the 15-17 years old admitted that they have tried EC before. They tried EC under their peers’ influence, to fit in, and to enjoy the vapour and play tricks with the smoke. Most have stopped EC after this experience. The majority of our participants showed limited or no knowledge about EC composition. Most of them had doubts about the safety of EC. They are not sure that health effects of EC are better than CC (Conventional Cigarette).

Conclusions

Compared with CC, youth indicated that they would be less willing to use EC under their peer influence. The youngest are still convinced of the role of traditional cigarette as a factor of social integration in the peer group.

Funding

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Efficacy of the “Be yourself” (STM) program to reduce the frequency of tobacco use in adolescents

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Introduction

The drugs consumption at early age is an important risk factor for its later use and progression to more serious forms. The objective of the study is to analyze the effectiveness of the program “Be yourself” (STM), to reduce the consumption of tobacco in adolescents. The sample consists of 893 participants (!4.8% men, 51.6% women), mean age = 12.74 years, from three public secondary schools in Teruel.

Methods

Model: Non-randomized controlled quasi-experimental study (30.5% GC, 69.5% GE), longitudinal with three times: pre, post at the end of the intervention, and follow-up at six months. Variables: “Sex”; “Frequency of tobacco use last 30 days”; “Experimental condition”.

Instruments: Questionnaire Frequency of drug use developed ad hoc based on the 2012 STUDIES Survey (PNSD, 2014).

Statistical analysis: Central tendency indices, contrast of the difference of means between GC and GE through the Levene test and the Cohen d for the effect size.

Results

The “STM” program achieve to moderate in GE the frequency of tobacco use in the last 30 days interval, being effective at the end of the application of the intervention (31% less than GC). Considering the gender perspective, the “STM” program achieve to moderate in GE the use of tobacco in the interval of the last 30 days in women (40% less than CG) and decrease it in men (22% less than GC), being effective at the end of the application of the intervention.

Conclusions

The “STM” program is effective in reducing the frequency of tobacco use, both in men and women, although more in women. In agreement with other studies, it is observed that their effects decrease or disappear in the follow-up. Reinforcement sessions are recommended.


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A meta-analysis of smokefree legislation effects on respiratory diseases

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Introduction

Aim: To synthesize the available evidence in scientific papers of smokefree legislations (SFL) effects on respiratory diseases (such as asthma, chronic obstructive pulmonary disease [COPD]) and lung infections (pneumoniae, bronchitis) among all populations (adults, children or general population).

Methods

Systematic review and meta-analysis were carried out. PRISMA guidelines were followed. A search between January 1995 and February 2015 was performed in PubMed, EMBASE, Cochrane Library, Scopus, Web of Science, and Google Scholar databases. The inclusion criteria were: 1) Original scientific studies concerning SFL, 2) With data before and after its implementation and 3) assessment of the impact of SFL on respiratory diseases. A meta-analysis was performed using the Review Manager (RevMan, version 5.3). The effect of SFL was estimated by risk ratios (RR) and risk difference (RD). Pooled effect measures were computed applying the inverse-variance method in a random-effect model. Heterogeneity was quantified with the I2 statistic.
Subgroup and sensitivity analysis were performed.

**Results**

17 studies reported effects on asthma, 9 on COPD and 4 on lung infections admissions. All the meta-analysis concerned comprehensive SFL settings. Six studies were included in a meta-analysis for asthma admissions in general population, 5 in children and 7 in adults. There was a significant decrease of 13% after SFL in general population (RR 0.87; 95%CI 0.81, 0.93; I² 78%) and of 15% both in children (95%CI 0.79, 0.91; I² 87%) and adults (95%CI 0.73, 0.99; I² 65%). In contrast, the 6 studies for COPD admissions showed a non significant decrease of 20% after SFL (95%CI 0.63, 1.00; I² 96%). For lung infections admissions, only 2 studies showed a non significant decrease of 14% after SFL (95%CI 0.67, 1.10; I² 55%).

**Conclusions**

SFL appears to decrease rates of admissions for asthma in all populations in comprehensive settings but not for COPD or lung infections.

**Funding**

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**Smoking cessation services provided by tuberculosis physicians in Armenia: A qualitative study**

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**Aim and Objective**

The importance of implementing smoking cessation interventions among tuberculosis (TB) patients has been widely acknowledged by the global public health community. The study aimed to assess TB physician’s practices on smoking cessation interventions in Armenia using ABC (A-Ask, B-Brief advice, C-Cessation support) for TB approach as recommended by the International Union Against Tuberculosis and Lung Disease.

**Results**

With regards to the component “A”, the great majority of TB physicians reported that they routinely ask and record TB patients’ smoking status in the medical records. For the “B” component, the overwhelming majority of TB physicians noted that they usually advise smoking TB patients to quit and emphasize the harmful effects of smoking on TB treatment outcomes. They characterized their advice as “explanatory” or “psychological” work. Concerning the “C” component, most of the physicians outlined the dominating role of patients’ willingness and willpower for quitting. A few of them listed several “traditional” behavioral techniques they offer their TB patients to support quitting. Physicians acknowledged that they did not prescribe pharmacotherapy because of poor knowledge and limited experience on tobacco dependence treatment and uncertainty about the effectiveness of smoking cessation drugs.

**Conclusions**

The ABC smoking cessation approach is not properly delivered by TB healthcare providers. Interventions targeting appropriate implementation of this strategy are key for improving TB and tobacco control in Armenia.

**Funding**

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