

# Bucharest



ROMANIA | BUCHAREST | 27-29 MARCH

4<sup>th</sup> ENSP-SRP  
INTERNATIONAL CONFERENCE  
ON TOBACCO CONTROL 2019

ABSTRACT  
BOOK



**ENSP**

*European Network  
for Smoking and Tobacco Prevention*



**SRP**

Societatea Română de PNEUMOLOGIE



## 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.

Full Journal Title: Tobacco Prevention and Cessation

Abbreviated Title: Tob. Prev. Cessation

ISSN (electronic): 2459-3087

Scientific Society: European Network for Smoking and Tobacco Prevention (ENSP)

Publisher: European Publishing

Publisher Address: Science and Technological Park of Crete, Greece

Editors: See Editorial Board Page

Peer Review: Double Blind

Rejection Rate: 58%

Publication Frequency: Continuous

Publication Medium: Electronic Only

Publication website: [www.tobaccopreventioncessation.com](http://www.tobaccopreventioncessation.com)

First Year Published: 2015

Article Processing Charges: None for 2015-2019. Waived by ENSP through an operating grant from the European Commission to ENSP.

Disclaimer: This journal is currently funded by the 3rd Health Programme of the European Union. Neither the European Commission nor any person acting on behalf of the European Commission is responsible for the use which might be made of the information contained herein. The views in this publication are those of the authors and do not necessarily reflect the policies of the European Commission.

This abstract book does not include the abstracts of all presentations in the 2019 ENSP conference, only those that were submitted in time for the production of the supplement.

This abstract book has been produced electronically and all articles are also available on-line as a special issue at [www.tobaccopreventioncessation.com](http://www.tobaccopreventioncessation.com)

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## WEDNESDAY 27 MARCH

### The EU Joint Action on Tobacco Control

#### Joint Action on Tobacco Control Consortium

The Joint Action on Tobacco Control (JATC) was launched in October 2017. This comprehensive EU funded project aims to provide support for the implementation of the Tobacco Products Directive (TPD) across the 28 EU Member States. The TPD is a complex legislative document that lays down the rules governing the manufacture, presentation and sale of tobacco and related products, while also supporting the functioning of the internal market of tobacco products in the EU. The JATC addresses the issue of tobacco product monitoring at an EU wide level through facilitating access of data within the EU Common Entry Gate (EU-CEG), assessing tobacco and e-cigarette product compliance to the TPD, assessing aspects of laboratory harmonisation and evaluating the role of priority additives in tobacco products. This 36-month project operates with 9 Work Packages and involves 30 Partners and an additional 13 Collaborating Partners, an activity that would be impossible to be done by one, or a few, EU MS by themselves.

**Tob. Prev. Cessation 2019;5(Supplement):A1**

**DOI: 10.18332/tpc/105211**

## YOUTH AND TOBACCO

### Smoke free/tobacco free schools in Sweden: A follow-up study

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<sup>1</sup>Teachers against Tobacco, Sweden

Teachers against Tobacco follow up the study from 2015 on the municipal tobacco policies. How has the attitude regarding tobacco-free and smoke-free working hours for both employees and students changed? What measures have been taken? The municipalities are responsible for the school in Sweden. Therefore, the municipalities' attitude to tobacco is important.

#### Funding

Public Health Agency of Sweden.

**Tob. Prev. Cessation 2019;5(Supplement):A135**

**DOI: 10.18332/tpc/105309**

### Single and multiple tobacco/nicotine product use among Serbian youth

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#### Introduction

Concurrent use of tobacco products is associated with increased risk of nicotine dependence and smoking-related complications. Increase in dual and poly tobacco product use worldwide represents a significant public health problem and call for better understanding of patterns of multiple product use. The aim of our study was to explore the pattern of use of cigarettes, waterpipes and e-cigarettes in youth in Serbia.

#### Methods

This is a secondary analysis of cross-sectional data obtained

through the Global Youth Tobacco Survey (GYTS) conducted in Serbia in 2017. A two-stage cluster sample design was used to produce a representative sample of students 13-15 years old. In total 3362 students in this age group completed the questionnaire. Descriptive statistic was used for presenting the frequency of different categories of students according to their tobacco products use status.

#### Results

Among 13-15 years old students, current prevalence (at least once in the last month) of cigarette smoking was 11%, of waterpipe smoking 9% and of e-cigarette use 6.2%. The most common pattern of current tobacco/nicotine use was waterpipe and/or e-cigarette use with no cigarette smoking (7.5%), followed by exclusive cigarette use (5.8%). Among student in the seventh grade of primary school, e-cigarette and/or waterpipe tobacco smoking was threefold higher (7.5%) than exclusive cigarette use (2.5%). Regarding current cigarette smokers, more than half are exclusive cigarette smokers (52.8%). Among all e-cigarette users, 39.3% are exclusive e-cigarette users, while 45.7% of current waterpipe tobacco smokers use this product exclusively.

#### Conclusion

The current prevalence of waterpipe and/or e-cigarette use is more common than exclusive cigarette smoking. This can be, among others, explained by lack of knowledge on these products and consequences of use as well as with curiosity. Finding calls for awareness raising campaigns and inclusion of waterpipe and e-cigarette related topics in the curriculums of evidence based interventions.

#### Funding

University of Illinois at Chicago's Institute for Health Research and Policy through its partnership.

**Tob. Prev. Cessation 2019;5(Supplement):A2**

**DOI: 10.18332/tpc/105217**

### A Smoke Free Generation in Belgium

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<sup>1</sup>Belgian Alliance for a Smoke Free Society

The goal of the Alliance for a Smoking Society and the Campaign "Smoke Free Generation" campaign is to create a society where every child born as of 2019 has the right to grow up in a smoke free environment and will not start smoking. To achieve this, we must further denormalise smoking, in line with the defined key-strategy of the World Health Organisation to solve the Tobacco problem with children and youngsters. Children and young people have the right to grow up healthy, including smoking, without harmful substances negatively affecting their development. Moreover, (young) children often do not have the choice to evade smoke and are insufficiently aware of the possible health implications. Belgium has explicitly committed itself by the ratification of the Framework Convention on Tobacco Control (FCTC) to make the necessary efforts to work on the tobacco epidemic. However, the current efforts are not enough: Belgium fell to the European Tobacco Control Scale, a well-established ranking of European countries on tobacco policy, from the 13th place in 2013 to the 17th in 2017.

To achieve our goal, we are focusing on the one hand to create a bottom-up movement 'Smoke Free Generation', to create smoke-free environments. This can only be achieved in collaboration with local governments, civil society organizations, private

companies, individuals, etc. in favor of the concept 'Smoke Free Generation'. On the other hand at the political level, the Alliance calls on politicians to take a number of necessary measures in a Memorandum '10 measures towards a smoke free society' to be implemented after the elections in May 2019.

So far, almost 50 associations support our movement. The number of smoke free environments is increasing, such as playgrounds and sport facilities of municipalities, sport clubs, recreation parks, children's farms, zoos and theme parks and hospital domains. Through campaigns aimed at the public at large, we are promoting our movement for a right to grow up in a smoke free environment.

**Tob. Prev. Cessation 2019;5(Supplement):A3**

**DOI: 10.18332/tpc/105221**

## Tobacco sales, advertising and promotion near the schools in Kazakhstan

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### Introduction

The target of this study is to evaluate sales, advertisement and promotion of tobacco products in points of sale near the schools of Kazakhstan.

### Methods

325 points of sale, located in five-minute walking distance from a school, were analyzed through mystery shopper approach by six trained investigators in May 2018. These points were located around 170 schools of the following cities: Astana, Almaty, Shymkent, Karaganda, Ust'-Kamenogorsk, Aktobe and Kostanay. Special app developed by "Tiny Targets: Big tobacco" campaign was used to measure the distance from schools and shops, and to collect the information.

### Results

Almost all shopping points (97%) provide tobacco products for customers. The most widespread forms of advertisement and promotion of cigarettes are posters (77%) and placement near sweets and toys (56%). Despite the establishment of policies, almost 30% of shops provide single sale of cigarettes and some points utilize banned promotion methods such as a present for a purchase, sweet and toys in form of cigarettes, the presence of tobacco tradesman. Two out of three shops offer flavoured tobacco products with a diverse range of tastes and 42% of analyzed spots place tobacco products at the eye-level of a child.

### Conclusion

This study figured out that despite certain legislative measures there are high accessibility, extensive sales and aggressive promotion of tobacco products at points of sales targeted for school-year children of Kazakhstan. Particularly, there is high access to single sticks cigarettes' sale and heavy exposure to tobacco advertisements at points of sale near the schools.

**Tob. Prev. Cessation 2019;5(Supplement):A4**

**DOI: 10.18332/tpc/105188**

## Prevalence of e-cigarettes use among Ukrainian youth: new challenge for public health?

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### Introduction

There is lack of e-cigarettes regulation in Ukraine. They are

available for everyone without age restriction. Aggressive marketing and delay with adoption of necessary laws contribute in increase of e-cigarettes prevalence among adolescents. New electronic products appear at the market and lack of regulatory measures may eliminate all tobacco control efforts and lead to serious challenges for public health.

### Methods

First questions about e-cigarettes use by youth were included into ESPAD (age of respondents was 15-17 years). In 2017, GYTS (age of respondents was 13 - 15 years) also revealed some data about e-cigarettes. Another data were got due to research about e-cigarettes marketing and regulation conducted with support of WHO and JHU.

### Results

ESPAD found that in 2015 in Ukraine the share of young people (15-17 years old) who were current users of e-cigarettes was 5.5%. However, in 2017 according to GYTS results, overall 18.4% of young people (13 - 15 years old) were current users of e-cigarettes (in contrast to 9.2% who smoked regular cigarettes).

Research on the e-cigarettes marketing demonstrated that e-cigarettes are actively promoted, especially for young people. At the same time, the market of e-cigarettes is not regulated in Ukraine resulted in lack of control for quality of devices and liquids which are sold to users, including minors.

### Conclusions

Lack of any e-cigarettes regulation in Ukraine and aggressive promotion of these products result in high percentage of adolescents (13-15 years old) who are current smokers of e-cigarettes. Also it causes problems with quality control so these products can be a direct threat to health and life of people and become new challenge to the public health of Ukraine.

**Tob. Prev. Cessation 2019;5(Supplement):A5**

**DOI: 10.18332/tpc/105296**

## Willingness of Students to Accept Exposure to Passive Smoking

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### Introduction

Tobacco contains about 4.000 chemical ingredients. Smoking is considered as a serious health hazard not only for smokers but also for non-smokers. Second hand smoking (SHS) causes cancer heart and lung diseases as well as other health related issues. Worldwide around 600,000 people die each year because of exposure to SHS. Despite the fact that Albania has smoke free laws, their implementation still remain a problem.

### Methods

The main aim of this cross-sectional study is to identify willingness of Vlora University students to accept their exposure on passive smoking. The study was conducted, on February and March 2019. Students of all academic years (both bachelor and master level) from Faculty of Public Health participated. A questionnaire with 16 questions was developed by the authors. Ethical approval was obtained by the ethical committee of the Faculty.

**Results**

The actual study is ongoing and data collection has not been finalized. Final results will be presented at the conference.

**Conclusions**

Enforcement of smoke free laws are of paramount significance for Albania. Joint actions between the government, NGOs and civil society can lead to success. Advocacy for mass-media campaigns, regular monitoring by responsible institutions and high penalties in case of violations are some of needed actions by health policy makers.

**Tob. Prev. Cessation 2019;5(Supplement):A147**

DOI: 10.18332/tpc/105625

**TAXATION AND PRICE REGULATIONS OF NEW GENERATIONS PRODUCTS**

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**Objective**

To present and assess regulations related to NGP (E-Cigs and HTP) in Eastern Europe; To question and discuss what model / position we think is best (at least in the short term). Panelists will present and share perspectives on the feasibility of tax policy and on the material needed to support policy (data / research).

**Tob. Prev. Cessation 2019;5(Supplement):A6**

DOI: 10.18332/tpc/105206

**HEALTHCARE SYSTEMS', NURSES' AND OTHER HEALTHCARE PROFESSIONALS' ROLE ON TOBACCO CONTROL****A cross-sectional survey of patients attending clinics with physicians trained in the adapted Certified Tobacco Treatment Specialist (aCTTS) program in the Former Yugoslav Republic of Macedonia (FYROM)**

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**Introduction**

In May 2017, 97 physicians completed an adapted Certified Tobacco Treatment Specialist (aCTTS) program. Objectives were to provide physicians with knowledge and skills to support them in providing tobacco counseling to their patients. Patients were surveyed in May and June 2018 to document their engagement and experience of counseling with trained physicians.

**Methods**

Patients who use tobacco and saw one of 26 aCTTS-trained physicians completed a cross-sectional survey to assess: 1) individual and peer/family smoking behaviors; 2) quitting experience and perceived barriers; 3) confidence in quitting; and, 4) counseling experience. Bivariate analyses were conducted to determine significant associations between independent and dependent variables.

**Results**

Among 275 patients surveyed, 44% were female; mean age was 49.4 years. Almost 50% of respondents smoked 19+ cigarettes daily and 58% reported attempting to quit in the past year. On a scale of 1 to 10 (10=very confident/important), patients had a mean score of 4.6 in confidence to quit, and a mean score of 7.0 for importance of quitting. Respondents under age 50 perceived quitting as less important ( $p=0.040$ ) than those age 51+. Female respondents more frequently reported 'gaining weight' ( $p<0.001$ ) and perception of 'no physical problems' ( $p=0.014$ ) as barriers to quitting. Preferred supports for quitting were medications (77.2%) and physician counseling (75.2%).

**Conclusion**

Smokers in FYROM have low confidence in quitting; importance of quitting and barriers are associated with age and gender. Most patients report tobacco counseling by aCTTS-trained providers. Continued data analysis will address demographic variations and need for targeted interventions.

**Tob. Prev. Cessation 2019;5(Supplement):A136**

DOI: 10.18332/tpc/105186

**Dentists in providing tobacco cessation services: Factors assist and resist**

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**Introduction**

The use of tobacco and its related health effects has emerged as a serious health problem. In a largest survey conducted in the UAE, the point prevalence of active cigarette smoking among men and women was 24% and 1% respectively. Dentists have the opportunity to assist their patients to change their habit of tobacco use. Studies reported that brief interventions of motivating tobacco users to make quit attempt within the dental settings may increase the chance of tobacco abstinence.

**Objective**

To determine the factors which assist and the dentists in delivering tobacco cessation advice to their patients in Northern Emirates, UAE.

**Methods**

Cross sectional study design was used in this study. Dentists practicing in hospitals, dental clinics, poly clinics and Primary Health Care Centers in the Northern Emirates, UAE were the study population. A validated pilot tested questionnaire was used in this study. 250 dentists participated in the study; participants were recruited conveniently.

**Results**

Majority (63%) reported of poor practice towards tobacco cessation advice as compared to those with good practice (37%). Around 61.6% perceived lack of patient's interest as the most common preventing factors. Nearly 90% responded distribution of relevant educational materials and availability of appropriate referral system as facilitating factors in providing advice.

**Conclusion**

Unavailability of appropriate referral services, lack of interests of patients, lack of printed resources and lack of training were commonly reported barriers. While distribution of relevant

educational materials and provision of training opportunities were reported to be significant facilitating factors.

**Tob. Prev. Cessation 2019;5(Supplement):A7**

**DOI: 10.18332/tpc/105198**

### Real life impact of educating nurses in tobacco cessation intervention

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#### Introduction

Nurses, when educated in tobacco cessation interventions, are well positioned to address smoking with their patients achieving a long-time quit rate of approximately 10%, according to the literature.

#### Methods

Together in partnership with the International Society of Nurses in Cancer Care and University of California in Los Angeles, USA, and the Society for Treatment of Tobacco Dependence, Czech Republic, an international project funded by Bristol-Myers Squibb Foundation "The Eastern Europe Nurses' Centre of Excellence in Tobacco Control – Developing Nurse Champions for Tobacco Dependence Treatment" (EE-COE) involves six Eastern European countries (CZ, HU, MD, RO, SI, SK). The EE-COE offers to nurses various educational activities in tobacco control, i.e. train of trainer workshops, short seminars, or online e-learning. Through these methods positively evaluated in previous projects, thousands of nurses have already been educated.

#### Results

Results from EE-COE 2016 five country 3-month post-training online surveys, a total of 507 trained nurses estimated that they offered cessation intervention to 850 to 1239 patients a week (minimum / maximum weekly estimates, respectively), a mean of 1,044 patients per week. Assuming a 10% long-term quit rate from nurses' intervention, we estimated that 104 patients quit tobacco use per week, or 5,408 ex-smokers per year in five countries alone. Simplified calculation of investment into nurses' education translated to \$63 USD spent per ex-smoker.

#### Conclusion

Investment into nurses' education in tobacco control knowledge and skills is an effective approach with substantial impact on patients quitting smoking, improved patient health, in addition to health care cost savings.

#### Funding

The Eastern Europe Nurses' Centre of Excellence for Tobacco Control II project was made possible through a grant from the Bristol-Myers Squibb Foundation to the Society for Treatment of Tobacco Dependence.

**Tob. Prev. Cessation 2019;5(Supplement):A8**

**DOI: 10.18332/tpc/105285**

### Post-degree Nursing Academic Curriculum formally redesigned including Tobacco management: a pilot experience at Sapienza University, Rome, Italy

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<sup>4</sup>San Camillo Hospital, Italy

#### Introduction

Nurses are perceived as role-model and are the largest group of health professionals caring for both healthy people and patients. They could have a tremendous impact in tobacco control, but, in Italy, their prevalence of smoking is the double of that of the general population (and delivery of tobacco-related treatment depend on own smoking status) and they have limited knowledge, skills and confidence in implementing cessation intervention, due to limited inclusion of tobacco control contents in their academic curricula. These aspects hinder their potential role in curbing the tobacco epidemic.

#### Methods

In Rome, at Sapienza University, for the first time in Italy (to our knowledge), the post-degree Nursing Academic Curriculum was redesigned and tobacco management formally included in the curriculum. The smoking cessation intervention education program will start in 2020, in the 2nd year course and will be based on blended learning (didactic face-to-face including the 5-As model and simulation sessions). Pre and post assessment tools will collect data about students' knowledge, skills and self-efficacy. Long-term effects of this blended program will be tested through an objective structured examination.

#### Results

Expected results will be the improvement of nursing student's self-efficacy in performing smoking cessation intervention, the increasing of motivational processes and perceived competence in their ability to help smokers to quit.

#### Conclusions

Innovative, experiential and evidence-based smoking cessation program into academic curricula could improve nurse clinical skills in helping smokers to quit and promote nurse own quitting, increasing their awareness.

**Tob. Prev. Cessation 2019;5(Supplement):A9**

**DOI: 10.18332/tpc/105313**

### Tobacco dependence treatment provision by tuberculosis physicians in Armenia

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#### Introduction

The integration of tobacco dependence treatment interventions into routine tuberculosis (TB) services is broadly acknowledged as an important measure to tackle the dual burden of TB and tobacco. The study aimed to explore TB physicians' practice of tobacco dependence treatment based on the recommended 5"A's" model.

#### Methods

A cross-sectional study was conducted among TB physicians from

inpatient and out-patient TB facilities throughout Armenia. Self-administered questionnaire included questions on demographics, knowledge, attitude, practice and confidence in providing tobacco dependence treatment. The predictors of the high practice score (number of activities always performed during physicians' daily practice) were assessed using multiple linear regression analysis.

### Results

Overall, 91 TB physicians completed the survey. The mean self-reported practice score was 5.71 (max=15). Majority of TB physicians always asked about smoking status of their patients (72.53%) and always advised smoking patients to quit (93.41%). About half of them always assessed patients' willingness to quit (54.95%). Conversely, less than half of physicians always assisted their patients in smoking cessation (43.96%) and only few respondents (3.30%) mentioned about always arranging follow-up to review patients' progress in quitting. Regression analysis revealed that TB physicians' knowledge on smoking cessation ( $\beta=0.22$ ) and monthly number of their patients ( $\beta=-0.05$ ) were significantly associated with practice score.

### Conclusions

Recommended interventions were not fully implemented into routine TB services. TB physicians with higher knowledge score on smoking cessation and lower patient load were more likely to have higher practice score. These predictors should be targeted for future interventions improving tobacco dependence treatment practices.

### Funding

Global Bridges Healthcare Alliance for Tobacco Dependence Treatment, hosted by Mayo Clinic and Pfizer Independent Grants for Learning and Change.

**Tob. Prev. Cessation 2019;5(Supplement):A10**

**DOI: 10.18332/tpc/105273**

## EUREST-PLUS: MONITORING THE IMPLEMENTATION OF THE TOBACCO PRODUCTS DIRECTIVE

### Changes in support for smoke-free policy among smokers in six European countries

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### Introduction

This paper aims to examine changes in the smokers' support for bans in different settings, and explore the determinants of changes in smokers' opinions about smoking in different settings in six European countries.

### Methods

Longitudinal survey (the ITC 6 European Country Survey, part of the EUREST-PLUS Project) using nationally representative samples of adult smokers in Germany, Greece, Hungary, Poland, Romania and Spain. Data were collected in 2016 (wave 1) and 2018 (wave 2). Generalized estimating equation logistic regression models were used to estimate the support in each wave and then test the change in adjusted percentages between waves.

### Results

In the six countries there was an overall significant increase in support for smoking bans in nine out of eleven settings. Policies that protect children and teenagers against smoke continued to

be the most supported in wave 2 (>90%). Smokers in Greece were outliers in comparison to other countries with a decrease in their support in nine out of eleven policies surveyed. In contrast, smokers in Hungary and Spain had an increase in their support in all policies. Smokers belonging to the younger age group had the biggest increase in support for smoking bans. Those who quitted between waves consistently had higher support for smoking bans compared to daily smokers.

### Conclusions

The support for smoke-free regulations increased among European smokers. Specific groups of smokers should be studied to determine why they are still resistant to support smoke-free regulations and how to tailor interventions to inform them about the benefits of such regulations.

### Funding

The EUREST-PLUS Project takes place with the financial support of the European Commission, Horizon 2020 HCO-6-2015 programme (EUREST-PLUS: 681109; CV) and the University of Waterloo (GTF). Additional support was provided to the University of Waterloo by the Canadian Institutes of Health Research (FDN-148477). EF was supported by the Ministry of Research and Universities from the Government of Catalonia (2017SGR319).

**Tob. Prev. Cessation 2019;5(Supplement):A137**

**DOI: 10.18332/tpc/105401**

### Characterizing smoking, cessation behaviours and attitudes toward tobacco control policies among smokers of menthol and flavored cigarettes: the EUREST-PLUS ITC Europe Surveys

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### Introduction

Since May 2020, the ban on production and sale of menthol and other flavored cigarettes will come into force in the European Union countries. Then millions of cigarette smokers can quit smoking or switch to other tobacco products, both conventional and novel.

### Study aim

To assess the prevalence, socio-demographic characteristics, cessation behaviors and attitudes of menthol and other flavored cigarette smokers towards tobacco control policies and programs.

### Methods

Cross-sectional data were collected in 2016 among 10,760 adult current smokers from 8 European countries (EUREST-PLUS ITC Europe Project). Smokers of menthol, other flavoured, unflavored tobacco, or no usual brand were compared on smoking prevalence, socio-demographic characteristics, tobacco dependence, motivation to quit, self-efficacy, prior cessation behaviours, and attitudes towards tobacco control measures. The univariate data analysis adjusted to few confounding factors was made with the use of SPSS Complex Samples Package.

### Results

Study results shows that around 7% of adults in all 8 analyzed European countries smoke menthol cigarettes and around 3% other flavored cigarettes. However, prevalence of menthol smoking substantially varies between countries (0.4% in Spain to 12.4% in England). Compared to other groups, menthol cigarette smokers are younger, more likely to be female, better educated, had higher household income, and smoked fewer cigarettes. In comparison to smokers of unflavored cigarettes, smokers of menthol and other flavoured cigarettes are less likely to smoke daily, tend to be less dependent and have higher quitting self-efficacy. In comparison to all other smokers, menthol smokers are less likely to support a ban on sale of flavored tobacco products, including menthol cigarettes. After enforcement of the ban, around a fifth of all menthol and flavored cigarette smokers intends to switch to another brand, and a third to reduce the amount they smoked or to quit smoking.

### Conclusions

The EU TPD ban on sale of flavored cigarettes will affect one in ten smokers in the countries surveyed and provides an opportunity for targeting these groups with tobacco control policies and cessation programs. Lower tobacco dependence rates found in smokers of menthol and other flavored cigarettes may lead to greater success rates if quit attempts are strengthened by smoking cessation programs. However, smokers of different cigarette flavours in Europe differ on a range of smoking and cessation characteristics and may need different, target-tailored approaches.

**Tob. Prev. Cessation 2019;5(Supplement):A11**

**DOI: 10.18332/tpc/105386**

**Cross-border Purchasing of Cigarettes among Smokers in Six European Countries: Findings from the EUREST-PLUS ITC Europe Surveys**

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### Introduction

The availability of lower-cost cigarettes provides price-sensitive smokers with incentives to purchase cheaper cigarettes in order to minimize their financial costs of continuing to smoke. This study estimates the prevalence of and factors associated with cross-border purchasing of cheaper cigarettes among nationally representative samples of smokers from Germany, Greece, Hungary, Poland, Romania, and Spain (n = 6,011).

### Methods

The primary outcome was purchasing cheaper out-of-country cigarettes in the last six months. The prevalence of cross-border purchasing was estimated by country and residential location, defined as (a) living in regions bordering a country where the cost of the most popular price category brand of cigarettes was at least €1/pack lower than in smokers' home countries, (b) living in regions bordering a country with similar cigarette prices, and (c) living in regions not bordering other countries. Weighted multivariable logistic regression tested differences in purchasing cheaper out-of-country cigarettes by country and residential location.

### Results

Residential location was associated with purchasing cheaper out-of-country cigarettes in Germany and Poland (p < 0.05): 31% of German and 11% of Polish smokers living in regions bordering lower-price countries made such purchases in the last six months. Across all countries, smokers living in areas bordering lower-price countries had 4.21 times greater odds of purchasing cheaper out-of-country cigarettes compared to smokers living in non-border areas (95% CI: 2.39-7.42).

### Conclusions

Tax harmonization policies that minimize cross-border price differentials can eliminate lower-priced alternatives for price-sensitive smokers.

### Funding

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 681109 (C. I. V.) and the University of Waterloo (G. T. Fong). Additional support was provided to the University of Waterloo by the Canadian Institutes of Health Research (FDN-148477). G. T. Fong was supported by a Senior Investigator Grant from the Ontario Institute for Cancer Research. E. Fernández is partly supported by Ministry of Universities and Research, Government of Catalonia (2017SGR319) and by the Instituto Carlos III and co-funded by the European Regional Development Fund (FEDER) (INT16/00211 and INT17/00103), Government of Spain.

**Tob. Prev. Cessation 2019;5(Supplement):A12**

**DOI: 10.18332/tpc/105388**

## INTERNATIONAL AND NATIONAL TOBACCO CONTROL ACTIVITIES

**Are tobacco control policies effective? Interrupted time series analysis of routine tobacco surveillance data: opportunities and challenges**

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## Introduction

Tobacco control policies intend to impact long-term indicators of population health via reducing the prevalence of tobacco use (POTU). Interrupted time series (ITS) analysis gives opportunities in analyzing routinely collected longitudinal data to see the effects of interventions.

## Methods

ARIMA models were applied to routinely collected data on POTU in Ukraine. Dependent series reflected POTU in 2000-2017 collected by the national statistics service. Independent series reflected the adoption of tobacco control policies including tobacco taxation, smoke-free policies, and tobacco pack health warnings. Independent variables had ordinal format to characterize the level of adopted policy and binary format to denote the year of policy introduction.

## Results

All the considered population groups were responsive to tobacco taxation. POTU showed delayed decreases next year after the new level of tobacco taxation was achieved. This POTU change per average tax increase reached -1% for all, almost -2% for men and -0.4% for women. Sharp declines in tobacco affordability caused immediate reactions of similar size in all groups which were more obvious in men and more affluent groups. Introduction of new health warnings (stronger textual in late 2006 and pictorials in 2012) caused immediate reactions more expressed among men and poorer population groups. Smoke-free policies introduced in 2006 and 2012 did not reveal associated changes in POTU which could be masked by contemporary policies.

## Conclusions

ITS analysis of POTU data in Ukraine shows the predominant impact of tobacco taxation on all population groups and the impact of health warnings on men and poorer smokers.

**Tob. Prev. Cessation 2019;5(Supplement):A13**

**DOI: 10.18332/tpc/105222**

## Organizational and financial analysis of Polish tobacco control programme in years 2000-2017

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## Introduction

Funding tobacco control activities in Poland up to 2017 was legally based on the Art 4 of the Act on the Protection of Public Health against the Effects of Tobacco Use of November 9th, 1995. The Act established "programme outlining health, economic and social policies aimed at reducing tobacco use" which working name is The Programme on Reducing Health Consequences of Tobacco Smoking (PRHCTS).

## Methods

The subject of the analysis was the The PRHCTS in years 2000-2017. The documents describing the programme were compared with the guidelines for health policy program (HPP) developed by the Agency for Health Technology Assessment in Poland (AHTAPol) and the Article 12th of the WHO Framework Convention on Tobacco Control. Additionally, the financial analysis of spendings on the programme was performed.

## Results

The PRHCTS in years 2000-2017 did not comply with the

AHTAPol guidelines as well as with the Article 12th of the WHO FCTC. The programme did not have indicators which could stimulate effectiveness. Furthermore, the PRHCTS was heavily underfinanced. The spendings on tobacco control in recent years did not exceed 1% of value indicated in the law.

## Discussion

Although Poland achieved significant reduction in daily smoking prevalence among people aged 15+ from 33% 1999 to 24% in 2015 the recent report of the Polish Supreme Audit Office states that PRHCTS does not result in change in smoking rate and does not prevent worsening in age structure of smokers.

## Conclusions

The Tobacco Control Programme in Poland was not created, conducted and financed in an effective way. That could result in slower change in smoking rates and can be seen as a missed opportunity in fighting tobacco use.

**Tob. Prev. Cessation 2019;5(Supplement):A14**

**DOI: 10.18332/tpc/105278**

## What can motivate smokers to quit? Results from Russian Tobacco Control Policy Evaluation Survey

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## Introduction

The Russian State Tobacco Control policy aims at decreasing the prevalence of smokers by means of preventing taking up smoking and motivating smokers to quit. The aim of this study is to analyse the quitting intentions of smokers under the Russian tobacco control law and factors that could motivate them to quit.

## Methods

Cross-sectional data from Russian Tobacco Control Law Evaluation Survey (2017-2018) are analysed, based on multistage random national representative sample of 11625 adult respondents, stratified by smoking status: 6569 smokers, 2377 former smokers, 2679 never smokers, in 10 Russian Federal subjects, interviewed with questionnaire comparable with the one of ITC Project. Data are compared with the results of 'EURESTPLUS ITC Europe Surveys'.

## Results

Significant majority of smokers (56.6%) had signs of high tobacco dependence and 81.4% of smokers considered themselves dependent on tobacco. 50.9% of the smokers were convinced that quitting smoking is difficult or very difficult, only 14.0% had clear intentions to quit, 51.9% - were somewhat willing and 34.1% - had no willingness to quit.

Accordingly, only 7.3% were planning to quit within one month, and 13.9% - within 6 months, which was lower than in England and the same/lower than in the Netherlands, but higher than in other 6 countries. 32.4% of smokers had planned to quit sometime beyond six months, and 46.4% - had no quitting plans at all. Similarly, this was higher than in England and the Netherlands, the same as in Romania, and lower than in the rest of the countries. The most powerful potential stimuli for quitting smoking were the concern for personal health (for 52.4% somewhat and 36.3% very much important) and being told of having a smoking related

illness: (39.6% and 42.2% respectively). Those were followed by reasons for family values, like the influence of family and friends (49% and 25.2%), setting an example for children (45.2% and 28.4%), planning or expecting a child (33.5% and 36.3%) and concerns about the health of the others (51.6% and 17.4%). From the legislative measures most of all could motivate smokers to quit prices of cigarettes (41.5% somewhat and 22.4% very much).

Doctor's advice to quit could motivate about 52% of the smokers, possible availability of medication as well as restrictions at work and societal disapproval – about 48% of smokers. The least number smokers would be impressed by availability of quitlines and warning labels on cigarette packages (32.1% and 35.9% respectively).

### Conclusions

General intention to quit among smokers in Russia is still low, and for the majority of smokers having smoking related diseases is the most powerful motivational factor to quit. Data should be used to better shape Russian Tobacco control policy interventions.

### Funding

Our research was provided by the Ministry of Health of Russian Federation.

**Tob. Prev. Cessation 2019;5(Supplement):A15**

**DOI: 10.18332/tpc/105280**

## Are smokers in the European Union actually “hardening”? A multi-level and ecological approach

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### Introduction

Tobacco control policies are proven to reduce smoking prevalence. It has been suggested that tobacco control measures are less effective where smoking prevalence has significantly declined, as the remaining smokers have “hardened”. Our aim was to empirically evaluate the “hardening hypothesis” at the population-level in the European Union and analyse the determinants of hardcore smoking.

### Methods

We conducted two separate analyses in the 28 EU Member States using data on smoking from the Eurobarometer surveys (2009-2017, n=110,241); a multilevel logistic regression analysis with two levels (individual and country) with hardcore (daily smokers, smoking  $\geq 15$  cigarettes per day [cpd] that have not attempted to quit in the last 12 months) and light (<5 cpd) smoking as dependent variable and time as the main independent variable, controlling for individual (sex, age, education, difficulties to pay the bills, marital status, type of community) and ecological (GDP and Tobacco Control Scale score) variables. At an ecological-level, we conducted a panel-data fixed-effects linear regression to investigate changes over time in the percentage of hardcore

smokers in relation to standardized smoking prevalence at the country level.

### Results

We studied 29,010 current smokers (43.8% hardcore and 14.7% light smokers). The odds of being a hardcore smoker were increased over time in middle-age men and people with difficulties to pay the bills. The odds of being a light smoker significantly declined among women over time (OR=0.98, 0.96-0.99 per calendar year). At an ecological-level, the prevalence of hardcore smoking among adults increased by 0.55 (0.14-0.96) percentage points per each additional percentage point in the overall increase in smoking prevalence.

### Conclusion

Our study does not support the “hardening hypothesis” in the EU between 2009 and 2017 but rather suggests a softening of the smoking population. Existing tobacco control policies are likely to be suitable to further decrease smoking prevalence in Europe.

### Funding

AF, CM and EF were supported by the Ministry of Research and Universities from the Government of Catalonia (2017SGR319). AF has received financial support through the “Fundació Pedro I Pons” Grant from the University of Barcelona, Barcelona, Spain. EF was also supported by the Instituto de Salud Carlos III, Government of Spain, co-funded by the European Regional Development Fund (FEDER) (INT16/00211 and INT17/00103). CM was also supported by the Instituto de Salud Carlos III, Government of Spain, co-funded by the European Regional Development Fund (FEDER) (INT17/00116) and Ministry of Health from the Government of Catalonia (PERIS No 9015-586920/2017).

**Tob. Prev. Cessation 2019;5(Supplement):A16**

**DOI: 10.18332/tpc/105311**

## Utilizing Human Rights Norms to Advance Tobacco Control: Translating Discourse into Praxis

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### Introduction

Several literatures have discussed how human rights (HR) and the Framework Convention on Tobacco Control (FCTC) reinforce each other, propounded the use of HR-based approaches and tools to advance tobacco control (TC), and suggested the need for governments to safeguard public health based on legally-binding HR norms.

### Methods

The authors compared case studies on HR/TC with highly publicized HR concerns (e.g., women, children, environment, killings), and examined patterns driving civil society organizations (CSOs) to succeed in using HR mechanisms in order to guide TC advocates to translate the HR/TC discourse into praxis.

### Results

The paper lists countries with strong HR bodies and active CSOs where the potential of TC to tap HR mechanisms have yet to be fully tapped. Currently, HR discussions in health are focused on health rights (e.g., access to healthcare). People's right to be protected from tobacco harms is invariably ignored in HR reporting. Even shadow reports hardly make a case for HR/TC.

Policy reform as a result of HR reporting vary on a case to case/country basis but the potential for raising awareness among non-health sector is increased for matters included in such reports.

### Conclusions

There are “low-hanging fruits” in certain countries where HR infrastructure is robust and where plugging in TC is an efficient way to raise the profile of FCTC/TC and to encourage TC policy reforms. TC advocates need to engage HR groups and join the discourse on the link between HR and Sustainable Development Goals (SDGs).

**Tob. Prev. Cessation 2019;5(Supplement):A17**

**DOI: 10.18332/tpc/105173**

## ECPC SYMPOSIUM

### Smoking cessation in cancer patients: a review of the evidence

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#### Introduction

Smoking cessation (SC) has rarely been recommended by oncologists in Europe. Many believe it is too late to matter or perceive that patients will not be receptive to SC. Main aims of this paper are to review the evidence of health benefits from SC among cancer patients, and to identify strategies to approach SC among cancer patients, and, more in general, among people who are exposed to clinical encounters at any healthcare service.

#### Methods

To collect and summarize articles and reviews on health benefits of SC in cancer patients, and on strategies to approach smokers in healthcare services.

#### Results

A growing body of literature has identified substantial health benefits from SC in cancer patients including improved general health, improved all-cause and cancer-specific mortality, reduced toxicity, greater response to treatment and decreased risk of disease recurrence and second primaries.

In Europe, ascertainment and treatment of smokers in Oncologic Departments and in all healthcare services is not well embedded in service designs, patient pathways or disease treatment guidelines, and typically use opt-in designs. Systems in which smokers are systematically identified and offered treatment on an opt-out basis approximately doubles quit rates achieved by opt-in approaches.

#### Conclusions

By systematically offering SC in Oncologic Departments, cancer patients in Europe will achieve the best possible health benefits from their cancer treatments. Framing SC as a quality of care issue will be a critical point in order to promote SC in Oncologic Departments.

**Tob. Prev. Cessation 2019;5(Supplement):A141**

**DOI: 10.18332/tpc/105176**

### Smoking cessation in female lung cancer patients- the need for a personalized approach

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Actually, there is a major deficiency worldwide in smoking

prevention and cessation programs addressing women.

Lung cancer is the most common cause of death from cancer worldwide; it is the third deaths cause in Europe after breast and prostate cancer. Lung cancer has different characteristics in women and in men; in women that smoke adenocarcinoma is more common. There is a difference in the behavior, prognosis and response to treatment in non-small cell lung cancer by sex and by hormonal status. Quitting smoking was associated with a reduction in mortality.

Women are affected differently than men by tobacco consumption: the fear of weight gain is higher, smoking is practiced as an antidote to negative feelings or as a “time-out”, the socio-sensorial context has a greater impact on the addiction of women than nicotine, suggesting that the use of nicotine substitution therapy will have a low impact on this category of smokers. Women also give up smoking harder due to: a differentiated response to nicotine, lack of social support, depression and a specific hormonal configuration. More smoking relapses are described in women; also a differentiated correlation with tobacco exposure biomarkers<sup>1</sup>.

That`s why there is a great need for a more personalized approach in this field, focused on the specific aspects of female tobacco consumption and cessation and on characteristics of lung cancer in females.

1. Trofor A, Petris O, Trofor L, Man MA, Filipeanu D, Miron R. Biochemistry in assessing tobacco exposure - smokers versus non-smokers -correlations with clinical practice. *Revista de Chimie*. 2017. 68(5):1002-1006.

**Tob. Prev. Cessation 2019;5(Supplement):A142**

**DOI: 10.18332/tpc/105166**

### Tobacco Cessation in Cancer Patients

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Smoking is the major risk factor for several types of cancers and is responsible for 35% all cancer types and for 80% of head-neck and lung cancers. Persistent smoking in the cancer patients reduces the effectiveness of chemo and/or radio treatments, increases perioperative risks, the toxicity associated with cancer treatments, increases the risk of recurrence, and reduces survival time. Despite all these known negative effects, a high percentage of cancer patients who smoked at the time of diagnosis do not quit when diagnosed or during their treatment. Rates differ from type of cancer and geographic area, but 25% to 34% of cancer patients who smoked before the diagnosis continue to do so afterwards. Cancer patients who continue to smoke after diagnosis show higher rates of nicotine dependence, low self-efficacy, higher levels of depression and/or anxiety. Nevertheless, smoking cessation after cancer diagnosis is associated with better clinical outcomes. Thus, developing tobacco cessation interventions is a key tertiary prevention strategy that could improve cancer patients' health conditions. However, smoking cessation interventions are not well spread among cancer health care services. Only 40-60% of cancer patients who smoke report having been told to quit by

their health providers, demonstrating the low level of assistance of oncology providers in providing support to quit. As a result, cancer patients are not receiving the necessary support to quit in a relevant and “teachable moment”. There is a need to design interventions that could help patients recognize their specific risks of smoking during and after cancer treatment. Specific strategies to promote cessation among cancer patients include: to train health providers in smoking cessation, to identify mechanisms to integrate cessation into cancer treatment programs and, to develop methods to improve tobacco cessation efficacy among these patients.

**Tob. Prev. Cessation 2019;5(Supplement):A145**

**DOI: 10.18332/tpc/105593**

## Smoking cessation in cancer patients in France

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Fifty years ago, no action was taken in France against smoking in the context of cancer.

In 1987 with Pr Tubiana, oncologist, who will also later found the French Alliance against tobacco, President Mitterrand with the European Commission launched the first program (1987-1989) Europe against cancer. Article 1 and 2 of the European Code Against Cancer ask to don't smoke and promote smoke-free home. This program widely developed in France only involved the prevention of cancer.

In 1999 France create its national network of tobacco cessation centers (1 / 100,000 inhabitants), but without specific program for cancer patients.

In 2002 president Jacques Chirac, “declares the war on tobacco” by launching the first Cancer plan. Alongside taxes increases, this plan also clearly included smoking cessation.

In 2006 the decree Bertrand put an end to passive smoking with the French ban.

In 2013 the National Cancer Institute (INCA) has developed a series of tools for the management patients with cancer who smoke. A literature review showing the benefit of stopping smoking for cancer patients in terms of survival time, quality of life, the results of surgery, certain radiotherapy and chemotherapy and wished that the cessation of tobacco be included in the standard care. Theoretically each patient supported in one of the 700 cancer centers licensed for cancer surgery, chemotherapy and radiotherapy was questioned about his smoking and nicotine replacement is proposed to all smoker without delay. The management of smoking is planned as other care need for cancer. All guideline from HAS incorporate smoking cessation as an essential treatment of cancer.

All the drugs and medicals fees for smoking cessation are free of charge (for > 98% of the French population). INCA is the France health agency that has the most open attitude towards the e-cigarette.

But in 2019 it is possible to perceive ambulance drivers or other medical personnel smoking in white coats in certain outdoor spaces of a cancer center and oncologist not enough proactive to treat tobacco dependence of cancer patients. Good rule is not enough, France need also good daily practice.

**Tob. Prev. Cessation 2019;5(Supplement):A143**

**DOI: 10.18332/tpc/105425**

## Cancer patients who smoke – care options. A challenge and an opportunity for tobacco control

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When a smoker becomes cancer patient loses every appeal for the market of tobacco products. We never read about programs or initiative of cigarette manufacturers to help smokers to live with cancer and to face with treatments. To be a cancer patient and to remain a tobacco consumer means to live in a very critical situation. The social stigma represents the smoker like the only person who choose consciously the risk of cancer and worse when also during the cancer treatments he is not able to cut the chain of tobacco addiction.

Italian cancer centres usually don't take specific care of cancer patients who smoke: NRT is available only in a few hospitals and other smoking cessation treatments and counselling are not dispensed with the National Health System.

The patient who smokes is a very fragile person and we identify three main areas to develop his care:

- 1) Telling facts: today it is not adequate to recommend to stop smoking. Patients who smoke must know how smoking impacts the prognosis of her/his disease, in the outcome of surgery and in the efficacy of radiotherapy and drugs treatments.
- 2) Offering sensitive and effective smoking cessation like an instrument of patient's empowerment that gives the possibility to achieve better QoL.
- 3) Assisting for nicotine withdrawal symptoms patients who want to stop or reduce smoking and also patients unwilling to quit.

### Conclusion

Cancer patients who smoke are the principal victims of tobacco epidemic and the alliance with them can enforce an effective tobacco control policy.

**Tob. Prev. Cessation 2019;5(Supplement):A144**

**DOI: 10.18332/tpc/105556**

## The role of urologists in smoking cessation: what they can do for urological cancer patients

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### Introduction

Tobacco use is the most preventable cause of death, including death from cancer. Smoking is a well-known risk factor for various cancers, including bladder cancer (BCa). BCa is the most common malignancy of the urinary tract, the seventh most common cancer in men worldwide, and eighth most frequent cause of cancer-specific mortality in Europe. Smoking has been well documented as a risk factor for BCa, incidence and the factor that worsens BCa treatment outcomes and prognosis.

### Study aim

To evaluate the need and a potential of smoking cessation interventions that urologists can perform in their medical practice for patients with cancer of urinary or urogenital tract.

### Methods

A search of recent literature was conducted using the MEDLINE

data base and the Internet, as well as resources from well-known health, cancer and tobacco control organizations.

### Results

Smoking cessation is proved to be one of the most effective primary and secondary preventive methods in cancer patients, however, in medical practice is still used in limited extent. Among cancer patients is mostly advised to those with lung, laryngeal or oral cancer. National health surveys show that even general practitioners (GPs) do not advise and assist their patients in quitting smoking on regular basis (such advice is usually provided to only 40-50% of smoking patients). Urologists tend to do it in medical practice much less often than GPs. A large study that examined the practice patterns of American urologists, including their smoking cessation assistance for patients with BCa, showed that over half of urologists never discussed smoking cessation and only one of five always had a talk with his BCa patient on smoking cessation. It mainly resulted from big loopholes in their knowledge and beliefs on smoking as serious risk factor in cancer of urinary tract and lack of education and professional training in smoking cessation. This paper discusses what can be done to involve urologists in smoking cessation counselling and proposes a new 5As-based scheme of brief intervention tailored to the needs of BCa cancer patients.

### Conclusion

Urologists who treat patients with disease of urinary or urogenital tract, patients at the risk of cancer or diagnosed cancer patients may play an essential role in helping their patients cease smoking. Their cessation efforts should be focused on cancer patient-tailored brief intervention and collaboration with specialized smoking cessation resources.

**Tob. Prev. Cessation 2019;5(Supplement):A146**

**DOI: 10.18332/tpc/105594**

## CENTRAL EASTERN EUROPE NURSES' CENTRE OF EXCELLENCE FOR TOBACCO CONTROL

### Looking back where it all started

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### Introduction

There is a need to increase awareness among nursing professionals about tobacco dependence and treatment, including brief interventions, in Central and Eastern Europe. The Czech Republic, a central European country, has 10 million inhabitants, 2,200,000 smokers (30 % of the population 15 years and older), 40,000 doctors and approximately 90,000 nurses. It is the nurses who are uniquely positioned to deliver evidence-based interventions for tobacco dependence including to patients already diagnosed with cancer.

### Methods

Report about activities of the Czech Society for Treatment of Tobacco Dependence, and what nurses achieved in tobacco control over 10 years from the initiation.

### Results

Since 2007, regular one-day "train the trainer" (TTT) workshops (taught by nurses trained in tobacco intervention) are organized for nurses about basics in tobacco control and smoking cessation methods, mainly the brief intervention and the possible role of nurses in its application in selected groups. In addition since 2012, more such activities are conducted through the collaborative project with the ISNCC as reported in another abstract. During this decade, a total of 735 nurses have participated in the TTT program, while additional 700 nurses have been trained via e-learning program in the Czech Republic.

### Conclusion

Continuing increasing interest in the tobacco control education as well as promoting positive attitudes toward smoking cessation intervention among Czech nurses can impact future trends in nursing practice. Adequate education and training is essential for nurses to be able to successfully include the short intervention into daily practice. It must be supported and widely offered in both academic and clinical settings.

### Funding

The Eastern Europe Nurses' Centre of Excellence for Tobacco Control II project was made possible through a grant from the Bristol-Myers Squibb Foundation to the Society for Treatment of Tobacco Dependence.

**Tob. Prev. Cessation 2019;5(Supplement):A18**

**DOI: 10.18332/tpc/105319**

### Smoking cessation training for health visitors in Hungary

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The EE-COE project in Hungary has increasingly turned the attention to healthcare professionals' smoking cessation education. It has been realized that there is great need to increase the number of dedicated individuals who would promote smoking cessation and could reach diverse members of local communities. The Hungarian team's newest focus is getting health visitors involved in cessation counselling, since they have perhaps the easiest access to the population, including children, youth, expecting mothers and through them, the entire family.

The health visitors' network is a unique institutional organisation of maternity and infant protection in Hungary which serves health maintenance and health promotion of families. Although health visitors are obliged by law to conduct brief intervention to expecting mothers, they usually lack the skills and the practice. A pilot training was designed to be held in Szabolcs-Szatmár-Bereg county. The population's socio-economic status here is generally lower compared to most other areas in the country and both overall and expecting mothers' smoking rate is high. For many, smoking is a learned behavior influence by the family.

The two-day intensive workshop was followed by a training period and a supervisory day when health visitors shared counselling experiences. The aim was to build on existing knowledge of health visitors and provide them with practical skills to aid communication, raise motivation, disseminate relaxation and relapse prevention techniques to smokers. Three trainings were held in September and were attended by 45 health visitors. Around 130 patients have been counselled already since the trainings.

The pilot was so well received that the Hungarian team has been contacted by the neighbouring county who are interested in bringing the program to their region. The above and data collected from the health visitors will be presented.

#### Funding

The Eastern Europe Nurses' Centre of Excellence for Tobacco Control II project was made possible through a grant from the Bristol-Myers Squibb Foundation to the Society for Treatment of Tobacco Dependence.

**Tob. Prev. Cessation 2019;5(Supplement):A19**

**DOI: 10.18332/tpc/105316**

### Starting the first tobacco control for and by nurses in Moldova - lessons learnt

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According to World Health Organization data, smoking is a major global cause of preventable population mortality, which is one of the main challenges for public health and demographic security. Smoking is a problem of modern society and annually produces more victims than AIDS, alcohol, drug abuse, traffic accidents, crimes, suicide attempts, and is one of the first causes of preventable deaths.

For the past few years, because of increase of smoking, overall mortality in Republic of Moldova is two times higher than in European countries. Non-communicable diseases, having smoking as one of the risk factors, is the cause of about 87% of overall mortality. Cancer, for example, accounts for about 11% of overall mortality, and cardiovascular diseases - about 60%.

A special role in the tobacco cessation have nurses, which make up the largest number in the health system, and are the most frequent professionals that face patients, provide 24/24 services in medical institutions, and are important people who contribute to reducing the number of smokers. As nurses, our aim is to do what we can to improve the health of the patient in front of us, in the time that we have together. We do our best to address the most urgent issues, and tobacco cessation is one of them.

The Nursing Association of Moldova was included in the project Eastern Europe Nurses' Centre of Excellence for Tobacco Control – Developing Nurse Champions for Tobacco Dependence Treatment (EE-COE II) in 2017 in achieving the objectives proposed in its activities.

During this time were trained a large number of nurses in the Republic of Moldova as trainers leaders in tobacco cessation. In turn, these trainers trained other nurses about the risk of smoking and its interventions. They organized activities in schools, military units, hospitals and in public places. Thanks to their activities, they managed to improve the understanding of the population about smoking by distributing informative materials and the Guidelines for tobacco cessation. The implementation of the in-person workshop program has modified and improved the practice of health care providers in tobacco cessation.

The issue of tobacco use is becoming an important public health problem. Tobacco research is an attraction for researchers, the field that still has many unknown data involving a complex multidisciplinary approach. Currently, smoking in public places is prohibited by law in Republic of Moldova.

In conclusion, health professionals have a prominent role to play

in tobacco control. They have the trust of the population, the media and opinion leaders, and their voices are heard across a vast range of social, economic and political arenas. At the individual level, they can educate the population on the harms of tobacco use and exposure to second-hand smoke. They can also help tobacco users overcome their addiction. At the community level, health professionals can be initiators or supporters of some of the policy measures, by engaging, for example, in efforts to promote smoke-free workplaces and extending the availability of tobacco cessation resources. At the society level, health professionals can add their voice to national and global tobacco control efforts like tax increase campaigns and become involved at the national level in promoting the WHO Framework Convention on Tobacco Control. In addition, health professional organizations can show leadership and become a role model for other professional organizations and society.

#### Funding

The Eastern Europe Nurses' Centre of Excellence for Tobacco Control II project was made possible through a grant from the Bristol-Myers Squibb Foundation to the Society for Treatment of Tobacco Dependence.

**Tob. Prev. Cessation 2019;5(Supplement):A20**

**DOI: 10.18332/tpc/105318**

### The role of Romanian Nursing Association in promoting and supporting smoking cessation

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#### Introduction

Nursing association have an important role in improving leadership, developing and implementing projects, organizing workshops, seminars. conferences, for develop nursing and for educate nurses. The ICN Code of Ethics for Nurses affirms that health promotion and illness prevention are among the fundamental responsibilities of the nurse. Nurses remain key to providing the individual help and support necessary to combat smoking.

#### Aim and Objectives

To train nurses leaders and nursing students in tobacco control and treating tobacco addiction.

Nurses and nursing students need:

- to be aware that need to make prevention, because tobacco use is the cause of more diseases, and also it is preventable
- to know the risks of tobacco use and the benefits of quitting smoking, including financial ones
- to know their role as a health educator
- to be role model for their colleagues, for patients and their families
- to know brief interventions
- to educate colleagues, patients and their families

#### Methods

- PPT Presentation, Application questionnaires, Fagerstrom test
- Workshops
- Minigrants
- Seminars
- Public Events
- Street event
- Measuring the amount of CO from exhaled air with Smokerlyzer

## Conclusions

Nurses and nursing students gained the knowledge in the field of tobacco. By applying for fundraising and developing minigrants nurses have demonstrated leadership and manager skills. Students in nursing have demonstrated their qualities as good communicators and educators for health in their relationship with the public from the street. The Library of the Nursing Association is enriched with materials: Guide for nurses, brochures, leaflets.

**Tob. Prev. Cessation 2019;5(Supplement):A21**

**DOI: 10.18332/tpc/105312**

## Tobacco control among health professionals from the perspective of an educational institution—nurses' awareness of the importance of non-smoking behavior and the role of the Angela Boškin Faculty of Health Care (Slovenia) in endorsing a non-smoking policy

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<sup>1</sup>Angela Boškin Faculty of Health Care, Slovenia

### Introduction

In Slovenia, smoking as a risk factor is the leading preventable cause of death. Each year, almost 3,600 inhabitants of Slovenia die of smoking-related illnesses, which is almost 10 a day; of these, one in four die before the age of 60. Almost a quarter of the adult population of Slovenia smokes, and smokers mostly took up the habit as early as their teenage years. Most of them smoke regularly, on a daily basis (National Institute of Public Health – NIPH, 2018). Restriction on the Use of Tobacco and Related Products Act (ZOUTPI, 2017) states that, in Slovenia, tobacco heating products may not be sold to persons younger than 18, it is prohibited to sell them from vending machines, online or through any other means of telecommunication or evolving technologies, also prohibited are cross-border distance sales of these products, their advertising, exhibiting, promotion and sponsorship, they may not be used in enclosed public spaces or at work premises, and must contain written health warnings. All venues selling such products must, from the end of 2018 onwards, possess a vending permit issued by a competent authority (NIPH, 2018). The prevalence of tobacco use is becoming a major issue also among health professionals (Smith & Leggat, 2007). Health professionals who smoke cannot provide appropriate health education and tobacco cessation counselling by setting an example as they are hindered in this by their own smoking (Tong, et al., 2010). By acting as role models and promoting non-smoking behavior, health professionals can significantly contribute to reducing tobacco use. According to previous research findings on the prevalence of smoking among nurses and other health professionals, different work methods should be implemented to increase the knowledge, responsibility and awareness of health professionals on non-smoking behavior and on educating patients about tobacco cessation. A national cross-sectional study among nurses—the largest group of health professionals—, nursing assistants and midwives showed that smoking remains all too frequent among these professional groups, a fact which may impact their calling, promotion of non-smoking behavior, and assistance in smoking cessation (Koprivnikar, 2013).

As a faculty, we are well aware of the importance of promoting non-smoking behavior and endorsing non-smoking policy in our

educational processes, as smoking is common also among nursing students—a fact which has drawn attention internationally. It is clear that health faculties must be aware of this issue and provide support in getting their students to quit smoking. Researchers have found that most students desire to quit smoking and faculties should support them in their endeavors, encourage them and raise awareness. One idea is to form work groups with members including both lecturers and nursing students (Durkin, 2008). Considering the prevalence of smoking and a high smoking rate among nursing students, there is an urgent need for implementing effective measures to increase quit rates among nursing students (Biraghi & Tortorano, 2010). Compared to other countries, Slovenia does not have as extensive research on nursing students' psychological distress and their use of licit drugs. It is a known fact that self-image, positive opinions and role-model behavior contribute to the effectiveness of health education work. Health professionals should set an example by not consuming alcohol or using tobacco products because that is the only way to encourage patients to quit smoking and stop consuming alcohol. Medical faculties and other health faculties should ensure their students have all the knowledge available about the dangers of smoking to health.

The main aim of the study was to determine nurses' opinions on the importance of their own non-smoking behavior and their self-assessed competency for implementing health education workshops in tobacco control.

### Methods

A quantitative study design was employed and a structured questionnaire was used as a research instrument. The study was conducted among nurses who participated in the Tobacco Control project workshops in the period 2017-18. A convenience sample was used. The study included 79 nurses who participated in the workshops. The questionnaire was filled out by 66 nurses (a response rate of 83.5%). The obtained information was analyzed using statistical software SPSS 20.00.

### Results

Study results revealed that, of all the nurse respondents, 5 (7.6%) were active smokers. Of these, 3 (4.5%) smoked on a regular basis (daily). A total of 20 respondents (30.3%) reported having smoked 100 or more cigarettes in their lives. Of the active smokers, 4 (6.1%) expressed a desire to quit. The results showed a unified, stable and positive opinion on the impact of nurses' own smoking status and role-model behavior ( $M=1.4$ ;  $SD=0.7$ ), on the role of nurses in actively assisting patients to quit smoking ( $M=1.4$ ;  $SD=0.8$ ), and the need for additional education in tobacco control ( $M=1.5$ ;  $SD=0.8$ ).

### Conclusions

Our study revealed that nurse respondents are aware to a high degree that their own smoking status affects their calling, their work in health promotion, their promotion of non-smoking behavior, and assistance in smoking cessation, which can certainly represent an obstacle in effective implementation of tobacco control activities. It is crucial to increase nurses' knowledge, responsibility, and awareness in terms of non-smoking behavior and patient education on smoking cessation by implementing various work methods such as the workshops conducted as part of the Tobacco Control project. It is important to remember that every health professional plays an important role in tobacco control activities and that their actions also influence their professional reputation. According

to our findings on the importance of nurses' smoking status, we suggest active participation and inclusion of professional health workers' associations in the effort to lower smoking rates and provide support to health professionals in smoking cessation. Health workers' associations are advised to promote the culture of non-smoking among their members at various meetings and events, thereby encouraging a non-smoking policy through all their activities.

Undoubtedly, educational institutions for future health professionals also have an important role on raising awareness about the dangers of smoking. Students must be made aware of all the dangers, risks and risk management strategies connected to smoking. Furthermore, we suggest the formation of work groups with lecturers and other professional staff members who can provide support in smoking cessation to both health professionals and students.

As part of the Tobacco Control project, the Angela Boškin Faculty of Health Care has implemented e-learning with 97 nurses, conducted four workshops with a total of 79 nurse participants, and awarded seven Mini Grants. Nurses who participated in the workshops gave short seminars to raise awareness among nurses and patients. As a result of the project, a big emphasis was placed on raising awareness on the adverse effects of smoking among students. Five promotional activities were conducted which included 150 nursing and physiotherapy students. Under the guidance of mentors from the Angela Boškin Faculty of Health Care, students held a health education lecture on the detrimental effects of smoking for hospital patients. The lecture was attended by 10 patients and two employees. Moreover, students helped raise awareness among passers-by at a shopping center stand.

As an educational institution, we are aware of how important it is to promote non-smoking behavior. This is why we encourage students to prepare posters and stands for the World No Tobacco Day and the International No Smoking Day, raising awareness on the dangers of smoking.

**Tob. Prev. Cessation 2019;5(Supplement):A22**

**DOI: 10.18332/tpc/105317**

## Thursday 28 March 2019

### PLENARY

#### Chain reaction: The link between Tobacco tax law/policies and illicit trade

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#### Introduction

Studies have shown the inextricable connection between the increase in tobacco taxation and the reduction of illicit trade in tobacco products. The tobacco industry, however, continues its crusade to deny the relation between the two, purporting that taxation opens up any market and border to illicit trade. Notwithstanding, taxation is deemed to be the most critical strategy to tackle the problem of illicit trade in tobacco products. It is therefore essential for governments to implement appropriately designed policies or enact legislation imposing tobacco fiscal policies in order to strategically take advantage of the benefits to be derived.

#### Methods

Country specific research and experience, augmented by global evidence, were analysed to uncover the importance of a strong legal framework, driven and supported by political will, in tackling illicit trade in tobacco products.

#### Results

Properly imposed and systematic tax increases with effective enforcement will substantially reduce tobacco consumption overtime. Jamaica's experience has seen an increase in Specific special consumption tax rate for cigarettes between 2005 and 2017 (i.e. from \$1,920 per 1000 sticks in 2015 to \$17,000 per 1000 sticks in 2017) which has resulted in consequential decline in illicit trade, despite arguments to the contrary by the tobacco industry.

#### Conclusion

The link between tobacco taxation and a decline in illicit trade is undeniable. While political will is the engine needed to drive the implementation of fiscal policies, enforcement and collaboration across various sectors of government and civil society are required to effectively tackle illicit trade and accelerate its decline.

**Tob. Prev. Cessation 2019;5(Supplement):A23**

**DOI: 10.18332/tpc/105233**

#### Using ISO 22382 (Tax Stamps) as a Means to Reduce Illicit Trade in Tobacco Products

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I was ISO's Project Leader on ISO 22382, Guidelines for the content, security, issuance and examination of excise tax stamps, the new guidance standards for tax stamps. In this paper I will run through the content of this standard and explain how tax authorities and tax stamp suppliers can adopt its recommendations to counter tobacco product fraud such as smuggling, diversion and counterfeiting.

The Standard explains why the use of anti-fraud features on tax stamps requires consideration of the three-way relationship between the authentication feature, the tools required to examine it and the examiner using those tools. In other words, the importance of considering the examiner in the field when specifying tax stamps. It also describes the function of the unique identifier, explaining how this can be applied to the stamp and taxable products to provide the means of tracking and tracing. I will show the practical implications of this in implementing the requirements of the Standard to reduce illicit trade and increase excise tax revenues.

In conclusion, I will show how tax stamps designed to meet the guidance in this Standard comply with the requirements of the FCTC Protocol and the EU TPD, thus allowing tax and health regulation authorities to save money by adopting what amounts to a dual-function stamp.

**Tob. Prev. Cessation 2019;5(Supplement):A24**

**DOI: 10.18332/tpc/105189**

#### How did Georgia handle illicit tobacco trade: update

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#### Introduction

In lower- and middle-income countries, limited research exists on

illicit tobacco trade and its responsiveness to taxation. Tobacco taxes are critical in reducing tobacco consumption, thereby improving public health. However, the tobacco industry claims that tax increases will increase illicit tobacco trade. Therefore, research evidence on the size of illicit cigarette market is needed in Georgia and other low- and middle-income countries to inform tobacco tax policies.

#### Methods

In 2017, a household survey using stratified multistage sampling was conducted in Georgia with 2997 smokers, to assess illicit tobacco consumption. Smokers were asked to show available cigarette packs to the surveyors. These were examined for tax stamps and health warnings which allowed for an assessment of illegal cigarette consumption in Georgia.

#### Results

The packs shown to surveyors suggest illicit cigarette trade is low (1.5%), albeit with regional differences, as illicit cigarette packs were present in 6% of the households in Zugdidi. Most illicit cigarettes were purchased at kiosks or informal outlets. This estimate might be conservative, as 28% of respondents did not show any packs to the surveyors.

#### Conclusions

Despite recent tobacco tax increases, illicit cigarette trade in Georgia seems to be negligible. The market is more vulnerable to illicit cigarette trade close to the border with Abkhazia (near Zugdidi). Tighter control of or ban of tobacco sales at kiosks and informal outlets may reduce illicit cigarette trade. Further investigation is planned to better understand why a large proportion of survey participants said they had no pack available at home.

**Tob. Prev. Cessation 2019;5(Supplement):A25**

DOI: 10.18332/tpc/105141

## HEATED TOBACCO PRODUCTS: THE WRONG TOBACCO SOLUTION TO A REAL TOBACCO PROBLEM? ERS SYMPOSIUM

### Cost, affordability and market share of heated tobacco products

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Heated tobacco products (HTPs), especially IQOS, have been aggressively promoted by the tobacco industry in recent years and they are increasing in popularity in several markets. Using data from the Euromonitor International Passport database collected in December 2017, we compared the price of 20 HEETS sticks with the price of 20 conventional cigarettes (Marlboro) in each country and estimated the affordability of HEETS and IQOS heating devices across 32 countries. We also estimated the Pearson correlation coefficient between the HEETS-Marlboro price difference and the market share of IQOS in each country. We found that price and affordability of IQOS varies across countries. In most, but not all countries, the cost of 20 HEETS was similar to the cost of 20 Marlboro cigarettes. Market share was below 1% of the total tobacco market in almost all countries, although Japan had the highest market share at 14.28%. IQOS is marketed by Philip Morris International at similar prices as Marlboro cigarettes, their most popular brand of conventional

cigarettes. Market share of IQOS was still low in most countries in 2017 and its success in certain market cannot be explained by price differences between HEETS and conventional cigarettes.

**Tob. Prev. Cessation 2019;5(Supplement):A26**

DOI: 10.18332/tpc/105160

### Marketing communications from the tobacco industry for nicotine intake: "Old habits die hard"

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Tobacco kills more than seven million people each year and if smoking patterns continue, by the end of the 21st century the death toll will rise to a total of 1 billion tobacco-related deaths. New nicotine consumption methods have arisen on the market such as ENDS and heated tobacco products. Although various researches have shown that these new products' marketing communication strategies have followed the footsteps of the traditional tobacco advertising in the case of the messages' themes, they have mainly moved to specific communication channels, Internet, social networks and "publicity" being the most important ones, often through public relations events. This is especially relevant in the case of IQOS, the heated tobacco product from Philip Morris International, that is moving fast to strategies of merchandising with shops that look more like Apple stores than tobacco ones as well as very active campaigns of personal selling and public relations. Tobacco control organisations should be aware of these forms of transmitting information to consumers as well as the themes used to persuade them if they want to avoid new nicotine addiction pandemics.

**Tob. Prev. Cessation 2019;5(Supplement):A27**

DOI: 10.18332/tpc/105205

### The harm reduction strategy in tobacco control - A closer look at tobacco industry tactics on heated tobacco products

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The industry has recently attempted to restore its image, by acting like a public health guardian. The industry now wants to create a smoke-free world, eliminate cigarettes, reduce tobacco-related mortality. They have showed interest in funding research, scientific meetings and publications. If tobacco industry has not decided to close down the business completely, there may be some other reasons behind this strategy. Today's customers, the Z generation, tend not to smoke. Selling classical cigarettes will not be a good business model in the very near future. The "safer" product had to be marketed. The new product is named after the acrostic of "I Quit Ordinary Smoking". The tobacco is not burnt but heated. These products are called heated tobacco products (HTPs). Surveys of tobacco industry documents showed that the tobacco industry's early HTP pursuits were primarily driven to evade smoke-free regulations and that tobacco industry's use of harm reduction was aimed to gain access to scientists, public health community and policy makers and rebuild its reputation. Tobacco industry had deceived public since 1954. In January 1954, US tobacco manufacturers jointly sponsored an advocacy advertisement entitled "A Frank Statement to Cigarette Smokers"

which appeared in 448 newspapers in 258 cities reaching an estimated 43 245 000 Americans. They said “We believe the products we make are not injurious to health. Euromonitor predicts that vapor products market is expected to grow to more than 30 billion US dollars until 2021. The top three markets by value are expected to be Japan, USA and Turkey. Tobacco industry strategy documents clearly show that they want to establish the concept of harm reduction as a legitimate public policy in tobacco regulation and marginalize the policies and advocates of extreme measures as prohibitionists. HTPs are not risk free. They are marketed by the same deceptive industry responsible for 100 million deaths in the last century. Their use could re-normalize tobacco use. There is no evidence to suggest they will reduce use of cigarettes. General obligation of the international convention urges member states to prevent tobacco use of any form.

**Tob. Prev. Cessation 2019;5(Supplement):A28**

**DOI: 10.18332/tpc/105202**

### The ERS position paper on heated tobacco products

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Emergent tobacco products such as heated tobacco remain largely unregulated in many countries menacing the progress of tobacco control achieved in the last decades. They are being aggressively marketed by the industry as products of “reduced risk” and “smoking cessation tools” or smoke-free alternatives to smoking conventional cigarettes. WHO stresses that heated tobacco products are tobacco products and are therefore subject to the provisions of the WHO-FCTC. To date, there is growing independent research showing that these products are not harmless. However, a dangerous debate has re-launched harm reduction in the field of tobacco control and is splitting scientists, the public health community and society as large. Healthcare professional organizations have a crucial role to play in tobacco control. The European Respiratory Society (ERS), as a leading medical Society, has paved the way on tobacco control advocacy in Europe and worldwide. This presentation will present the ERS position on heated tobacco products, including the evidence regarding their toxicity, addictive potential and potential impact on public health.

**Tob. Prev. Cessation 2019;5(Supplement):A29**

**DOI: 10.18332/tpc/105322**

### BUILDING THE BRIDGE FROM TOBACCO TAX RESEARCH TO EFFECTIVE TAX POLICY

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#### Objective

To present case studies of successful communication and collaboration of research and advocacy to impact tobacco tax policy. To build communication and support between economists who develop research-based evidence about the impact of tax reforms and policy makers, advocates, legal experts (media experts?). To discuss challenges and share perspectives on the feasibility of tax policy and on the needed material to support policy.

**Tob. Prev. Cessation 2019;5(Supplement):A30**

**DOI: 10.18332/tpc/105372**

### HEATED TOBACCO PRODUCTS – A GLOBAL OVERVIEW

#### Undermining of Heated Tobacco Product Regulatory Policy in the Philippines: Implications to FCTC Article 5.3 Implementation

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#### Introduction

Transnational tobacco companies’ investments in heated tobacco products (HTPs) have grown worldwide. However, the method with which HTP commercial introduction is facilitated by policies or norms is little-known. The Philippine legislative process presents a pioneering case study. The local Philip Morris International (PMI) subsidiary monopolizes the cigarette market, creating leverage for HTP rollout. The historically strong tobacco lobby and pervasive tobacco industry interference (TII) serve as important predisposing factors.

#### Methods

We reviewed all bills on tobacco product regulation in the Philippines’ bicameral Congress (July 2016 to November 2018) and cross-referenced proposed regulations with industry positions derived from a triangulated survey of literature; extensive informant interviews; and participation in legislative hearings.

#### Results

We identified 23 bills in both Lower House (LH) and Upper House (UH); 11 bills cover electronic nicotine delivery systems (ENDS). We documented sponsorship of bills with PMI draftsmanship (3 in LH; 1 in UH), all aiming preemption of “reduced exposure/risk” claim approval and the exclusion of HTPs from current pictorial requirements, tax treatment, and prohibitive advertisement/promotions/access restrictions rules. All 4 bills are filed as ENDS regulation with corresponding support from e-cigarette trade associations and consumer groups, and without ostensible tobacco industry participation.

#### Conclusions

ENDS industry espousal of PMI-oriented bills circumvents government rules against TII, necessitating more intensive measures to inform and caution policy-makers. An express prohibition in existing anti-TII regulation is needed. Globally, the authoritative recognition of the unity of interests between ENDS and tobacco industries under Article 5.3 by the FCTC Conference of Parties is warranted.

#### Funding

The research was supported by grants from the World Health Organization and Southeast Asia Tobacco Control Alliance.

**Tob. Prev. Cessation 2019;5(Supplement):A31**

**DOI: 10.18332/tpc/105144**

#### The FCTC dilemma on heated tobacco products

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#### Questions and research method

The paper asks two interrelated questions: (i) whether (and to what extent) heated tobacco products (HTPs) are covered by the Framework Convention on Tobacco Control (FCTC), and

(ii) whether legal regime provided by the FCTC is suitable in a long-term perspective for regulation of HTPs. The paper relies in its analysis on standard legal research methods (i.e. textual and sociological).

### Background

In October 2018, the Conference of the Parties (COP) adopted its first decision on novel and emerging tobacco products, including HTPs. Unfortunately, the decision has left many legal questions unanswered. For example, the preamble to the decision states that HTPs 'are tobacco products' subject to the FCTC provisions. However, at the same time, its paragraph 5 not only remains obscure as to the applicability of the FCTC but also makes a distinction between HTPs and the 'devices designed for consuming such products', reinforcing the idea that the devices need separate (and potentially looser) regulations.

### Results

The paper argues that HTPs indeed need to be legally classified as tobacco products under the FCTC. The paper also submits that the distinction made by the COP between HTPs and devices leads to unsatisfactory results as it creates loopholes in tobacco control standards. In addition, the paper contends, when addressing the normative question of suitability of the FCTC disciplines, that the answer depends not only on scientific evidence relating to health risks posed by HTPs, but also on the conceptualization of the FCTC ultimate objective(s).

### Funding

The research was funded by the Polish National Science Centre under the grant number UMO-2016/21/B/HS5/02065.

**Tob. Prev. Cessation 2019;5(Supplement):A32**

**DOI: 10.18332/tpc/105145**

## Duplicity: Heated Tobacco Products Strategy in Low- and Middle-Income Countries (LMICs): A Philippine Case Study

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### Introduction

Tobacco companies are employing the same tactics they have used for years to market tobacco "harm reduction", like heated tobacco products (HTPs) and e-cigarettes/ electronic nicotine delivery devices. Despite their harm reduction claim and attempt to repackage their image as partners in tobacco control (TC), they are duplicitous, opposing effective TC measures and capitalizing on the poor regulatory environments of LMICs. Coupled with inadequate TC measures for cigarettes and disproportionately high number of youth and poor, re-normalization of tobacco use is likely to occur. This paper examines how the tobacco industry executes its double-edged strategy to create a new market and expand the current one.

### Methods

The authors examined pending legislations, available transcripts, and observations of civil society organizations involved in policy development, and analyzed market trends in the Philippines.

### Results

Philip Morris (PM) was observed to drive weak e-cigarette regulation in the country. Despite its alleged commitment to less harm, smoke free, and FCTC, it backed less stringent reforms on

tobacco regulation (low tobacco taxes, less than "100% smoke-free" laws), and failed to recommend robust safeguards to prevent youth uptake of HTPs/e-cigarettes notwithstanding proliferation of recreational use.

### Conclusions

PM is employing a dual strategy in its positions in legislative processes, that would likely result in increase in youth or recreational use considering the country's market condition and regulatory environment. Its strategy may not be an isolated case and much can be learned from other LMICs to ensure that the global corporation and its allies are held accountable for their actions.

**Tob. Prev. Cessation 2019;5(Supplement):A33**

**DOI: 10.18332/tpc/105172**

## How does (public health) ethics address "harm reduction"?

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### Introduction

Tobacco related diseases and its global control is among prior issues of public health science. Recent threats also known as "new" products including e-cigarette, heated tobacco products, etc raise also "new" questions to be answered. Integrating ethical discussion(s) to the issue will probably widen the perspective(s) to protect the people from the risks of tobacco burden. In this presentation, it was aimed to understand how (public health) ethics discussed "harm reduction" using one scientific database.

### Methods

"Pubmed" was searched on 28th of January, 2019 with the keywords "ethics" AND "harm reduction". Total number of the articles accessed were 111. Publications were limited to the last five years (2014-2018). All of the abstracts were read and 98 articles were out of the scope because the articles were in other topic/content rather than tobacco. Only 13 articles were related with "ethics and (tobacco) harm reduction". Using only one dataset with two keywords were major limitations.

### Preliminary results

Unfortunately, majority of the articles supported "harm reduction" practice(s). No comparisons were done with the non-smokers conflicting with the public health ethics perspective. "Unclear" aspect of harm reduction was only the issue of a couple of articles, thus, no strong recommendation for eliminating tobacco smoking was raised.

### Conclusions

Ethics/public health ethics approach needs to highlight the importance of precautionary principles in harm reduction related discussion(s) clearly. Unfortunately, in the current accessed articles, such clear messages are thought to be missing. We should not forget that tobacco-free life is a basic human right for all without any discrimination.

**Tob. Prev. Cessation 2019;5(Supplement):A34**

**DOI: 10.18332/tpc/105234**

## Trend in electronic cigarettes and smokeless tobacco in Italian adolescents, Global Youth Tobacco Smoke (GYTS), 2014, 2018

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Barbara De Mei<sup>6</sup>, Susanna Lana<sup>6</sup>, Maria Masocco<sup>6</sup>, Valentina Minardi<sup>7</sup>, Claudia Mortali<sup>7</sup>, Luisa Mastrobattista<sup>7</sup>, Rosilde Di Pirchio<sup>7</sup>, Roberta Pacifici<sup>7</sup>, Lorena Charrier<sup>8</sup>, Franco Cavallo<sup>8</sup>, Fabrizio Faggiano<sup>9</sup>, Francesco Barone-Adesi<sup>9</sup>

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### Introduction

Main aim was to describe prevalence trends in Italy, 2014-2018 of tobacco cigarettes, electronic cigarettes (e-cig), smokeless tobacco (snuff, chewing tobacco, heated tobacco products), and to describe cigarettes and e-cig access from the Global Youth Tobacco Survey (GYTS).

### Methods

GYTS is a nationally representative school-based, cross-sectional survey of students aged 13-15 years. GYTS has been carrying out in 61 countries worldwide and used a standard methodology. Ten items were selected in order to describe prevalence trends and access to tobacco cigarettes and e-cig.

### Results

Ever and current tobacco use in Italy non-significantly decreased from 46.4% to 41.0%, and from 23.4% to 19.8%, respectively. Ever and current e-cig users significantly increased from 28.0% to 43.5%, and from 8.4% to 17.5%, respectively. Ever and current smokeless tobacco use in 2018 were 3.4% and 1.6%, respectively. In 2018, 68.0% and 76.0% of adolescents who were current cigarette smokers or e-cig users, respectively, reported retailers did not refuse to sell them cigarettes or e-cig because of their age; 19.7% and 15.3% of current smokers reported to buy cigarettes in stores, or in vending machines, respectively. Among current e-cig users, 10.2% reported to get e-cig from specialized shops.

### Conclusions

From 2014 to 2018 current e-cig users doubled; in 2018, current smokeless tobacco users were 1.6%. Even though sale bans to minors were implemented in Italy for cigarettes and e-cig, about 2 out of 3 tobacconists and managers of e-cig shops keep on selling their products to adolescents.

### Funding

This study was partially supported by European Union's Horizon 2020 Project TackSHS under grant agreement No 681040. This study was supported by the Italian Ministry of Health (MADES Project, chapter 4100/22).

**Tob. Prev. Cessation 2019;5(Supplement):A35**

**DOI: 10.18332/tpc/105303**

## A big new risk of iQOS use: a device that harvest personal data about users' tobacco habits

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Human being has a natural and civil right to protect his health and life. His civil right also includes protection of personal data, including those data that could have an impact on his health. Such

data are considered to be sensitive and have to be protected by law, government and all other stakeholders, including commercial companies. Personal data on tobacco habits belong to such datasets. Since May 25, 2018, any company that has processed personal data of European Union citizens is obliged to fulfill GDPR/RODO regulations related to personal data protection. There is no doubt that personal data on consumer's habits, including his tobacco behavior have to be protected by the law. The recent studies and reports warn the public that such novel tobacco products as iQOS (heated tobacco) are first tobacco products ever produced that can harvest personal data on users' tobacco habits and use them in tobacco marketing strategy. Technical reports prove that the iQOS is equipped with two microcontroller chips enable to store and transmit usage information to producer. Phillip Morris, that produces iQOS, is already building a mega database of iQOS customers who register with the company and is developing a software that strengthens these activities. Collected data include the number of puffs and average consumption per day which is crucial information for monitoring tobacco user's nicotine dependence and may help producer in manipulating with addiction potential. This paper collects available data on above risk and proposes on how to counter-act this challenge.

**Tob. Prev. Cessation 2019;5(Supplement):A36**

**DOI: 10.18332/tpc/105293**

## VOICES OF WOMEN IN TOBACCO CONTROL IN EUROPE

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Gender is one of the factors that influences patterns of smoking prevalence and the tobacco industry tactics to target both women and men. For the last couple of years, the tobacco industry continues to exploit social, cultural and economic differences between gender roles.

Tobacco use might be considered as an indicator of social, political norms and beliefs when there is a division between feminism and patriarchy, feminine rebellion or intensified femininity and masculine superiority or positive masculinity.

Modern trends that promote gender equity are becoming a foundation for tobacco marketing aimed at women and particularly young girls in Europe. On the other hand, women are not equally represented in the leadership of tobacco-control policy-making and implementation.

The tobacco industry has been constantly rebranding itself and its tools to appeal to young men and women. Mainstream tobacco control is contrary to the tobacco industry tactics has been focused on the ideas of "traditional" gender roles. Therefore, wider efforts to promote leadership in tobacco control to merge gender issues with tobacco control advocacy, policy-making, health promotion and human rights to address inequities due to gender, power, income, freedom and discrimination. More research and carefully planned advocacy strategies and campaigns to raise awareness and call to action to promote tobacco endgame could incorporate gender theory to upgrade tobacco control.

The proposed symposium offers a platform where all interested conference attendees will have an opportunity to discuss recent gender-related trends in Europe, how to better plan for the integration of both sex and gender into all tobacco control activities

and how to increase women representation and leadership of tobacco control policy-making and implementation processes.

**Tob. Prev. Cessation 2019;5(Supplement):A37**

DOI: 10.18332/tpc/105260

## PARTNERING WITH ECONOMIC AND FISCAL POLICY THINKTANKS IN PRODUCING RESEARCH TO INFORM TOBACCO TAXATION POLICIES

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### Objective

This session will highlight the importance of evidence-based policy-making by presenting a case of partnering with economic think-tanks in the SEE region to build their capacity to conduct economic research on the impacts of tobacco taxation and inform tobacco taxation policies through policy-dialogue. In addition to presenting a summary of global economic research and empirical evidence on tobacco taxation in low- and middle-income countries, this session will showcase the think-tank capacity building project by the University of Illinois at Chicago. Finally, this session will showcase the economic research conducted by UIC's partner network of seven SEE countries.

### Funding

This research is funded by Bloomberg Philanthropies.

**Tob. Prev. Cessation 2019;5(Supplement):A38**

DOI: 10.18332/tpc/105216

## TOBACCO DEPENDENCE TREATMENT 1

### Smoking cessation counseling: a survey among tuberculosis patients in Armenia

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### Introduction

Smoking negatively affects tuberculosis (TB) treatment outcomes and increases the risk of recurrence. TB healthcare providers (HCP) are in regular contact with their patients and have a unique opportunity to deliver smoking cessation interventions at every encounter. This study aimed to explore the provision of smoking cessation services among TB patients in Armenia.

### Methods

Interviewer-administered phone survey was conducted among adult TB patients (excluding prisoners and patients with psychiatric diseases) within 2 months after completion of the treatment. The smoking cessation services were assessed according to "5 A's" strategy.

### Results

Out of 163 TB patients who completed the survey, 58.3% (n=95) were smokers during their last treatment (77.6% of males). Majority of smokers (92.6%) were asked about their smoking status (Ask) and 89.5% received cessation advice from HCP (Advice). Around 33.0% of the smokers were asked about their interest in quitting (Assess). Only 5.3% of patients received a cessation assistance from HCP (Assist) and 6.3% reported about follow up appointments to discuss smoking (Arrange). Around 60.0% of smokers made a quit attempt during the treatment and

25.3% were abstinent during the last two weeks of the treatment (quitters). However, 45.8% of quitters relapsed and were current smokers at the time of the interview.

### Conclusion

The TB patients did not receive recommended smoking cessation counselling according to 5 "A's" model. There is a need for further integration of smoking cessation assistance into TB care in Armenia to increase the quitting rate, decrease the relapse rate among quitters and consequently improve TB treatment outcomes.

### Funding

Global Bridges Healthcare Alliance for Tobacco Dependence Treatment, hosted by Mayo Clinic and Pfizer Independent Grants for Learning and Change.

**Tob. Prev. Cessation 2019;5(Supplement):A39**

DOI: 10.18332/tpc/105227

### Smoking during and 1-month after discharge in Southern European countries (Spain and Portugal)

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### Introduction

Smoking prevalence is still high in Southern European countries. Smokers are frequent users of hospitals and hospital admission might be an adequate moment for quitting. The aim of this study was to assess changes in smoking status, willingness to quit, and quit attempts among current smokers during hospitalization and one-month after discharge.

### Methods

We conducted a survey among current smokers hospitalized in two convenience hospitals in Portugal and two in Spain during hospitalization and one-month after discharge. A representative sample of conscious and oriented smokers participated after giving their informant consent and telephone number. The survey included questions about patients' smoking status (abstinence, cigarettes per day, etc), their willingness to quit smoking, quit attempts, and other socio-economic variables. We conducted a Chi-squared bivariate descriptive analysis, stratified by country.

### Results

211 smokers were identified during hospitalization (58 from Portugal and 153 from Spain). Overall 74% of smokers were abstinent during hospitalization. Women, ≥55 years/old, and those who live with a non-smoker presented a higher percentage of abstinence than their comparisons (men, < 55 years/old, and those who live with smokers), being statistically significant (p<0.05). One month after discharge, 39.3% of smokers remained abstinent, being the percentage of abstinent patients similar in both Spanish and Portuguese hospitals (39.8% and 37.9%, respectively).

We observed an overall change in smoking patterns after discharge with a reduction of the number of cigarettes per day ( $p=0.025$ ) and an increase in the number of quit attempts ( $p>0.001$ ). The main reason to continue smoking was nicotine dependence and anxiety; while the main reasons to quit smoking were receiving health professional advice and personal decision (42.8% in both cases).

#### Conclusion

Hospitalization is a key moment to promote smoking abstinence and quit attempts. Our findings suggest the need to promote smoking cessation during and after hospital stay.

#### Funding

The project ISCI-SEC was funded by Global Bridges Mayo Clinic (Pfizer Medical Group; GB-25678023: Independent Grants for Learning and Change (IGLC).AF, CM, ME, LA were supported by the Ministry of Research and Universities from the Government of Catalonia (2017SGR319). EF was also supported by the Instituto de Salud Carlos III, Government of Spain, co-funded by the European Regional Development Fund (FEDER) (INT16/00211 and INT17/00103). CM was also supported by the Instituto de Salud Carlos III, Government of Spain, co-funded by the European Regional Development Fund (FEDER) (INT17/00116) and Ministry of Health from the Government of Catalonia (PERIS No 9015-586920/2017).

**Tob. Prev. Cessation 2019;5(Supplement):A40**

**DOI: 10.18332/tpc/105268**

### Assessment of factors affecting the duration and quality of tobacco dependence remissions based on the annual reports of tobacco dependence treatment rooms of the Russian Federation

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#### Objectives

One of the relevant and significant directions of improving the quality of tobacco dependence therapy is the ability to predict the duration of abstinence from Smoking on the basis of clinical evaluation of therapeutic remissions.

#### Aim

Comparative study of the results of complex therapy of tobacco dependence in 18 regions of the Russian Federation with the analysis of clinical features of emerging therapeutic remissions.

#### Results

The results of tobacco dependence therapy, conducted by psychiatrists-narcologists in 18 regions of the Russian Federation evaluated in 6 and 12 months after the anti-nicotine therapy, were investigated.

The effectiveness was characterized by quitting, ranged from 38.8% to 68% after therapy course, from 29.5% to 50% - after 6 months, from 25.3% to 38% - after 12 months.

The best results were in 8 regions where the combined therapy of tobacco dependence was carried out: the combination of nicotine replacement and receptor therapy with small doses of psychotropic drugs, psychotherapy, non-drug therapies.

Factors that worsen the prognosis-pharmacoresistance to drugs for nicotine dependence therapy (Nicorette, Champix), the presence of incomplete remission after quitting.

#### Conclusions

New directions to increase the efficiency of results of treatment of tobacco dependence – the improvement of clinical and diagnostic evaluation of Smoking patients, the use of complex pathogenetic therapy.

**Tob. Prev. Cessation 2019;5(Supplement):A41**

**DOI: 10.18332/tpc/105289**

### The effect of brief counselling and NRT sampling on the recruitment of smokers to quit smoking

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<sup>1</sup>Tung Wah Group of Hospitals Integrated Centre on Smoking Cessation, Hong Kong, China

#### Introduction

The smoking population has declined to 10.8% in Hong Kong in 2017 thematic household survey. The passive recruitment measures to motivated smokers to join smoking cessation service exclusively results in a significant missed opportunity to capture the remaining majority of smokers who are not yet planning quit attempts.

2012 Cochrane review suggests that proactive personal contact with potential participants and tailored intervention may help to recruit smokers into smoking cessation programme.

The majority of smokers are ambivalent about quitting. Emerging evidence reveals that providing NRT samples engage both motivated and unmotivated smokers into the quitting process.

#### Methodology

In the past two years, a mobile truck was deployed to park at different smoking hotspots to reach the smoking population. We provide brief counselling using 5 A's and 5 R' techniques to engage the smokers. Free one week nicotine replacement therapy (NRT), either patch or gum was provided for those who were aged 18 or above, no chronic medical diseases or mental illness, not pregnant or breast feeding no recent hospital admission in the recent 6 months and no contraindications on the use of NRT. They were then recommended to join our formal smoking cessation programme. Phone follow up were arranged within one week to answer queries on any side effects. Those not eligible for NRT sample were also encouraged to join our service.

Personal data were collected. Number of smokers who had received NRT sample and those who had enrolled our full treatment programme were recorded. The self-reported 7-day point prevalence abstinence rate at 8th and 26th week were ascertained by phone contact. Those who defaulted or could not be contacted were considered failure to quit by intention to treat analysis.

#### Results

2,890 smokers were engaged with brief counseling and 1,394 (48.24%) enrolled our smoke cessation programme. The mean age was 41.68 (SD 13.24) with male 2,324 (81.29%) and female 536 (18.71%) with 30 missing data on gender. The average cigarette consumption per day was 17.29 (SD 8.46). The average Fagerstrom score was 4.74 (SD 2.38). 1,842 (63.74%) received sample NRT of whom 810 (810/1842, 44%) enrolled our full treatment programme whereas 584 (584/1048, 55.7%) without NRT sample enrolled our service. The 7-day point prevalence abstinence rate of all the enrollees at 8th week, 26th week were 47.34%, 38.85% respectively. There was no major adverse events reported.

**Discussion and conclusion**

Many smokers are in a state of contemplation or have no intention of quitting. Our initiative successfully induced 48.2% smokers to undergo formal smoking cessation treatment. The self-reported 7-day point prevalence abstinence rate at 8th and 26th was satisfactory.

**Tob. Prev. Cessation 2019;5(Supplement):A42**

**DOI: 10.18332/tpc/105300**

### We Can Quit2 (WCQ2): A community-based intervention on smoking cessation for women living in disadvantaged areas of Ireland: study protocol for a pilot cluster randomised controlled trial

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**Introduction**

The 'We Can Quit2' (WCQ2) study is a pilot pragmatic two-arm, parallel-group, cluster randomised trial, that aims to explore the feasibility and acceptability of trial processes including recruitment and to estimate parameters to inform sample size estimates needed for an effectiveness trial of a community-based smoking cessation intervention for women living in disadvantaged areas on short and medium term cessation rates.

**Methods**

Eight districts (clusters of four matched pairs) in Ireland selected by area level deprivation, geographical proximity and eligibility for free medical services, will be randomised to receive either WCQ (behavioural support +/- access to Nicotine Replacement Therapy (NRT) delivered over 12 weeks by trained community facilitators) or usual care, a one-to-one smoking cessation service delivered by Smoking Cessation Officers. 25 women will be recruited per cluster (97 per arm; 194 in total) in four phases with consent obtained prior to cluster randomisation.

**Results**

The outcome measures will assess feasibility and acceptability of trial processes, including randomisation. Biochemically-validated smoking abstinence data for a future definitive intervention will be collected at end of programme (12 weeks), and at six months. WCQ2 incorporates a comprehensive process evaluation. Processes will be assessed against domains of the PRECIS-2 wheel to inform future a definitive trial design.

**Conclusions**

Data from this pilot trial will inform the design and sample size for a full cluster RCT. It will provide transferable learning on the systems and implementation strategies needed to support effective design, implementation and evaluation of tailored intervention trials to address behaviour change in disadvantaged communities.

**Funding**

The project is funded by the Health Research Board Ireland under the Definitive Interventions and Feasibility Awards DIFA-2017-048.

**Tob. Prev. Cessation 2019;5(Supplement):A43**

**DOI: 10.18332/tpc/105271**

### Smoking-cessation public awareness campaign and its effectiveness among population

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**Introduction**

There are a lot of antitobacco public awareness campaigns combined with different surveillance activities which have been associated with decreased smoking prevalence and the exposure of second hand smoke and cigarette consumption. In 2018 RAMOH National Institute of Health organized a campaign aimed to identify the most effective methods to increase the awareness of the general public on the harmful effects of smoking and of exposure to secondhand smoke and suggest them different tips for quitting.

**Methods**

The concept of the campaign was based on the analogous French campaign called "Moi(s) sans Tabac" meaning "me (month) without tobacco." The Armenian version of the campaign was named "Quit10" and had three objectives: to inform people about the harmful consequences of cigarettes and the exposure of second hand smoke, second-to involve public through social media messaging and public events, and third was to challenge people to quit during 10 days, meanwhile encourage them to join us and also to "transmit" surroundings to quit smoking. The campaign consisted of social media campaign and public events, during which we provided free smoking cessation counseling to smokers and measured breath carbon monoxide (CO) level using that monitors in public places.

**Results**

During the two-day public event, we had approximately 400 participants. The main conclusion of the campaign was that for higher effectiveness of the campaign the best tools are the most interactive tools which engage youth easily. In our campaign we used devices for measuring carbon monoxide level in peoples' lungs which proved to be an effective method for attracting young people's attention on the dangers of smoking ("pollution of their lungs") and encourage them to quit smoking.

**Tob. Prev. Cessation 2019;5(Supplement):A44**

**DOI: 10.18332/tpc/105310**

### MEDIA, TAPS, SPORTS AND TOBACCO CONTROL

#### Tobacco industry activities in Turkey: through media monitoring

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**Introduction**

WHO Framework Convention on Tobacco Control (FCTC) Article 5.3 requires Member States to take measures to protect the public health policies from the commercial interests of the tobacco industry. However there is no system that monitors tobacco industry vs. public and civil institutions to compliance FCTC. This study aims to monitor the compliance of the parties with FCTC by surveying the TI activities in Turkey in 2017. The keywords "cigarette", "tobacco products" and "tobacco industry"

were searched among the press news articles between January-December 2017. The content, the circulation, the number of people reached and the advertising equivalent were evaluated. Direct advertisement, promotion, sponsorship, activities related with public and civil institutions, news including TI incentives and industry violations against FCTC article 5.3 were recorded.

#### Results

In 2017, 84,696 news clips appeared about the searched keywords. 993 of these were related to tobacco industry with 37,359,229 circulation, accessed 119,064,772 people and had 9,938,074 \$ advertising equivalence. 214 news directly related TI activity news had 8,225,723 circulation, accessing to 25,139,063 people and had \$2,171,763 advertising equivalent. Break down of these news revealed 48 corporate presentations, 107 awarding events, 27 new product introduction, 32 intervention to tobacco control policies and violation of FCTC 5.3. Of the award news 87 news were about the recognition by public institutions, 7 by NGOs.

#### Conclusions

Monitoring printed media showed the lack of awareness about the FCTC 5.3 among public and non-governmental organizations; reflected in the examples of collaborating or rewarding the industry

**Tob. Prev. Cessation 2019;5(Supplement):A45**

DOI: 10.18332/tpc/105162

### Prevention of TI manipulations during the implementation of a ban on TAPS

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Tobacco display can have a high promotional impact on smokers and especially on people who do not smoke. In developing countries where there is a ban on advertising, promotion and sponsorship, but poorly developed institutional capacity of state institutions, the tobacco industry stimulates the development of a network of tobacco sales points and uses them for the advertisement for tobacco products.

According to the monitoring results, TINY TARGETS project by the Campaign for Tobacco-Free Kids in Ukraine uses marketing tools such as tobacco marketing, tobacco at the level of the child's eyes up to 1 meter, tobacco along with sweets and toys, etc.

Heightened the problem created by Heated Tobacco Products, which completely avoided the legislation on the prohibition of Tobacco Advertising Promotion and Sponsorship. In this way, the tobacco industry has the potential to create a deep associative effect from the full-fledged Heated Tobacco Products advertising, complemented by a promotional display of tobacco products. In these conditions, the consumer can perceive all information as a continuous ad unit of tobacco products.

In order to prevent these threats during the creation of national tobacco advertising legislation in accordance with the FCTC, account should be taken of possible manipulations that the tobacco industry can make in order to advertise, promote and sponsor tobacco products.

**Tob. Prev. Cessation 2019;5(Supplement):A46**

DOI: 10.18332/tpc/105307

### Wolf in sheep's clothing: tobacco industry's sponsorship and CSR in Bulgaria

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The WHO Framework Convention on Tobacco Control (FCTC) highlights the comprehensive ban of tobacco sponsorship as one of the effective measures to drop smoking levels. Countries that have ratified it pledge to put this measure in practice in favor of public health. Even though the Convention was ratified in Bulgaria by law in 2005, sponsorship by tobacco production or tobacco trade industry is still allowed with only two exceptions - sponsorship of radio and TV productions; and sponsorship of events that take place in several EU member states, EEA member states, or have other transborder effect.

In summer of 2018 the fourth edition of a program called "Summer for Joy, Autumn for Care" was launched, funded by Philip Morris Bulgaria. It includes educational academy for children, medical check-ups for elderly people, local entrepreneurs academy and teachers academy in tobacco producing regions in Bulgaria. As of December 2018 the program has received six awards for a charity initiative and corporate social responsibility (CSR). One of the award ceremonies was hosted by the Bulgarian President. The program is as well noted as a positive example of CSR in a textbook by a university lecturer.

The presentation will focus on notable practices of tobacco sponsorship and CSR in Bulgaria. It will track on tobacco industry approaches of sidestepping existing regulations and benefiting from the lacking ones. It will as well note the forms of recognition of tobacco industry initiatives received by media, academics as well as state institutions.

**Tob. Prev. Cessation 2019;5(Supplement):A47**

DOI: 10.18332/tpc/105308

### Where There's Smoke: How Big Tobacco is Taking Over Social Media

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#### 1. Big Tobacco's Use of Social Media

Tobacco companies are increasingly - and often secretly - using social media to advertise cigarettes to a global audience of young people. We will provide an overview of the evidence collected as part of a two year investigation by the Campaign for Tobacco-Free Kids and our research partners. Evidence reflects actual posts from social media platforms, interviews with influencers paid to advertise cigarettes on social media and an assessment of the global scope of this marketing tactic.

#### 2. Campaign Actions and Opportunities

The nature of the companies' purposefully covert marketing tactic makes addressing this form of tobacco advertising particularly challenging for advocates, policy makers and regulatory agencies. We will discuss in detail how to uncover the tobacco industry social media campaigns, possible actions advocates can take and share experiences with our own campaign in the U.S. as well as current efforts in Brazil. The session will cover four key topics:

- Research: How to identify and monitor tobacco influencer marketing
- Legal: Understand how this type of marketing violates existing tobacco advertising, promotion and sponsorship laws and consumer protection laws
- Action: Consider taking legal and advocacy action against the tobacco companies through courts and/or appropriate

enforcement agencies

- Communication: The role of media advocacy in creating public pressure to stop influencer marketing

### 3. Looking Forward: Discussion of Using Research in Your Country and Overcoming Potential Challenges

We will engage in a guided group discussion for participants to share challenges anticipated in their countries when considering action to stop tobacco companies' from advertising on social media.

**Tob. Prev. Cessation 2019;5(Supplement):A48**

**DOI: 10.18332/tpc/105410**

## The impact of anti-tobacco policies and sport policies in the EU: How countries can prosper together?

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At the first side, Tobacco policies do not seem to interact directly with the following policies: Economics of Sports, Integrity of Sports, Sports, Role of Sports into Society, Sport in International Cooperation and External Relations, per se. The limited role in Sports that European Commission has been well established during the time, whilst the EUTPD has been acting as a directive which ensured great protection for the EU citizens in every country. Analyzing the impact of both policies in different EU countries based on specific criteria will allow to distinguish progress and identify the synergies which can be in the future strengthened at a national level. Reviewing what these policies have in common will facilitate a great transition towards a better collaboration for policy makers in tobacco and sports which might lead to better internal coordination and implementation of practical activities. The final aim of the paper is to have a clearer view of the impact of these policies, and if this match has indeed help at the development of public health and sports.

**Tob. Prev. Cessation 2019;5(Supplement):A49**

**DOI: 10.18332/tpc/105232**

## The evidence-base and development of a tobacco-free stadium declaration for Europe

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The paper will present new data on the frequency of tobacco-free policies at football stadiums across UEFA's 55 member associations, including data on mandatory and voluntary policies, and levels of adherence by fans.

With reference to this new evidence-base, the author will then detail new partnerships with UEFA, national football associations, Healthy Stadia and tobacco-control agencies in the development of a declaration.

The declaration will commit national associations and/or league operators to embed tobacco-free stadia policies and enforcement within stadium regulations and conditions of sale for tickets to matches, and will be supported by a wide range of assets including guidance, case studies and training modules. It is anticipated that national associations will adopt a phased approach to implementing the primary aims of the declaration, with a commitment to completing the process within 24 months of signing the declaration.

The declaration will be launched in June 2019 at the UEFA Nations League Finals in Portugal.

**Tob. Prev. Cessation 2019;5(Supplement):A50**

**DOI: 10.18332/tpc/105314**

## TOBACCO AND HEALTH

### Individual factors associated with COPD in Greece: Does age matter?

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#### Introduction

The current analysis aimed to identify individual factors associated with COPD and possible differences among those who reported COPD in two age groups.

#### Methods

A secondary, cross-sectional, nationally representative analysis using data from 2014 Hellenic Statistical Authority was conducted. (Hellenic Statistical Authority (ELSTAT), 2014) The current study divided data from 8,223 respondents into two groups for analysis; those between  $\geq 40$  and  $< 64$  years old (group A;  $n = 3,365$ ) and  $\geq 65$  years old (group B;  $n = 2,681$ ). Individual factors included smoking, activity status (daily physical activity and mobility limitation) and depression, in addition to socio-economic and demographic factors. Logistic regression was used to identify individual factors associated with COPD in study groups. A  $\chi^2$  test was used to compare subgroups ACOPD and BCOPD. All results were weighted and presented as proportions with a p-value threshold set to  $< 0.05$ .

#### Results

COPD prevalence in group A was 2% and 8.7% in group B. Factors significantly associated with COPD in group A were smoking, obesity, and mild-moderate mobility limitations, while in group B were male gender, obesity, depression, and severe mobility limitations. Factors that were significantly different between ACOPD and BCOPD were smoking status ( $p < 0.001$ ), income ( $p = 0.047$ ), daily physical activity ( $p < 0.001$ ) and mobility limitations ( $p < 0.001$ ).

#### Conclusions

Individual factors associated with COPD differed by age groups showing a need for a tailored approach targeting smoking cessation in younger ages and management of depression in those over 65 years old. All COPD patients would benefit from education on healthy diet and exercise.

**Tob. Prev. Cessation 2019;5(Supplement):A51**

**DOI: 10.18332/tpc/105147**

### Smoking and Caries Experience among Dental Visitors in Armenia

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## Introduction

Adverse effects of smoking on oral health are well documented including periodontal diseases and mucosal lesions. However, its effect on dental caries experience is not well researched yet. The study aimed to evaluate the association between smoking and Decayed-Missing-Filled Teeth (DMFT) scores among dental visitors in Armenia, a country with one of the highest male smoking prevalence in Europe (51.5% in 2016).

## Methods

We conducted a cross-sectional study among adult visitors of dental clinics who had 18 and more uncrowned teeth. The data collection included self-administered survey on potential risk factors and clinical observation of dental caries using DMFT Index Form. We used multivariable linear regression to find the adjusted association between the study variables.

## Results

Overall, 423 participants from Yerevan (capital city) and Gyumri (second largest city) participated in the study. The mean age of the participants was 31 years old (SD=9.7) and the majority were women (63.0%). The prevalence of smokers was 24% (males 57.1%, females 3.8%). The mean DMFT score was 11.9 (SD=3.7), with a higher score among smokers (12.3 vs 11.9). After adjusting for age, plaque, decayed and filled teeth scores smoking was significantly associated with a higher missing teeth score ( $\beta=0.39$ ,  $p=0.024$ ).

## Conclusion

This study confirms the association between smoking and oral health. These findings should be considered for health promotion interventions and for future studies to explore the mechanism of such a relationship.

**Tob. Prev. Cessation 2019;5(Supplement):A52**

DOI: 10.18332/tpc/105225

## Smoking and air pollution – their impact on lung development from the prenatal period to childhood

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Air pollution and tobacco smoke have a substantial impact on the lungs development during both pre- and postnatal period. The harmful particles from the tobacco smoke (including second hand smoking and e-cigarette) can cross the placental barrier, leading to decreased pulmonary function, respiratory infections, and an increased risk of asthma in childhood. In-utero exposure to air pollutants can lead to preterm birth, lower birth weight, and lung developmental defects. The presence of NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>10</sub> in prenatal period was associated with the risk of developing asthma and in postnatal period with a lower increase in lung function (FEV<sub>1</sub>). The reports and research in this field continues and harmful environmental exposures is a key component in developing future strategies for health care systems.

**Tob. Prev. Cessation 2019;5(Supplement):A53**

DOI: 10.18332/tpc/105230

## Polonium in bronchial washing specimens of smoker, ex-smoker and non-smoker patients with lung cancer

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## Introduction

The aim of this study was to verify the presence of radioactive Polonium (Po-210) in the lungs of patients with lung cancer who were smokers, ex-smokers and never-smokers.

## Methods

Bronchial washing specimens of 55 patients diagnosed with non-microcytoma lung cancer (NSCLC), underwent alpha spectrometric analysis in order to detect the presence of Polonium 210 (Po-210) (primary end point). Patients were divided into 3 arms (smokers, ex-smokers, never-smokers). The detection of alpha radioactivity in urine and the detection of spirometric data were also performed (secondary end points). Each patient was then given a kit for the detection of the environmental Radon at home (for 3 months).

## Results

67 Bronchial washings were examined: 22 of smokers, 35 of ex-smokers and 10 of never-smokers. The Polonium was detected in 100% of the current smokers (mean 6 mBq) and of the ex-smokers (mean 4 mBq) bronchial washings, while it was detected only in 60% of the never-smokers bronchial washings. It is interesting that ex-smokers had quit smoking for at least 5 years. There were even 3 patients who quit 11, 17 and 20 years before. All patients presented a picture of chronic bronchitis or had a spirometry that could be classified as stage I or II GOLD. This suggests that heavy metal retention is more a function of mucociliary clearance than bronchial obstruction.

## Conclusion

The presence of Po-210 in the ex-smoker bronchial washings is an important finding both for understanding lung carcinogenesis and for health education and therapeutic recommendations.

## Funding

Grant from the National Institute of Health of the Italian Ministry of Health (Istituto Superiore di Sanità - Ministero della Salute).

**Tob. Prev. Cessation 2019;5(Supplement):A54**

DOI: 10.18332/tpc/105295

## Tobacco smoking still the greatest preventable health risk factor in Poland

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## Background

Taking care of public health requires the implementation of all strategies that will improve the health of society. Previous research has mainly focused on the analysis of the effects of smoking. However, recent findings suggest that a lack of physical activity may be worse than smoking and obesity.

## Methods

Publicly available data was collected from the Polish Central Statistical Office, the National Cancer Registry, and the National Food and Nutrition Institute. The incidence and mortality rates,

BMI, and smoking prevalence were used.

### Results

In Poland, 9 million people smoke. It is estimated that in Poland 42% of men and 5% of women die prematurely (at the age of 35-69) of smoking. Currently, lung cancer is indicator disease for tobacco smoking and in Poland, it is the leading cause of cancer deaths in both sexes (29.3%, 17.1% respectively) with a tobacco-attributable fraction of 93%.

More than half of the adult population is overweight and about 20% obese. Excessive body weight occurs in 15-20% of children and adolescents.

### Conclusions

In the Polish population, complications and diseases caused by smoking are still a bigger problem than those associated with a lack of physical activity. Following the recommendations of the European Code Against Cancer, it is necessary to add the recommendation to increase physical activity to the anti-tobacco campaigns. Research shows that physically active people are less likely to smoke. Increasing physical activity among the population may favor tobacco control.

**Tob. Prev. Cessation 2019;5(Supplement):A55**

**DOI: 10.18332/tpc/105291**

## Friday 29 March 2019

### TACKSHS PROJECT

#### Second-hand smoke exposure in playgrounds in 11 European countries

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#### Introduction

Secondhand smoke (SHS) is a widespread health hazard. Smoke-free policies have commonly focused on locations that are more relevant for adults, neglecting SHS exposure at children areas. This study aimed to assess SHS exposure in children playgrounds, according to socioeconomic status (SES).

#### Methods

We monitored airborne nicotine concentration and tobacco-related variables in 20 different playgrounds in 11 European countries (N=220 measurements). The fieldwork was carried out between March 2017 and April 2018. Playgrounds were selected according to the SES (half of them belonging to the most deprived neighborhoods and half of them to the least deprived neighborhoods). Vapor-phase nicotine levels were measured using active sampling. Furthermore, self-perceived wind, number of smokers, and butts inside playground and on playground surroundings were collected through a form. Nicotine concentrations were later dichotomized using the limit of detection (LOD) as a cut-off point (0.06 µg/m<sup>3</sup>).

#### Results

Detectable levels of nicotine were found in 40.9% of the playgrounds. Median nicotine concentration was <0.06 µg/m<sup>3</sup> (IQR: <0.06-0.127) and there were no statistically significant differences when considering neighborhood's SES or the observer's self-

perceived wind. There were people smoking inside one out of five playgrounds. More than half of the sites showed presence of butts inside (56.8%) and just around (74.5%). Presence of butts inside playgrounds was higher in sites from a low SES (p<0.05).

#### Conclusions

There is evidence of SHS exposure in playgrounds across Europe. These findings confirm the need of smoking bans in playgrounds in those countries that do not have legislation and a better enforcement in those countries that already have a smoking ban.

#### Funding

Funded by the European Union's Horizon 2020 Research and Innovation Programme.

**Tob. Prev. Cessation 2019;5(Supplement):A59**

**DOI: 10.18332/tpc/105301**

#### Second-hand tobacco smoke exposure and passive exposure to electronic cigarette aerosol in 12 European countries: the TackSHS Project survey

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#### Introduction

Exposure to second-hand tobacco smoke (SHS) has serious adverse health effects, causing more than 600,000 deaths among non-smokers each year worldwide. Also exposure to electronic cigarette aerosol has been shown to have potential adverse health effects in bystanders passively exposed.

#### Methods

Within the TackSHS Project ([www.tackshs.eu](http://www.tackshs.eu)), in 2016-2018 we conducted a face-to-face cross-sectional survey in 12 European countries (Bulgaria, England, France, Germany, Greece, Ireland, Italy, Latvia, Poland, Portugal, Romania, and Spain). The survey included a specific section on exposure to SHS and on electronic cigarette use and passive exposure to its aerosol in selected private and public indoor places. In each country, the sample consisted of around 1,000 participants representative of the general population aged ≥15 years.

#### Results

Of 11,909 participants, 8,834 (74.2%) were non-smokers. Among them, 31.2% were daily exposed to SHS in indoor places, ranging between 24.3% in Ireland and 68.0% in Greece. This prevalence was 13.1% at home, 11.4% in indoor workplaces, 4.7% in public transportations, 5.7% in private transportations and 14.7% in other indoor places. Overall, 2.4% were current electronic cigarette users. This prevalence ranged between 0.6% in Spain and 7.2% in England. Among 11,570 electronic cigarette non-users, 16.2% were daily exposed to electronic cigarette aerosol, with the highest exposure rate found in England (29.8%) and the lowest one in Spain (4.6%). The exposure rate was 5.8% at home, 6.4% in indoor workplaces, 4.0% in public transportations, 3.2% in private transportations and 8.3% in other indoor places.

#### Conclusions

Almost one out of three European non-smokers was daily exposed

to SHS. We recognize the dramatic fall in SHS exposure due to the comprehensive smoke-free legislations adopted in various countries over the last decade. Notwithstanding, SHS exposure is still far to be negligible, particularly in homes and in indoor workplaces. Despite current use of electronic cigarette is still relatively low in most European countries, our data suggest that, in indoor settings, more than 54 million Europeans are daily exposed to the aerosol exhaled by less than 8 million electronic cigarette users.

#### Funding

This work was developed under TackSHS Project. This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 681040. Esteve Fernandez, Marcela Fu, and Olena Tigova were supported by the Ministry of Research and Universities from the Government of Catalonia (2017SGR319). Dr Esteve Fernandez was also supported by the Instituto de Salud Carlos III, Government of Spain, co-funded by the European Regional Development Fund (FEDER) (INT16/00211 and INT17/00103).

**Tob. Prev. Cessation 2019;5(Supplement):A58**

**DOI: 10.18332/tpc/105276**

### A novel air quality feedback intervention trial using mHealth techniques across four European countries: the TackSHS Project Measuring for Change Study

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#### Introduction

Second-hand tobacco smoke exposure is a cause of serious ill-health for children, and in most European countries this exposure occurs predominantly in the home. There is therefore a great deal of research interest in reducing smoking at home, but few behaviour change interventions have been designed which are proven to promote smoke-free homes effectively. Within the TackSHS Project ([www.tackshs.eu](http://www.tackshs.eu)), the aim of "Measuring for Change" study was to design, implement and evaluate an intervention to promote smoke-free homes.

#### Methods

In this study, we monitored air quality (PM<sub>2.5</sub> concentrations) in participants' homes over one month. The intervention was conducted over the second and third weeks of the monitoring period to allow a week to measure baseline levels and a week after the intervention to estimate the changes in each participant home. During the two weeks of the intervention we have used mHealth techniques including daily SMS messages and weekly emails with visualisations of air quality data to provide participants with relevant, up-to-date information on the effect of smoking on their home's air quality.

#### Results

In interim results from four centres in Scotland, Italy and Greece (55 households) the intervention was shown to lead to a small but significant decline of 21% (10% to 34%) in measured PM<sub>2.5</sub> between baseline and follow-up measurement periods, and to a fall in the amount of time that intervention homes had PM<sub>2.5</sub> concentrations higher than the WHO guideline level.

#### Conclusion

Future interventions to reduce SHS exposure at home should consider the use of mHealth techniques and the advantages of internet-based monitoring to provide up-to-date feedback to participants.

#### Funding

This work was developed under TackSHS Project. This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 681040. Esteve Fernandez, Marcela Fu, and Olena Tigova were supported by the Ministry of Research and Universities from the Government of Catalonia (2017SGR319). Dr Esteve Fernandez was also supported by the Instituto de Salud Carlos III, Government of Spain, co-funded by the European Regional Development Fund (FEDER) (INT16/00211 and INT17/00103).

**Tob. Prev. Cessation 2019;5(Supplement):A57**

**DOI: 10.18332/tpc/105282**

### Passive exposure to e-cigarette emissions: sensory irritation, timing and association with VOCs

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In the frame of the TackSHS Project, we examined irritation symptoms reported by the participants passively exposed to e-cigarette emissions during 30 minutes, their timing and their association with the concentrations of volatile organic compounds (VOCs) produced. 40 young healthy non-smokers were exposed to e-cigarette emissions produced by a human smoker using a standardized topography and two resistance settings (exposure 0.5 Ohm and 1.5 Ohm) in a 35m<sup>3</sup> room for 30 minutes, in addition to a control exposure session with no emissions. PM<sub>1.0</sub> and PM<sub>2.5</sub> were continuously measured over the duration of exposure, while VOCs were recorded at 0, 15 and 30 minutes (t<sub>0</sub>, t<sub>15</sub> and t<sub>30</sub>). Each participant completed an irritation questionnaire at t<sub>0</sub>, t<sub>15</sub>, t<sub>30</sub> and t<sub>60</sub> (30 minutes post-exposure). The questionnaire included questions on ocular, nasal, throat and respiratory irritation symptoms and on general complaints. Within this study, we found that a 30 minute exposure to emissions of e-cigarettes increased concentrations of PMs and VOC's and provoked sensory irritation symptoms and general complaints that were positively associated with the concentrations of the VOC mixture emitted.

**Tob. Prev. Cessation 2019;5(Supplement):A60**

**DOI: 10.18332/tpc/105411**

### Tobacco challenge and implementation research in EC funded projects

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<sup>1</sup>European Commission

The H2020 funded research projects studying relations between smoking and respiratory health are a high valuable source of knowledge that supports or inspires new policy interventions to cope with diseases related to smoking. Nevertheless, the success of public health policies requires adaptation to local realities, as clearly showed by international experiences with fighting disease in various countries, populations and socio-economic contexts and by monitoring the sustainable development goals on disease world burden. Therefore, the implementation science

has captured more and more the interest of workers on health interventions in the last 10 years. The European Commission is pioneering and structuring this evolving type of research. In FP7 and H2020, it invested more than EUR 150 million in implementation research through specific calls for addressing a number of chronic disease areas of high interest among world's largest funders.

Thus, several H2020 "societal challenges" projects focused on finding creative solutions to control in practice risk factors and diseases related to lung, metabolic, vascular, mental, cancer or maternal and child health. Among them, a number of projects specifically addressed aspects of tobacco consumption, showing the importance of this particular challenge. They are getting now to the final stage. Their preliminary conclusions are delivering strong policy messages. This also demonstrates the value and the need of further developing the implementation science. Horizon Europe, the new EUR 100 billion research and innovation programme, will strengthen the research and innovation role in supporting EU health policies. New opportunities are opened for multidisciplinary and cross-sectoral research able to tackle with global and complex challenges in real contexts.

**Tob. Prev. Cessation 2019;5(Supplement):A56**  
DOI: 10.18332/tpc/105281

## IMPLEMENTING TOBACCO CONTROL POLICIES IN BALKAN COUNTRIES: WHAT HAS BEEN DONE AND WHAT WE NEED TO DO

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Tobacco use is the leading cause of preventable morbidity and mortality worldwide and a major preventable risk factor for cardiovascular disease, cancer and other diseases. Many European countries have adapted relevant legislative measures and are implementing tobacco control policies according to the WHO FCTC and EU recommendations.

Balkan Peninsula is a geographic area in the south-eastern Europe. It is composed of twelve (12) countries. The most of these countries have high smoking rates (i.e Greece 43.7%, Bosnia and Herzegovina 39.0%, Croatia 37.1%, Romania 30%, Albania 29.2% etc.).

In order to have comprehensive policies in tobacco control is important to emphasize on a series of price and non-price measures as described by the articles of WHO FCTC e.g. Packaging and labelling of tobacco products, Education, communication, training and public awareness, Tobacco advertising, promotion and sponsorship, Demand reduction measures concerning tobacco dependence and cessation.

Despite the fact that Balkan countries have ratified WHO FCTC and implemented Tobacco Control laws most of the legislation is not enforced and well-implemented. Political measurers and tobacco control policies are not simple because many actors and in different levels are involved. The aim of this workshop is to share experiences, good practices, barriers/facilitators in tobacco control policies and the current legislation from Balkan countries.

**Tob. Prev. Cessation 2019;5(Supplement):A61**  
DOI: 10.18332/tpc/105163

## HOW TO HELP SMOKERS QUIT? WORKSHOP FOR HEALTH PROFESSIONALS

### Evidence based methods in tobacco dependence treatment

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Smoking is the leading cause of preventable death. Every year, more than 71600 of Poles and 36600 Romanians are killed by tobacco-caused disease. In whole European Union 1 400 000 people die due to tobacco smoking. Tobacco smoking causes many diseases like cardiovascular diseases, pulmonary diseases, cancer and others, however tobacco dependence is a disease itself. Tobacco dependence syndrome (F 17.2.- ICD X revision) is a chronic disease caused by nicotine dependence. The criteria to diagnose tobacco dependence are very similar to those recognized in drug and alcohol addiction. Tobacco dependence is a chronic condition that is treatable, however due to its nature often requires repeated intervention for success and good plan for treatment provided by specialist (doctor, nurse, health counsellor, therapist etc). The effective treatment exists and include pharmacotherapy and behavioural support. Both methods are effective itself but according to Cochrane library reviews the most effective is combing both medicines and psychological support. Evidence-based guidelines recommend nicotine replacement therapy, bupropion SR, and varenicline as effective in smoking cessation therapy, especially when combined with behavioral interventions. There is as well effective and safe herbal drug - cytisine, however not available in all European countries. The success rate is at least doubled by using evidence based methods in tobacco dependence treatment.

The effects of alternative methods like hypnotherapy in smoking cessation in uncontrolled studies were not confirmed by analysis of randomized controlled trials. Electrostimulation is not effective for smoking cessation. Well-designed research of acupuncture, acupressure and laser stimulation could be needed since these are very popular among smokers, though these interventions alone are likely to be less effective than evidence-based interventions.

There is an evidence from few trials that electronic cigarettes effectiveness in smoking cessation may be equal to nicotine patches or higher, when both products were accompanied by behavioral support.

**Tob. Prev. Cessation 2019;5(Supplement):A138**  
DOI: 10.18332/tpc/105320

### The challenge of treating tobacco dependence in patients with depression

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Tobacco smoking is one of the main risk factors for many chronic illnesses and the leading preventable cause of morbidity and premature death worldwide and also very common among people who are suffering from depression. People with depressive symptoms are about twice more likely to be smokers than the general population and also diagnosed with a greater level of addiction.

People with depression who are trying to make a quit attempt, more regularly experience negative mood changes and also

success rates of complete abstinence are lower than the general population. Although, smoking cessation interventions have been shown to be less effective for depressive people compared to the general population, previous studies have shown that behavioral counseling and pharmacotherapy can contribute to tobacco use abstinence.

We must also note that there are several concerns regarding the fact that tobacco cessation as a process can possibly worsen the prognosis for depression. However, a number of studies have reported improvements in the symptoms of depression following smoking cessation.

It is also worth mentioning that a meta-analytic review found greater short-term and long-term smoking abstinence when pharmacotherapy is used as a treatment compared with the counselling alone. However, as it is mentioned in the same study, due to the small number of studies and more research is needed.

**Tob. Prev. Cessation 2019;5(Supplement):A139**  
DOI: 10.18332/tpc/105373

### Quitline in smoking cessation

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Tobacco smoking is still the leading cause of premature mortality in Europe. Thus article 14 of the WHO Framework Convention on Tobacco Control (FCTC) states that “each Party shall develop and disseminate appropriate, comprehensive and integrated guidelines based on scientific evidence and best practices (...) shall take effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence”. One of the effective methods used in comprehensive therapy is behavioural counselling and element of such counselling is Quitline. In article 14 of FCTC is written that all Parties should offer quitlines in which callers can receive advice from trained cessation specialists. A quitline is a telephone counselling service where smokers can receive information, advice and support. It can be provided both reactive and proactive counselling. Ideally Quitline offer proactive support. A reactive quitline provides an immediate response to a call initiated by the tobacco user, but responds only to incoming calls. A proactive quitline involves setting up a schedule of planned calls to tobacco users. According to review in Cochrane library three or more calls increase the chances of quitting compared to a minimal intervention such as providing standard self-help materials, or brief advice, or compared to pharmacotherapy alone.

Quitline can work as a stand-alone service, however it works best as a part of an overall tobacco control programme, which might include dedicated website, smoking cessation clinics, and health education campaigns.

Benefits of quitline service: professional help, cheap for both: client and funder, access for those living in small towns and villages, immediate intervention in the crisis, possibility of permanent contact with the specialist, possibility of a long-term consultation.

Polish Quitline established in 1996 as a first national quitline in Central and Eastern Europe. It offers proactive service to its client. Quitline number is on every cigarette pack.

**Tob. Prev. Cessation 2019;5(Supplement):A140**  
DOI: 10.18332/tpc/105321

## TOBACCO DEPENDENCE TREATMENT 2

### Prevalence and determinants of cigarette smoking relapse among US adult smokers - a longitudinal study

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#### Introduction

The prevalence of smoking is determined by three major parameters: initiation, cessation, and relapse. Various wider health determinants influence these parameters. Existing literature has mostly focused on investigating determinants of smoking initiation and cessation, whereas studies investigating smoking relapse in-depth are scarce.

#### Aim

This analysis aims to estimate the prevalence of cigarette smoking relapse and determine its predictors in a representative sample of adult former smokers in the United States.

#### Methods

This quantitative research project analysed secondary data retrieved from the Tobacco Use Supplement-Current Population Survey (TUS-CPS) 2010-11 cohort with a total sample size of 3,621 participants. Smoking relapse was defined as picking up smoking in 2011 after reporting smoking abstinence in 2010. The prevalence of relapse over the 12-month follow-up period was estimated in different subgroups. Multivariate logistic regression models were applied to determine associations between smoking relapse and a broad spectrum of sociodemographic and environmental factors.

#### Results

A total of 184 former smokers reported smoking relapse by 2011 (weighted prevalence: 6.8%. 95%CI: 5.7%-8.1%). Prevalence and odds of relapse were higher among young people compared to the oldest age group (65-years and above). Former smokers living in smoke-free homes had 60% lower odds of relapse compared with those living in homes that allowed smoking inside (aOR:0.40; 95%CI: 0.25-0.64). Regarding race/ethnicity, only Hispanics had significantly higher odds of relapse compared to whites (non-Hispanics). Odds of relapse were higher among never-married, widowed, divorced and separated couples compared to the married group. Continuous smoking cessation for 6-months or more significantly decreased odds of relapse among the study sample.

#### Conclusions

Wider health determinants influenced prevalence of smoking relapse among US adults; individual as well as lifestyle characteristics were associated with relapse, highlighting the need for designing targeted interventions to prevent it.

**Tob. Prev. Cessation 2019;5(Supplement):A62**  
DOI: 10.18332/tpc/105151

### A 12-month longitudinal outcomes and process evaluation of the adapted Certified Tobacco Treatment Specialist (aCTTS) program for

## physicians in the Former Yugoslav Republic of Macedonia (FYROM)

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### Introduction

A Certified Tobacco Treatment Specialist (CTTS) program was adapted to address socio-cultural contexts of tobacco use in FYROM. The training objectives were to increase provider knowledge regarding tobacco use and risks; increase provider self-efficacy for patient counseling; decrease tobacco use among providers; and document provider counseling during post-intervention clinic appointments.

### Methods

A survey was conducted at baseline, and 6- and 12-months post-intervention. Bivariate and multivariate analyses were conducted to determine significant changes across time and refine associations between independent and dependent variables. Weekly logbook data documented numbers of patients counseled and time spent counseling.

### Results

Of 97 participants who completed baseline, 72 (74.2%) completed the 12-month survey. Scores on a 30-item knowledge scale increased between baseline (10.5), 6-month (18.9) and 12-month (20.7) post-intervention ( $p < 0.001$ ). Between baseline and 12 months, perceived barriers to engaging with patients regarding tobacco use decreased ( $p = 0.001$ ) and confidence in providing tobacco treatment counseling increased ( $p = 0.046$ ). At baseline and 12-month post-intervention respectively, 29% and 20% of respondents reported current smoking ( $p < .001$ ). Providers' interest or engagement in quitting tobacco increased significantly between baseline and 6-month ( $p = 0.026$ ) and 12-month ( $p = 0.019$ ) post-intervention. Logbook data indicate that 39% of patient visits were tobacco related with 78% of those patients receiving counseling.

### Conclusion

There is an urgent need for tobacco-focused education among health providers in FYROM. The adapted CTTS program was well-received. Data indicate physicians are engaging in tobacco counseling, with increased knowledge and greater confidence. Future efforts include expanding training in FYROM and possibly elsewhere in the Balkan region.

### Funding

Pfizer Grants for Learning and Change (European Division) and the Global Bridges Healthcare Alliance for Tobacco Dependence Treatment, Mayo Clinic, USA.

**Tob. Prev. Cessation 2019;5(Supplement):A63**

**DOI: 10.18332/tpc/105181**

## Cognitive behavioral approach to quitting smoking

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The presentation aims to describe the approach to smoking

cessation from the perspective of cognitive behavioral therapy, applied in the field of private practice.

In the presentation, the basics of cognitive behavioral therapy are described, the main methods on which a therapeutic intervention is based, a brief description of them.

Cognitive behavioral therapy is part of the short-term therapy class, centered on current issues, in our case, quitting smoking. The method focuses on developing or modifying the patterns of thinking and behavior that lead to behaviors that are considered dysfunctional and undesirable.

The main argument in the use of cognitive therapy is the existence of concrete and solidly substantiated scientific evidence demonstrating a close link between a person's beliefs and decisions.

The cognitive-behavioral therapeutic intervention focuses on two major components: a package of cognitive techniques to identify people's beliefs about smoking and altering these beliefs, and a package of behavioral techniques that, through their implementation, can change the target behavior of the plan proposed in therapeutic intervention.

As a conclusion, the importance of the therapeutic relationship and the motivational aspects involved in smoking cessation can be revealed.

**Tob. Prev. Cessation 2019;5(Supplement):A64**

**DOI: 10.18332/tpc/105197**

## Smoking cessation drugs in France: First effects of reimbursement under the general regime

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### Introduction

Article 14 of the FCTC recommends facilitating access to smoking cessation medication.

Until 2018, some EU countries had specific free of charge program for NRT, but no country had proposed general reimbursement of smoking cessation drugs as reimbursement of others essential drugs.

In France a retrospective reimbursement up to 150 € per year of NRT was only partially successful until 2018 because patients received only a retrospective and often partial reimbursement.

### Recent story

In 2016 the laboratory who market varenicline has requested reimbursement of th drug in France and obtained on the criterion of a high-level medical service and obtain a 65% reimbursed by French national insurance with a price of 32,84 euros for the box of initiation of 14 days and 69,25 euros for 56 tablets for 4 weeks. In May 2018 a generic laboratory asked and obtain the 65% reimbursement for a nicotine gum, then all NRT are now reimbursed. Patient have nothing to paid to obtain drugs because the remaining 35% are taken in charge by complementary assistance. For patients with 23 listed chronic disease receive 100% reimbursement by national insurance.

### Results

Consumption of varenicline and NRT had dramatically increase in France when medication became free of charge for the patient.

### Conclusion

France has become the first country where smoking cessation drugs are covered by national health insurance. The first results are very positive, and all European countries must be encouraging

to obtain the same availability of free of charge smoking cessation drugs for all smokers.

**Tob. Prev. Cessation 2019;5(Supplement):A65**

**DOI: 10.18332/tpc/105207**

### Quitting smoking and use of Smoking Cessation services: Results from Russian Tobacco Control Policy Evaluation Survey

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#### Introduction

Delivery of smoking cessation services is part of WHO FCTC implementation plan in Russia and Russian State Tobacco Control policy.

The purpose of this study is to define how well smoking cessation services are implemented in Russia in comparison with European countries.

#### Methods

Data from Russian Tobacco Control Law Evaluation Survey (2017-2018) are analysed, based on multistage random sample of 11625 adult respondents, stratified by smoking status: 6569 smokers, 2377 former smokers, 2679 never smokers, in 10 Russian Federal subjects, interviewed with questionnaire comparable with the one of ITC Project. Data are compared with the results of 'EURESTPLUS ITC Europe Surveys' (<https://doi.org/10.18332/tid/98912>).

#### Results

Significant majority of smokers (56.6%) had signs of high tobacco dependence and 81.4% of smokers considered themselves dependent on tobacco. 37.4% of smokers had made quit attempts in the past 12 months, which was lower than in England (46.3%), but much higher than in all other countries. No significant differences were found for sex and age groups, however, smokers with financial problems had more quit attempts. 64.9% of those who had tried to quit didn't use any assistance, only 9.5% had turned to healthcare institutions, 18.8% - used smoking cessation medication, and 6.6% - used quitlines, internet and print materials. 59% from those who had used healthcare services, had turned to smoking cessation support in medical prevention and smoking cessation offices. 65.2% of smokers who had chosen smoking cessation medication, had used nicotine replacement therapy, 8.1%- varenicline and 43.9%- citizine. From the few smokers who had used telephone-internet-media resources for quitting, 16.5% had used the National quitline, 19.5%-mobile apps, 45.1% internet and 45.7% - pamphlets. Results are comparable to those from the 8 EURESTPLUS ITC countries.

75.8% of respondents, who had visited the doctor in the last 12 months were asked about smoking. In 72.1% of cases smoking patients had got advice to quit, which is higher than in the countries of comparison. 41.6% of smokers were offered support in smoking cessation, and 46.1% had been referred to healthcare smoking cessation services, which only 18.1% had received, mainly – as counselling, medication and printed materials.

#### Conclusion

Despite high prevalence of smokers with signs of high tobacco dependence, frequency of quit attempts is low and most of those

are made unassisted. Smoking cessation services in healthcare are poorly implemented. Updated organizational mechanisms are needed, for effective implementation of smoking cessation at primary healthcare institutions.

#### Funding

Our research was provided by the Ministry of Health of Russian Federation.

**Tob. Prev. Cessation 2019;5(Supplement):A66**

**DOI: 10.18332/tpc/105210**

### Current smoking behavior among medical students in mainland China: a systematic review and meta-analysis

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This study aimed to estimate the prevalence of current smoking among medical students in mainland China through a systematic search across six electronic databases for English or Chinese studies published before May 25, 2018. A total of 79 studies were included; 26 had a high risk of bias. The overall pooled prevalence of current smoking was 10.93% (7460/68253; 95%CI: 0.09%, 13.08%, I<sup>2</sup> = 98.6%). This study found a decreasing prevalence of current smoking over the period studied (survey year range of 1988–2014). More specifically, the current smoking prevalence in males decreased progressively across time, while the prevalence in females remained relatively constant. The overall prevalence in the west was higher than in the middle or east of mainland China ( $p = 0.0061$ ). The overall prevalence of current smoking increased with year in school ( $p = 0.0028$ ). The present study provides a comprehensive synthesis of current smoking prevalence among medical students in mainland China. Although there have been some improvements in the status of tobacco use among medical students, given the leading role of physicians in tobacco control, sustained efforts are needed to curb the tobacco epidemic among medical students.

**Tob. Prev. Cessation 2019;5(Supplement):A67**

**DOI: 10.18332/tpc/105178**

## SECONDHAND SMOKE EXPOSURE

### Characteristics and Behaviours of Smokers at a Private College in Greece prior to the Implementation of a Smoke-free Campus

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#### Introduction

The current study examined characteristics and behaviours of employees who reported being smokers at a private college in Greece in 2018 and compare occasional and regular smokers for differences prior to the implementation of a smoke-free campus.

#### Methods

A sub-analysis of 50 smokers was conducted from a sample

of 219 college employees. Smokers were categorized into two groups; occasional (<20 cigarettes in last 30 days) and regular (>20 cigarettes in last 30 days). Characteristics and behaviours in relation to smoking and tobacco control policies were presented as percentages. All comparisons were conducted using Fishers Exact test with significant  $p < 0.05$ .

### Results

Of 22.8% smokers, 15.5% were regular and 7.3% occasional smokers. No differences in gender ( $p=0.591$ ), age ( $p=0.856$ ) or employee status ( $p=0.173$ ) were found between groups. 63% of occasional and 44% of regular smokers reported smoking <10 cigarettes/day while another 44% of regular smokers reported <20 cigarette/day. 44% of smokers had attempted to quit smoking at least once, while 50% of occasional and 71% of regular smokers reported they wished to quit.

81% of occasional smokers reported they don't smoke on outdoor school grounds in contrast to 65% of regular smokers reported that they do ( $p=0.005$ ). 88% of occasional smokers and only 24% of regular smokers reported they never smoke in front of their students ( $p < 0.001$ ) while another 27% of regular smokers reported they feel bad when they do.

Smokers were highly aware of health effects of smoking ( $p=0.704$ ) and a majority agreed with the smoking ban in public places ( $p=0.310$ ). In addition, 47% of occasional and 26% of regular smokers were willing to contribute to the implementation of a smoke-free campus.

### Conclusions

Smokers at the college were highly aware of the harms of smoking, wished to quit and had positive attitudes towards implementation of smoke-free legislation, indicating their readiness for a smoke-free campus.

**Tob. Prev. Cessation 2019;5(Supplement):A68**

**DOI: 10.18332/tpc/105148**

## Smoking inside is never okay. Smoke outside. Do it for your children: keys to a successful mass media campaign against secondhand and thirdhand smoke

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### Introduction

An inquiry of parents by phone in 2014 showed that in Flanders still 68.000 children were daily exposed to the smoke of their parents' cigarettes. Although the number had decreased since the first time we held the inquiry in 2008 (115.000 children) we wanted to further decrease that number by means of a mass media campaign.

### Methods

The 2014 inquiry had revealed that mainly parents with a lower education still smoked in the presence of their children. In order to understand our target audience better, we held focus groups with smoking parents. Furthermore we asked intermediaries such as GP's, pediatricians, pharmacists, etc. by means of an online forum what it takes or would take for them to discuss the subject with smoking parents.

### Results

The focus groups revealed that there are still a lot of misunderstandings about secondhand and thirdhand smoke. Furthermore parents don't want to be told off and don't want to

be stigmatised, as smokers often are. But they do want to protect their children. For many of them, to quit smoking is a bridge too far. We also discovered that intermediaries need a trigger to discuss the subject with smoking parents.

Based on these findings the campaign 'Smoking inside is never okay' was developed. It turned out to be very successful. One part of the campaign focussed on the parents (mass media campaign with tv-spots, website, social media campaign), the other part focussed on the intermediaries (with f.i. a brochure they could hand out to parents). A new inquiry at the beginning of 2018, just after the fourth wave, revealed that the number of children that is exposed to cigarette smoke by their parents further decreased to 36.000.

### Conclusions

It is essential to get to know your target audience before developing a campaign. The research we did was the key to develop a successful campaign.

**Tob. Prev. Cessation 2019;5(Supplement):A69**

**DOI: 10.18332/tpc/105204**

## Exposure to secondhand smoke in hospitality sector in Serbia

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Exposure to secondhand smoke (SHS) is a threat to individual and population health. The prevalence of SHS exposure is higher in countries with higher adult smoking rates. In Serbia, 37% of adults are smokers which is above world average. Current Serbian legislation allows owners to decide whether the premises will be smoke-free in case cafe/restaurants is up to 80 m<sup>2</sup>. Otherwise, they are obliged to provide smoke-free area but physical division between smoking and no-smoking areas is not requirement.

Data regarding exposure and attitudes towards SHS exposure in hospitality sector in Serbia were collected in 2018 as cross-sectional study on representative sample of 1200 Serbian adults (18-64 years) that have visited hospitality sector in the last six months. Probability proportional sampling was applied aimed to include both smokers and non-smokers.

Exposure to SHS in hospitality sector in Serbia is high (88% in cafes, 73% in restaurants). More than half (52%) of the cafes visitors (19% smokers, 86% non-smokers) and 63% restaurant visitors (26% of smokers, 89% non-smokers) stated that exposure to tobacco smoke bothers them. Almost half of the visitors (46%) said that they are always or frequently exposed to tobacco smoke when they are sitting in designated no-smoking area of the cafe/restaurant.

Our data contribute to the current body of evidence that designated smoking areas in the hospitality sector do not protect visitors from the SHS. Therefore it is necessary to adopt 100% smoke-free law in Serbia.

### Funding

Study was conducted within the project "Building consensus for adoption and full compliance with 100% smoke free law in Serbia", funded by Bloomberg Philanthropies and managed by the International Union Against Tuberculosis and Lung Disease.

**Tob. Prev. Cessation 2019;5(Supplement):A70**

**DOI: 10.18332/tpc/105219**

## Compliance with smoke-free laws in outdoor hospitality venues: a mix methods approach

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### Introduction

In this study we combined quantitative and qualitative data to: 1) describe the compliance of outdoor hospitality venues with smoke-free laws, and compare SHS levels in these settings according to their compliance; 2) explore perceptions and experiences among hospitality workers about the use of terraces in relation to tobacco consumption in these settings.

### Methods

This is a mix methods study conducted in the city of Madrid, Spain, in two phases. In phase 1 we conducted direct observation at outdoor terraces in hospitality venues to explore compliance with the smoke-free legislation, and measured PM<sub>2.5</sub> concentrations. In phase 2 we conducted in-depth interviews with hospitality workers to provide insights on the phenomena behind our quantitative findings.

### Results

We measured PM<sub>2.5</sub> concentrations in 92 outdoor terraces. 21 of them were uncompliant with the law (have a roof and more than two sidewalls, and there were people smoking during the measurement). PM<sub>2.5</sub> concentrations were significantly higher in those terraces that were uncompliant (15.08 vs 9.36 µg/m<sup>3</sup>, p=0.001). We conducted 7 in-depth interviews with hospitality workers. Six of them worked in terraces that were uncompliant with the law and all of them did not know the regulation. All hospitality workers agreed that most customers believe that outdoor terraces are places for smokers, and they have the right to smoke there. Few of them have experienced complaints by non-smokers, and in that cases they offered them to move inside the venue.

### Conclusion

There is a need for tobacco control interventions in outdoor terraces of hospitality venues to protect hospitality workers, and users from SHS.

**Tob. Prev. Cessation 2019;5(Supplement):A71**

**DOI: 10.18332/tpc/105304**

## Idea of ban on smoking in cars in the presence of children – analysis of Polish law

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### Introduction

In Poland 39% of 8 mln smokers admit to smoke in the presence of children and pregnant women. Many children suffer from secondhand smoke when they are carried in the private cars. Smoke concentration in these vehicles exceeds concentrations found in smokers' houses. There are examples of countries where the ban of smoking in cars was established.

### Methods

We have analyzed if ban on smoking in private cars when

children are present is feasible with Polish law. We have checked international treaties( ex. Convention on the Rights of the Child, FCTC) , Polish constitution and national law (ex. civil code, road traffic law, tobacco control law) looking for any conflicts of laws.

### Results

Not only ban on smoking in cars when children are present is feasible with all the laws in Poland but also existing regulations encourage legislator to establish laws which will better protect the rights of children. We have established that the right to health is human right superior to other rights including right to harm oneself and right to privacy.

### Conclusions

Children in private cars are not protected in sufficient way. The ban on smoking in these premises could limit passive smoking. As a result of this analysis authors proposed the amendment to the polish tobacco control act which was submitted to Ministry of Health and now is under legislation process.

**Tob. Prev. Cessation 2019;5(Supplement):A72**

**DOI: 10.18332/tpc/105266**

## The Economic Costs of Smoking in Greece

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Greece is among the countries with the highest smoking prevalence (43.8% for ages 15+), ranking third globally and second among EU countries. The high proportion of smoking population makes smoking the leading risk factor for death and disability. This habit has a detrimental impact on health, creating a cost to society. Our aim is to measure the economic cost of diseases attributable to smoking and secondhand smoke in Greece. The method used is the Cost of Illness approach. The economic cost consists of direct costs, such as healthcare expenditures, and indirect costs capturing the productivity loss due to morbidity and mortality. Using estimated smoking attributable deaths and disability from the Global Burden of Diseases Study 2016, we find that the total economic cost is € 6.88 billion (3.95% of GDP); 8.9% of total cost is attributable to secondhand smoke; the direct cost of smoking (secondhand smoke) is slightly less (more) than the indirect cost; the indirect cost is higher for males; musculoskeletal disorders and cardiovascular diseases comprise the greatest fraction of morbidity and mortality cost, respectively. Smoking imposes a heavy economic burden in Greece, underlining the need for efficient interventions, including better implementation of existing policies.

**Tob. Prev. Cessation 2019;5(Supplement):A73**

**DOI: 10.18332/tpc/105258**

## A REGIONAL LOOK AT TOBACCO CONTROL IN EUROPE: THE CASE OF BELGIUM, GEORGIA, POLAND AND ROMANIA

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The session is aimed to take a regional look at tobacco control in

Europe in order to better understand cultural, social, economic and political conditions for development of tobacco control policies and programs at this region. In addition, the regional approach for tobacco control helps complete geographical look at tobacco control in European region, raise awareness on best practices in analyzed countries and open the door for stronger collaboration and partnership between them in tobacco control policies and programs. Four countries, representing different parts of Europe and considered as case studies, have been selected for comparative analysis: Belgium, Georgia, Poland and Romania. Three of them reflect the level of tobacco control in Western, Central and Southern part of the European Union, one in non-EU Eastern region of Europe. The session refers to the book under the same title that is now planned to be published by the European Network for Smoking Prevention and is based on the template of the US Surgeon General Report on the Health Consequences of Tobacco Use. The session consists of seven short presentations that present the project's approach, concept and methodology and summarize results and conclusions of comparative analysis made in particular parts of the book dedicated to exposure to tobacco smoke, its health consequences, public beliefs, opinions and attitudes about smoking, its health effects and tobacco control policies, advances in tobacco control legislation and strategy, smoking prevention, cessation and tobacco control advocacy, and a vision of the future strategy for tobacco control.

**Tob. Prev. Cessation 2019;5(Supplement):A74**

**DOI: 10.18332/tpc/105265**

## TAXATION AND ILLICIT TRADE

### Results of tobacco taxation policy in Ukraine in 2016–2018

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#### Introduction

Specific excise rates for tobacco products increased in Ukraine by 40% in 2016, 40% in 2017 and 29.8% in 2018. The aim of the research is to estimate the impact of these increases on tobacco prices, consumption, and revenue.

#### Methods

Monthly data published by Ukrainian official bodies were analyzed.

#### Results

In 2016, the average price increased by 7% while inflation was 14%. In 2017 and 2018, the average price increased by 35% and 28% with inflation of 14% and 10%. Cigarette sales increased from 73 billion sticks in 2015 to 76 billion in 2016 but then decreased to 67 billion in 2017 and 55 billion cigarettes in 2018. Tobacco excise revenue increased in 2016 by 59%: from 22 billion to 33 billion UAH, while in 2017, it increased to 40 billion UAH (by 20%) and in 2018 – to 43 billion UAH (by 8%). In 2018, the revenue was 15 billion and 28 billion UAH in January-June and July-December respectively.

#### Conclusions

In three years excise increased by 154% and it caused an increase in price by 84%, reduction in sales by 25% and an increase in revenue by 94%. So, in long term, tobacco excise increase did have the expected impact. However, in short term, the impact can vary as the tobacco industry uses sophisticated tactics to distort

the results of tobacco taxation: price wars and price over-shifting, forestalling and others. Such tactics should be taken into account when forecasting the possible impacts of proposed tax increases.

**Tob. Prev. Cessation 2019;5(Supplement):A75**

**DOI: 10.18332/tpc/105306**

### Estimation of tobacco price elasticity in Serbia: evidence from macro and micro approach

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Previous research has indicated that tobacco price elasticity is negative and relatively inelastic. However, no such estimates are available for Serbia and Western Balkan region in general. Serbia is a middle income country with high tobacco consumption, low prices of cigarettes, and large perceived impact of multinational tobacco producing companies on public revenues, export, and employment.

The aim of this research is to provide the first estimates of the tobacco price elasticity for Serbia based on two estimation approaches. The first approach includes macro-level time series and regression (cointegration) analysis. The second approach is based on the microdata from the Household Budget Survey and a theoretical model proposed by Deaton (1988).

According to our macro-level approach estimated cigarettes price elasticity in Serbia ranges between -0.76 and -0.62, while micro-level approach suggests elasticity at intensive margin of -0.45. Bootstrapping procedures confirm that reported elasticities are statistically significant.

Our research suggests that by increasing tobacco taxes, and consequently tobacco prices, the government can produce two positive effects: lower cigarettes consumption and higher government revenue. Given that the estimated elasticity is negative, the increase in tobacco prices would result in lower cigarettes demand, which could lower the negative consequences of smoking on health. On the other hand, the relatively inelastic elasticity suggests that demand reduction would not be proportional to the increase of the price, which would, in turn, result in the increase of the government revenue from the tobacco tax collection.

#### Funding

Our research is a result of international research project “Accelerating progress in taxation of tobacco and tobacco products in low- and middle-income countries”, funded by the University of Illinois at Chicago’s Institute for Health Research and Policy through its partnership with the Bloomberg Philanthropies.

**Tob. Prev. Cessation 2019;5(Supplement):A76**

**DOI: 10.18332/tpc/105215**

### Fiscal policy impact on tobacco consumption, in high smoking prevalence transition economies / the case of Albania

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Smoking is already acknowledged to stand behind many serious diseases and health conditions, and consequently, there has been

a growing awareness among policymakers to tackle smoking, especially in more developed countries. Efficient policies, aiming at reducing tobacco consumption, should be based on evidence. The determinants of consumer demand are extensively investigated on the empirical ground, the investigation of tobacco products has been only recently investigated on developed countries and at a lesser extent on developing or transition countries.

One of the most widely used policies is increased taxation, which is expected to result in higher prices and lower consumption. The existing evidence from countries at all economic stages suggest that price increase on tobacco are effective in reducing smoking (Eozenou and Fishburn, 2007). Tobacco taxation generates a social positive outcome in terms of health and quality of living. In terms of reducing tobacco consumption, economic theory and studies suggest that especially young people and people with low incomes particularly from low socioeconomic status are likely to be more responsive to tax and price increases, because the greater the share of an individual's disposable income spent on a good, the more the individual will respond to price changes (Chaloupka and Grossman, 1996; Farrelly et al., 2001). The positive impact of taxes on reducing tobacco consumption has been confirmed in several empirical studies from developed and developing countries (see Bader et al. 2011; Chaloupka et al., 2010; Currie et al., 2012; Ross et al., 2007; Ross et al. 2003).

However, developing and transition countries have not been following at the same pace, anti-tobacco policies, like the developed counterparts. This is also the case of Albania, which is a transition country, one of the poorest countries in Europe but also one of the countries with highest smoking prevalence in the region (WHO, 2016). Despite the seriousness of the smoking phenomena, there has been limited research on smoking behavior including also determinant factors, which is surprising given the high smoking prevalence in Albania. Both theoretical and empirical research has devoted substantial attention to the price elasticity of tobacco, both for economic purposes and health externalities caused by smoking. Despite the prevalence of smoking in Albania and the existence of some studies investigating the impact of tobacco control policy on the Albanian market (Levy et al., 2008, Ross et al., 2008, Zaloshnja, 2010), there is a lack of empirical research on the price elasticity of tobacco.

Accordingly, motivated by the need to investigate the demand of tobacco in Albania, from which policies can be better tailored, and the scarcity of empirical studies, this paper is based on extensive research including econometrical analysis of both aggregate macro data and household level data.

The empirical analysis conducted on annually aggregate data suggests that prices significantly affect tobacco consumption. More precisely, the estimated results suggested that tobacco demand is price inelastic, with demand being relatively more elastic in the long-run than in the short run. Namely, the price elasticities of tobacco range from -0.27 to -0.77 in long-run and -0.007 to -0.107. With regard to the income elasticity, the estimated results suggested that income is not an important factor influencing cigarette consumption. Also, in terms of other control variables, this paper suggests that all the other factors except enrolment in tertiary education is insignificant factors.

To further strengthen the research findings, this paper reflects also the findings of the research on the tobacco price elasticity from a microeconomic perspective. To empirically estimate

the elasticity of cigarettes demand in Albania, this paper uses the Living Standard Measurement Survey (LSMS) as cross-section data for the year 2012. Whilst the majority of studies conducted in this field use Household Budget Survey, we are substantially determined by the data availability of our main variable of interests (quantity of cigarettes and expenditures of cigarettes) to use alternative surveys, which as abovementioned is the LSMS.

Following the Deaton's (1988) demand model and employing cross-sectional household survey data, this paper estimated the price elasticity for cigarette demand, which to the best of our knowledge this is the first empirical research conducted in Albania. More precisely, this research estimates an Almost Ideal Demand System (AIDS), which allows disentangling quality choice from exogenous price variations through the use of unit values from cigarette consumption. Following a three-stage procedure, the estimated results suggest that the price elasticity is around -0.57. The price elasticity appears to be within the range of estimated elasticities in developing countries and in line with the estimates elasticities from the model using aggregate. In terms of the control variables, it seems that the total expenditure, household size, male to female ratio and adult ratio are important determinants of tobacco demand in Albania.

Thus, since increase prices, which have been mainly driven by the increases of taxes, have demonstrated to have had a significant impact on tobacco consumption, the government should further engage in a gradual increase of taxation. Revising the existing tax policy in the context of a more dynamic increase in excises would lead to an increase in tax revenues of the state and significant savings in the health system. The results of the research show that by increasing the excise tax so that the minimum level of excise tax of 90 Euros per 1000 cigarettes, as required by EU, is achieved, the budget revenues would increase by 36 million Euros or 28%, as compared to the budget revenues generated in 2017, excluding the additional budget revenues generated from VAT taxes. The figures on overall cigarettes tax burden as well as the budgetary trends provide optimal conditions for strengthening fiscal control instruments on tobacco in Albania. Furthermore, the tax burden on cigarettes and tobacco products is the lowest in the region. Therefore, any immediate measure for pursuing sustained incremental increases in tobacco excises is feasible and is in line with the revenue-raising objectives of the governments. An awareness campaign has to be organized in order to inform policymakers on the importance of applying excise increase for the tobacco control in Albania.

**Tob. Prev. Cessation 2019;5(Supplement):A77**  
DOI: 10.18332/tpc/105228

## Tobacco taxation and illicit trade in Georgia as an emerging economy

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Tobacco legislation in Georgia has been in force since 2003, before the actual adoption of the FCTC and later acceding to it as one of the member state. Since 2003, tobacco control policy and taxation of tobacco products has gone through the tough times, depended mainly on the political will of the government officials and financial interests of the state and special groups beyond the state. It was only in 2013, i.e. the adoption of the Tobacco Control

Strategy and Action Plan, as well as the creation of the State Committee on strengthening tobacco control measures, with the NCDC, as its secretariat.

Taxation on tobacco products, as a single most effective measure of tobacco control and FCTC has been in place since 2013-2014 and since then each year the tax on tobacco products in Georgia has been increasing gradually, however it is considered that Georgia is on the first place in the region with the most accessible prices on tobacco products. The second biggest challenge is the lack or sometimes an absence of the effective control and monitoring mechanisms of tobacco products, which leads to the cases of illicit trade with tobacco products. In this regards the decisions of COP8 is of utmost importance and Georgia is on its path to strengthen mechanisms of monitoring and research, as well as surveillance mechanisms for the tobacco products placed in market. This problem is even more critical in the light of developing marketing strategies of BIG Tobacco in regards to the novel tobacco products and their popularization among youth.

**Tob. Prev. Cessation 2019;5(Supplement):A78**  
DOI: 10.18332/tpc/105146

### Increasing tobacco taxes by less than 5% is ineffective: Lessons from 2000–2018 surveys in France

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#### Introduction

France has an erratic anti-smoking policy. Effectives measures follow phases of stagnation or even regression. Until recently, taxation policies were decided only in the short term. These variations give the opportunity to analyze the effect of the price increase on cigarette sales.

#### Methods

From 2000 to 2018 we study change in yearly sales of cigarettes in metropolitan France to (source OFDT) to the price of the top sale cigarette pack (year  $n$ / year  $n-1$ ). In the case of an increase during the year, a monthly weighting is carried out. The results are expressed as the elasticity. If a price increases by 10% and sales fall by 6% the elasticity will be 0.6, it will also be 0.6 if a 5% increase price leads a 3% drop in sales).

#### Results

From 2000-2018, the 3 price increases >10% caused a sharp tobacco sales decline (0.9 elasticity). The 2 increases of 6-9% were almost as effective (elasticity 0.84). The 2 increases of 5% price resulted in a lower response (0.47 elasticity). The 5 small price increases <4.5% provide minimal response (0.16 elasticity). Increase of cigarette sales has been observed during the 4 years without price increase.

#### Conclusions

An above 6% step price (taxes) increase is needing to have significant public health effect. A 10% step increase is optimal Therefore any increase of <5% increase revenues of states without health benefits. Step of increases must be > 6% or better 10% to lower tobacco consumption without reducing the resources of the states.

**Tob. Prev. Cessation 2019;5(Supplement):A79**  
DOI: 10.18332/tpc/105195

### It is possible to have a lobby of ordinary people to contrast the powerful tobacco industry?

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#### Introduction

The action of the lobbies of tobacco and cigarette companies are trying to influence political decision against tobacco at every level. The Smoke Free Partnership produced a document that calculate the direct cost of tobacco industry interference in the EU policy making environment. In 2017 Cigarettes Companies direct spent € 8-10.1 million for lobbies activities; € 2.6-4.1 on consultancy; they paid for 110 fulltime staff and they obtain 37 accreditations in EU institutions. We have this data from the Transparency Register that permit to identify and measure the representation of tobacco industry interest in the EU policy making environment. But what happens at country level, in our case, Italy?

#### Methods

Our Patients' Association, Salute Donna, try to establish a national initiative to act like a lobby for all cancer patients. We connect in Rome 21 patient associations with a political program to present to Italian Parliament:

- 1) Prevention of cancer: enforcement of actions to promote stop smoking, Mediterranean diet, physical activity;
- 2) EB cancer screening for all the population
- 3) Quality Cancer Care and Treatments in all Italian regions

#### Results

The program met the commitment of politicians of all the political forces elected in Italian Parliament and we obtain some important goals like the possibility to have for free all the screening test for BRCA 1 and 2 people; more money for our NHS to buy new cancer drugs, the extension of Cancer Registries to all Italy. We also asked to increase the taxation of each cigarettes pack of an important amount and to use this money for cancer research and smoking cessation. This was rejected by the Renzi government in 2017. The actual government accept to increase cigarette taxation only 10 cent for every pack.

#### Conclusion

It Is very difficult to contrast the powerful tobacco lobbies, but our project is to bring the voice of cancer patient to our Parliament for the health of Italians and we will try again to ask for cigarette, heat not burn product and e-cig taxation for Public Health.

**Tob. Prev. Cessation 2019;5(Supplement):A134**  
DOI: 10.18332/tpc/105297

## E-CIGARETTES AND NOVEL TOBACCO PRODUCTS

### Regulation for e-cigarette use in public and private areas within European countries

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#### Introduction

Second-hand aerosols from electronic cigarettes (e-cigarettes)

contain toxic chemicals which are potentially harmful to bystanders and, thus, proper regulation is needed. Little is known about regulatory approaches taken by countries in minimising such exposure. This study aims to describe policies regulating the use of e-cigarettes in public and private sites among the European countries, identify barriers and promoters for the regulation adoption, and evaluate their compliance with the WHO FCTC recommendation on regulating e-cigarettes use indoors.

### Methods

A cross-sectional survey was conducted among experts from the 53 countries of the WHO European Region (May-July 2018). An internet-based questionnaire collected data provided by experts in each country on provisions of e-cig use in 27 public and private sites, level of difficulties in adopting the regulation, as well as the support and adherence to the regulations. A descriptive analysis was done to estimate the proportion (%) of each measure across countries.

### Results

We obtained information from 48 out of the 53 countries targeted. Among them, 77.1% had regulations of e-cigarettes, 58.3% had a specific national law on e-cigarette use, and 10.4% adopted some regulation at the subnational level. Regulations were more frequent among European Union countries. Twenty-one out of 27 sites were regulated by e-cigarette use national law. Education facilities were the most regulated site, with 58.3% banning the use of e-cigarettes in that area, while private areas (homes, cars) were the least regulated (39.6%). There were moderate difficulties in adopting the national law, support, and compliance to the law. Only one third of countries adhered to the WHO FCTC recommendation.

### Conclusions

Although the majority of European countries had introduced national regulation for e-cigarette use in public places, many countries still lack rules to protect non-users in indoor settings.

### Funding

“Beladenta Amalia received the support of a fellowship from “La Caixa” Foundation (ID 100010434). The fellowship code is LCF/BQ/IN17/11620013”.

“This project has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 713673.”

**Tob. Prev. Cessation 2019;5(Supplement):A80**

**DOI: 10.18332/tpc/105143**

## Role of e-cigarette experimentation on the transition to daily smoking among French ever smokers aged 17: results from the ESCAPAD survey

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### Introduction

The role of electronic nicotine delivery systems (ENDS) use on

smoking behaviours among adolescents remains controversial. It has been hypothesized that it could constitute a gateway to cigarettes smoking or, rather, a harm reduction alternative protecting from regular smoking. Many studies focusing on adolescents have investigated the role of ENDS on tobacco smoking initiation but very few assessed the role of ENDS on the transition to daily smoking.

### Methods

Using the French 2017 ESCAPAD survey, a nationally representative survey of French teenagers (n= 39,115), we estimated the association between ENDS ever use (=exposed group) and the transition to daily smoking by reaching 17, among ever users of tobacco. Descriptive analyses and Poisson regressions with robust variance and propensity score weighting to deal with confounding were undertaken.

### Results

Among ever smokers (n= 21, 401), adolescents who had experimented ENDS were less likely to have transitioned to daily smoking at 17 (PR = 0.65 [0.63 – 0.68]). They were 32.1 % to have become daily smokers in the exposed group (ENDS ever use) vs 49.6 % in the unexposed group (no ENDS ever use). Most dual ever users started by trying tobacco smoking (71.4 %).

### Conclusions

At this stage, those results do not suggest that vaping intervene into the transition to daily smoking in France. This might be specific to the French context, where smoking remains highly popular among adolescents (25.1 % of daily smokers at 17). As our studied population only concerns 17 years old, those analyses will have to be carried on among older populations to be confirmed.

### Funding

This work was supported by the French Cancer League as part of the PETAL research program on adolescent smoking.

**Tob. Prev. Cessation 2019;5(Supplement):A81**

**DOI: 10.18332/tpc/105175**

## Flavors, additives and nicotine levels detected among the most popular e-cigarette refill liquids across 9 European countries after the implementation of Tobacco Products Directive (TPD)

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### Introduction

Data on the flavors and additives content of the electronic cigarette liquids are scarce. This study aimed to identify, record and evaluate flavor and additive content of e-liquids.

### Methods

Within the Horizon2020, EUREST-PLUS study and during the post TPD sample selection period, we purchased in total 137 e-liquids from France, Poland, Germany, the Netherlands, United Kingdom, Spain, Romania, Hungary and Greece. These products included all e-liquids selected in the pre TPD period still available in the market and all the products that were in the top

rank during the post TPD period. A quantitative and qualitative chemical analysis was performed using a head space solid phase microextraction gas chromatography-mass spectrometry (HS-SPME-GCMS) and liquid chromatography-mass spectrometry method.

### Results

The GCMS analysis using two mass spectral libraries (NIST, WILEY) revealed that more than 247 compounds were present in the examined e-liquid samples. The chemical compounds most frequently detected were: menthol (57.66%), nonanal (53.28%), ethyl maltol (35.77%), linalool (25.55%) beta damascene (24.09%) and ethyl vanillin (24.09%). From the quantitative analysis of the flavor, the mean % w/w content for menthol was 0.0474, for linalool 0.0121, for beta damascene 0.0082, b-ionone 0.003, for a-ionone 0.0037, for ethyl hexanoate 0.0041, alpha damascene 0.0043, for limonene 0.0019, for a-terpinolene 0.0005, for methyl cyclopentanone 0.1536, for acetyl pyrazine 0.0207, for 2,5 dimethylpyrazine for 0.0027, for ethyl maltol for 0.2979, for 3,4 dimethoxy benzaldehyde 0.0116 and for ethyl vanillin 0.1646.

### Conclusions

Our evaluation revealed that after the implementation of TPD and specifically Article 18 where it is clearly stated that additives that increase carcinogenic, mutagenic and reprotoxic properties in unburnt form, addictiveness and toxicity should also be prohibited, stricter policies and monitoring on the flavors and additives are still necessary.

### Funding

European Union's Horizon 2020 research and innovation programme under grant agreement No 681109 (C. I. V.).

**Tob. Prev. Cessation 2019;5(Supplement):A82**

**DOI: 10.18332/tpc/105201**

## FCTC "Orphans"- Article 14, 19 and supply side measures

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The Framework Convention on Tobacco Control (FCTC) has been successful in many ways. However, some articles have received less attention than others. Other issues, such as some supply side measures, were left out of the FCTC altogether. This presentation will focus on Article 14 (cessation), Article 19 (liability) and supply side measures.

Article 14 of the FCTC requires that parties develop cessation guidelines, yet only 40% of parties have them. The presenter will discuss what is needed for cessation measures to be effective and how a human-rights based approach can help convince governments to act.

Article 19 of the FCTC concerns tobacco companies' liability for their actions. While some countries (ie. the US) have been very productive in their use of civil liability, no country has yet successfully utilized the other half of Article 19 - criminal liability. The presenter will illustrate how these arguments can be used in both criminal cases and as part of a human rights-based approach. Regarding the supply of tobacco, the FCTC only covered illicit trade, sales to and by minors and provisions to support economically viable alternatives. As we strive to move closer to our goal of zero tobacco deaths, it is time to start talking about

what can be done to further restrict the supply side of tobacco by addressing the retail environment, a topic that was excluded from the FCTC. There are many options, including licensing restrictions, a state sponsored dispensary model, and Tobacco Free Generation policies. The presenter will discuss how policies could work in different jurisdictions and outline the human rights arguments available to pressure governments to act.

Presenters will discuss what governments and advocates can do to finally address these "orphans" and how these topics are essential to the tobacco "endgame."

**Tob. Prev. Cessation 2019;5(Supplement):A83**

**DOI: 10.18332/tpc/105164**

## A look at market and patterns of the use of electronic cigarettes in Poland: current and future risks for tobacco control

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In the past 10 years, a sharp increase in sale of e-cigarettes is observed on Polish tobacco market. Between 2008 and 2011, when sale of e-cigarettes reached a peak, the market expanded almost 8 times. Currently, number of e-cigarette users in Poland is estimated on around one million persons, however, over half of them are dual users (smoke both e-cigarettes and other tobacco products). Although prevalence of daily e-cigarettes use among adults seems to be still at low level (3% to 5%), the current use of e-cigarettes among Polish schoolchildren is even 5-times higher (25%). Sociological studies show that typical Polish adult e-cigarette user is middle-aged and high educated person living in good economic conditions. Main reasons for e-cigarette use include lower or reasonable price of e-cigarettes as compared with price of traditional cigarettes and belief that e-cigarettes are less harmful than other tobacco products and more effective tool for quitting smoking than existing methods of tobacco dependence treatment. Until the e-cigarette use in public places was permitted in Poland, almost half of e-cigarettes users tried to use them in public places. Amendment of the Poland Tobacco Control Law of July 2016 enforced restrictive legislative measures for e-cigarettes, including ban of such products to minors, ban on their advertising, promotion and sponsorship and ban on the use of e-cigarettes in public places. The recent market studies and sociological surveys show that above legislative measures work and sale and the use of e-cigarettes among adults is on decline in Poland.

**Tob. Prev. Cessation 2019;5(Supplement):A84**

**DOI: 10.18332/tpc/105279**

## TOBACCO CONTROL IN ROMANIA - ARE WE READY FOR THE FUTURE?

### Romanian medicine students and tobacco industry

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As future physicians, medical students represent a primary target for tobacco-prevention programs but they also are victims of the tobacco industry. The eternal question for all educational

programmes is whether the medical staff and students is prepared to deliver the anti-tobacco messages and to participate in activities in this domain. For the past 2 years we made multiple studies and surveys (on questionnaires) on the behaviors and educational activities of students in the faculty of medicine, coming from different years of study. We found that the prevalence of smoking in the first year of study was 46,8% (62,5% females and 37,5% males), in the fourth year -41% (75,3% females ,24,7% males) and 49,3% in the fifth year (72,5% females and 27,5% males). If we consider the fact that the course about smoking is held in 4<sup>th</sup> year of study and that only very few faculties and departments have this as a compulsory course, we come to the conclusion that the training of these students is insufficient. As they go through medical school, the students' knowledge of smoking-related diseases obviously increases. Looking at all the years of study, we found no changes in their behaviors: 43% of our students are smokers (32,8%) or ex-smokers (10,2%) Concerning consumers of the trendy e cigarette in Romania we have 45,6% of them testing this product between one month and more than one year (36,6% consider this offer less dangerous as the conventional cigarette and 37,1% made this movement by curiosity). There is a strong need to provide medical students with training in smoking cessation techniques. We need comprehensive programmes of tobacco control among students and an unceasing effort to reduce the number of smokers in medical students, the mirrors of the anti-tobacco activities of our country.

**Tob. Prev. Cessation 2019;5(Supplement):A85**  
DOI: 10.18332/tpc/105191

### Romanian contributions to international tobacco control programs in adults

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In the past three decades, Romanian advocates and health professionals have participated to numerous educational programs dedicated to tobacco prevention and cessation in adults and training of experts in the field, but only recently Romanian researchers have involved in international tobacco control research projects. After a brief overview of educational programs with Romanian contribution ending with the EPACTT tobacco treatment guidelines still ongoing in many European countries, relevant as such research conducted in Romania will be presented here. The EQUIPT project ("European study on Quantifying Utility of Investment in Protection from Tobacco") was a comparative effectiveness research aimed to provide policy makers with information about the economic and wider returns that investing in evidence-based tobacco control can generate; it involved Romanian input in its Research Advisory Group. The TOB G project ("Tobacco Cessation Guidelines for High-risk Groups") developed and implemented an innovative and cost effective approach to treat tobacco dependence in adolescents, pregnancy and in smokers with diabetes, cardiovascular disease and COPD. Romanian team was responsible for personalized diabetes, cardiovascular and COPD group's approach<sup>1,2</sup>. In the EUREST PLUS project ("European Regulatory Science on

Tobacco: Policy Implementation to Reduce Lung Disease"), Romania acts to provide data on impact of the implementation of the Tobacco Products Directive across the EU.

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**Tob. Prev. Cessation 2019;5(Supplement):A86**  
DOI: 10.18332/tpc/105200

### National and international cooperation for improving smoking prevention and cessation among Romanian youth

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#### Introduction

One important pillar of comprehensive tobacco control actions and policies is represented by smoking prevention and cessation among youth. Hence, the objectives of this paper are to present the strengths, weaknesses as well as threats and opportunities for improving this field in Romania.

#### Methods

The paper presents research activities, development, implementation and evaluation of educational programs as well as legislative and advocacy measures for smoking prevention and cessation among Romanian youth, giving a special attention to identifying factors such as national and international cooperation which enabled several activities and might be useful for diffusion of educational programs as well as sustainable tobacco control policies.

#### Results

In the last years in Romania there were developed several research activities assessing prevalence of use of tobacco and electronic cigarettes and factors which influence these behaviors among different population groups of youth, including the Global Youth Tobacco Survey and Health Behaviour in School aged Children. At the same time, different national and international funding and partnerships enabled the development, implementation and evaluation of smoking prevention and cessation programs for youth as well as legislative measures with impact on both active and passive smoking among this target group. The challenges rely on continuing, diffusion and enhancing these activities and measures, as well as in developing educational programs for prevention of electronic cigarette use, since it is a reality faced by the Romanian youth.

#### Conclusions

The gained expertise, experience, tools and established

partnerships should be used in order to enhance tobacco control targeting young people in Romania in order to face old and new challenges in this field.

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**Tob. Prev. Cessation 2019;5(Supplement):A87**

**DOI: 10.18332/tpc/105274**

### The attitude of students towards smoking, e-cigarette and IQOS

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The present paper is based on the development of a questionnaire which takes into account the students' attitudes towards smoking, electronic cigarette and IQOS, so that we can evaluate the impact created among young people by the evolution of nicotine consumption in different forms. In order to accurately outline the consequences and interference of electronic cigarettes and IQOS in the life of society, a sample of the population aged twenty to thirty years is presented, as young people have a high degree of receptivity to the marketing of the technological devices. However, the question is, "From a youth perspective, does the new technology show an evolution that protects health more than normal cigarettes or, in fact, masked by exaggerated marketing the same danger?" Three types of attitudes are observed following the studies: a tolerant attitude, another intransigent and neutral one. As is well known, there are exceptions to any rule, so that electronic cigarettes, IQOS, respectively, are the exception to smoking in enclosed spaces, although we can not consider an upgrade for passive smokers, as the study performed. But do active smokers agree? It remains to be seen on the basis of the study what attitude predominates among young people, what do they think about the new technology in relation to normal cigarettes, all related to lifestyle, age and environment.

**Tob. Prev. Cessation 2019;5(Supplement):A88**

**DOI: 10.18332/tpc/105286**

### Navigating through storm, smoke and vapors- tobacco control advocacy journey Romania 2015-2018

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Despite being an early signatory of the FCTC in 2005, transposed in local legislation, Romania "enjoyed" throughout the years a heavy interference of the tobacco industry with its' policy development in tobacco control. As a result, multiple attempts for bringing local tobacco control legislation in line with FCTC provisions failed. Early 2015, the first broad-scale effort of the civic community, led by medical associations, resulted in the adoption (Dec. 2015) of a comprehensive smoke-free legislation and enabled its' successful defense through consecutive attempts for reversal in 2016-2017. As of September 2016, Romania's tobacco control community has

also brought forward the first holistic end-game strategy- 2035 Tobacco-Free Romania Initiative. Engaging with policy-makers and general public, drafting support data for proposed legislative changes, the tobacco control coalition, with its' over 350 NGO's members, has navigated its' way forward despite significant challenges. As a "test-playground" for the tobacco industry, especially in its' newly reinvented forms (heated tobacco products and electronic nicotine-delivery systems) and with a significant consumption of tobacco among young age group, Romania remains at the forefront of tobacco control policy-making efforts. Its' successes and its' challenges portray the difficult journey of any tobacco control effort.

**Tob. Prev. Cessation 2019;5(Supplement):A89**

**DOI: 10.18332/tpc/105174**

### Aer Pur Romania: 25 Years Dedicated to Tobacco Control

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#### Introduction

Organization AER PUR Romania is a non-governmental organization involved in tobacco control and health promotion for more than 25 year. This paper presents the strategy, activities and results of the organization in enhancing tobacco control in Romania as well as in building partnerships and collaborative projects with influence at European level.

#### Methods

The presentation focuses on the involvement of AER PUR Romania in influencing several fields of tobacco control-educational programs for smoking prevention and cessation for different population groups, legislative measures, training and capacity building, national and international cooperation.

#### Results

AER PUR Romania was active in implementing several smoking prevention programs such as I Do not Smoke, SmokeeFree Class Competition, Adolescent Smoking cessation, Quit and win for adolescents and in the present is involved in a European project for health promotion and cardiovascular disease prevention in Romania. It also plaid an important role in building partnerships and advocacy for moving forward several legislative measures in the field of tobacco control in Romania as well as research, training and capacity building for smoking prevention and cessation, several times stimulating the implication and commitment of several organizations in this field.

#### Conclusions

AER PUR Romania is committed to continue its activities in the field of tobacco control and health promotion, based on its experience and through a wide cooperation with national and international partners.

**Tob. Prev. Cessation 2019;5(Supplement):A90**

**DOI: 10.18332/tpc/105283**

### Promoting smoking cessation among health professionals - the educational role of the Tobacco Control Section of The Romanian Society of Pulmonologists

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The tabacology section was set up in 2007 at the second National Conference on Tobacco, entitled "Health or Tobacco", held in Cluj, between May 10-12 2007, with the wish to help smokers, and not just only them.

The objectives of this department were to attract as many pneumologists as possible to the smoking cessation cabinet, but also to develop educational materials for smokers (brochures, flyers, video clips, DVDs, etc.) to be distributed in specialized smoking cessation services. Another challenge was the continuation of the work that started with the introduction of the concept of smoking cessation in both the university and postgraduate medical curricula.

Also, the activity of the section was devoted mainly to the elaboration of the first Romanian guide for granting specialized smoking cessation assistance - the GREFA guide, published in 2008, updated in 2010.

Another objective was the continuation of already initiated partnerships with other professional societies (Romanian Society of Cardiology, Romanian Society of Internal Medicine, etc.) and the development of new collaborations in the field of assistance to smokers with still unaddressed professional categories such as psychologists, psychiatrists, oncologists, nurses, obstetricians, occupational medicine specialists, etc., as well as the organization of scientific and continuing medical education in the field of local and national conferences of the Romanian Society of Pulmonologists (RSP) or other medical societies of various specialties.

**Tob. Prev. Cessation 2019;5(Supplement):A91**

**DOI: 10.18332/tpc/105223**

### Preparing the new generation of Romanian experts in tobacco control: PhD studies in the field

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Scientific progresses and new regulatory global context about tobacco use and cessation have created attractive opportunities for young researchers seeking for a PhD in the field. As such, three most relevant ongoing PhD research topics at the University of Medicine and Pharmacy "Grigore T. Popa" Iasi were selected for presentation:

1. "Air pollution and tobacco smoke interactions in COPD" (to investigate cumulated effect of tobacco smoking and air pollution on clinical course and treatment benefits in COPD, in the actual upsetting increased local environmental pollution frame)
2. "Smoking and oxidative stress in mixed anxious and depressive disorder" (to reveal interactions between oxidative stress and tobacco smoking in mixed anxious an depressive disorders, to ascertain clinical practice benefits of tobacco exposure biomarkers in use and propose new such markers<sup>1</sup> to improve disease management)
3. "Personalized tobacco treatment" algorithms for smokers

at high respiratory risk" (to develop and implement clinical practice personalized algorithms to treat tobacco dependence in smokers at high risk for respiratory disease and to test their feasibility in a real life respiratory disease clinical setting)

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**Tob. Prev. Cessation 2019;5(Supplement):A92**

**DOI: 10.18332/tpc/105180**

### BUILDING TOWARD COMPLETE CESSATION OF TOBACCO SMOKING THROUGH HARM REDUCTION

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Reduction of the tobacco use prevalence through prevention and treatment is widely supported by health professionals because of the potential of reducing the public health effects of tobacco use. There are several products available for treating tobacco dependence. The risk if using these products varies as the toxicity associated with those products differs from product to product too. Conventional cigarettes are the products which are at the top of the health risk/harm spectrum due to the fact that they are designed quite deliberately to create and sustain addiction to nicotine and also deliver harmful chemicals upon combustion. However, products such as Nicotine Replacement Therapy (NRT), (gum, patches, etc) are at a very low or no health risk and can benefit people by delivering a steady or instant dose of medicinal nicotine in order to help them quit smoking. Made without tobacco (though the nicotine is derived from tobacco), these products pose minimal health risk and have been approved by regulatory bodies around the world as both safe and effective for treating tobacco dependence.

Along the continuum of risk are products such as smokeless and dissolvable tobacco products as well as the 'e-cigarette', that pose less harm than cigarettes, but for which less is known concerning their impact and role in promoting complete abstinence from smoking. While these products are often collectively referred to as "Harm Reduction" approaches, the ultimate reduction of harm is achieved by complete abstinence from all tobacco use.

**Tob. Prev. Cessation 2019;5(Supplement):A93**

**DOI: 10.18332/tpc/105405**

### TOBACCO PRODUCT REGULATION

#### Awareness of changes to tobacco product content and packaging design after implementation of the EU Tobacco Products Directive among smokers: Findings from the EUREST-PLUS ITC Europe Surveys

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### Introduction

The European Union (EU) Tobacco Product Directive (TPD), which went into effect in 2016, regulates tobacco product content and packaging design, aimed at decreasing misperceptions around reduced harmfulness and addiction potential. The aim of the current study was to examine the extent to which smokers noticed TPD-related changes to tobacco product design and correlates associated with noticing these changes.

### Methods

Data came from Wave 2 of the ITC 6 European Country Survey as part of the EUREST-PLUS project, among a nationally representative sample of adult smokers from six EU countries in 2018 (n=6037). Bivariate and logistic regression analyses of weighted data were conducted using SAS-callable SUDAAN.

### Results

56.3% of smokers noticed any TPD-related design change to cigarettes or roll-your-own tobacco. Over one-quarter of smokers noticed changes to health warnings (30.0%), standardized opening (27.7%), minimum unit size (27.9%), and the removal of tar, nicotine, and carbon monoxide (TNCO) information (26.7%) on packaging. Fewer smokers noticed packages no longer resembling food/cosmetic products (18.7%) and the removal of characterising flavours (12.8%). Noticing any change was significantly associated with older age (compared to ages 18-24), higher education, higher income, being a daily smoker, and usually smoking a menthol or other flavoured tobacco product. Awareness of changes varied significantly across countries for all measures. Compared to Spanish smokers, Greek smokers had 14.8 greater odds of noticing the removal of TNCO information (28.8% vs 4.9%, OR=14.8,  $p<0.001$ ). Romanian smokers had greater odds of noticing packages no longer resembling food/cosmetic products (28.8%) as compared to respondents from Spain (4.1%, OR=10.71,  $p<0.001$ ). Noticing the removal of characterising flavours was more likely among respondents from Hungary (17.2%, OR=5.25), Romania (18.1%, OR=4.66), and Poland (16.1%, OR=4.08) as compared to smokers from Spain (4.2%,  $p<0.001$ ).

### Conclusions

Findings indicate that TPD regulatory changes to tobacco product

content and packaging design are being noticed by over half of smokers, but this varied across countries and populations.

### Funding

European Union's Horizon 2020 research and innovation programme under grant agreement No 681109 (C. I. V.).

**Tob. Prev. Cessation 2019;5(Supplement):A94**

**DOI: 10.18332/tpc/105208**

## Trends of Global Dual and Poly-Tobacco Use: A Systematic Review

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### Introduction

The prevalence of tobacco use has been commonly reported on a product by product basis; relatively few studies have estimated the prevalence of current dual and poly-tobacco use. This is the first study to systematically review the prevalence of current dual and poly-tobacco use among adults globally.

### Methods

We systematically searched Medline, Embase and Global Health for studies describing dual use and use of multiple tobacco products along with their synonyms. We included quantitative study designs with any measure of prevalence of current (past 30 day) dual tobacco (smoking tobacco plus one other tobacco product) and poly-tobacco use (concurrent use of more than two tobacco products) with focus on nationally representative samples of the adult populations worldwide.

### Results

In total, we found 19 studies yielding 329 prevalence estimates for single, dual and multiple tobacco products in 48 countries from 1998 to 2018. Definitions of dual and poly-tobacco use varied widely among the included studies. Dual use of smoking and smokeless tobacco was highest in South East Asia as well as in low and middle income countries. Russia had the highest prevalence of dual use (38.8% among adults). Prevalence of poly-tobacco use was highest in the European region, markedly in Denmark (11.9%), the UK (11.4%) and France (10.4%). There were multiple studies in the US, which suggest the proportion of poly-tobacco use has been increasing, even as the overall tobacco use declined in the past decade. The phenomenon is more pronounced in young adults.

### Conclusions and applications

To our best knowledge, this is the first study to systematically review the prevalence of dual and poly-tobacco use among adults, describing trends and patterns of poly-tobacco use globally. This information may inform policy makers and practice of tobacco control and provide support for effective regulation of alternative tobacco products.

**Tob. Prev. Cessation 2019;5(Supplement):A95**

**DOI: 10.18332/tpc/105203**

## Estimating tobacco price elasticity in Kosovo: using the micro data from Household Budget Survey (2007 – 2017) and Deaton demand model

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### Introduction

Literature shows that in low- and middle-income countries (LMICs) tobacco expenditure represents a significant portion of the household budget especially in poor household, it exacerbates poverty by increasing healthcare costs, reducing incomes, and decreasing productivity. This analysis aims at estimating price elasticity of demand for cigarettes in Kosovo.

### Methods

Using data from Kosovo Household Budget Survey for the years from 2007-2017, in total 10,217 households with positive expenditure on cigarettes enter the sample for the estimation. Deaton (1988) demand model is used and it uses unit values as a proxy for price, spatial variation, and the structure imposed by a weak separability assumption account for the effect of the quality of the good. Basic idea of the model is that all households within a cluster (typically a small territory unit, such as municipality or village) face the same market price and that within-cluster variations in purchases depend only on total household expenditure and household characteristics, while cross-cluster variations in purchase are due to genuine price variations, among other factors. The estimation of the model consists of three stages. In the first stage, the effects of total household expenditure and other household characteristics are by the means of regression analysis purged from the budget share of the consumption and unit value. In the second stage, cluster average values of budget share and unit values are used to estimate unit value elasticity of consumption. In the final, third stage, we use separability assumption to separate the effect of price elasticity from the quality effects contained in unit value elasticity.

### Results

Results of the estimation indicate a negative price elasticity of cigarettes which amounts to -0.288. Standard error of the elasticity calculated via bootstrapping procedure (1000 replications) indicates that the elasticity is significantly lower than zero ( $\xi = -0.288$ ;  $SE\xi = 0.097$ ,  $t = -2.969$ ).

### Conclusions

In Deaton's model unit value of cigarettes as approximation of the prices are used and find a negative price elasticity of demand for cigarettes of -0.288. Although the previous estimates for Kosovo are non-existing and therefore it is impossible to make any comparison, this result is in line and validated with the theoretically expected and previous estimates of price elasticity for cigarettes for low and middle income countries.

### Funding

The research I conducted is funded by the University of Illinois at Chicago Institute for Health Research and Policy through its partnership with Bloomberg Philanthropies.

**Tob. Prev. Cessation 2019;5(Supplement):A96**

**DOI: 10.18332/tpc/105209**

## The elasticity of tobacco products in BiH – macrodata analysis

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Tobacco consumption continues to be behavior engaged in by a large percentage of Bosnia & Herzegovina (BiH) citizens. According to the official statistics, nearly half of the state's adults, that is about 1,200,600 people, consume tobacco product on a daily bases. The state excise policy is one of the main available tool for reducing smoking prevalence because the cigarette prices are under direct impact of this policy. The specific excise on cigarettes introduced in BiH in 2009 and have increased every year so it was the main driver of cigarettes price growth. In order to provide research-based evidence for more effective tobacco taxation policies in BiH, in this paper we estimate the price elasticity of demand for cigarettes using the macro level data for the period 2008 to 2017, on a semi-annual basis. The results have shown that increase in prices of cigarettes have statistically significant impact on cigarettes consumption, at a significance level of 1%. The estimated price elasticity coefficient is in the range from -0.71 to -0.83, depends on the selected control variables used in the model. It means that increase in real cigarettes prices for 10% led to the decrease in cigarettes consumption in the range from 7.1% to 8.3%. Results of our analysis suggest that the state excise policy is an effective tool for reducing smoking prevalence in BiH. If policy-makers in BiH continue with the policy of increasing excise taxes, the consumption of cigarettes will decrease.

**Tob. Prev. Cessation 2019;5(Supplement):A97**

**DOI: 10.18332/tpc/105226**

## Elasticity of tobacco products in Croatia

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### Introduction

Having an estimated cigarette price elasticity of demand for a specific country is very useful for planning purposes and it enables precise estimation of how much a tobacco tax increase will affect government revenues and tobacco use.

### Methods

In order to estimate the price and income elasticity of cigarette demand in Croatia, we used aggregate time series data on cigarette consumption, cigarette prices, income and smoking restriction policies from 2000 to 2017. After specifying conventional cigarette demand model in linear functional form, we applied both Error Correction Model (ERM) and Autoregressive Distributed Lag (ARDL) cointegration framework to examine the short-run and long-run characteristics of cigarettes demand. In addition to aggregate time-series analysis, we used data obtained from household budget surveys (HBS) for three years (2010, 2011 and 2014) to estimate cigarette price elasticity in Croatia.

### Results

The results of the research carried out within this project indicate that in Croatia, the demand for tobacco is price-sensitive. The aggregate time-series analysis suggests that a 10% increase in prices would result on the average reduction in long-term demand for cigarettes by between 4.4% and 6.1%. Estimated results of analysis based on Deaton's (1988) model indicate that a 10% increase in cigarette price would lead to a 10.7% decrease in cigarette consumption.

**Conclusions**

The government should increase taxes on tobacco and related products, especially the portion of specific excise duties in order to raise their price so that tobacco products will become less affordable over time.

**Tob. Prev. Cessation 2019;5(Supplement):A98**  
DOI: 10.18332/tpc/105270

**TPD AND FCTC IMPLEMENTATION****Monitoring of the WHO-FCTC and the implementation of the anti-tobacco law in Albania**

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**Introduction**

This is the second report that was prepared by the NGO "FTFA". It is focused on WHO/ FCTC and compares it with the Albanian anti-tobacco law. It monitors implementation and prepare recommendations for improvement.

**Methods**

Analyzing Albanian national legislation in tobacco control and authentically confirmed text of the FCTC. This analysis has been carried out to study the national legislation related on tobacco control in Albania.

**Results**

This law reflects the recommendations of the above convention. The implementation of some acts of the law, appeared a serious problem. There are not available services to quit smoking and quit line. The warnings do not include a photograph or graphic still. Albania has a ban on most forms of direct and indirect advertising, but is not being implemented. In some kiosks is also noticed another violation; tobacco products placed on the outside of it contain on their background clearly parts of the brand. Every teenager at age of eighteen can buy tobacco products. Another important issue is taxation. Illicit trade of national tobacco products in Albanian remain very cheap, twenty open cigarettes are sold 40 cent Euro.

**Conclusions**

Albania should continue to support and accelerate the development of FCTC protocols, including in illicit trade. National tobacco products excises must increase at the same time to control illegal trade. Albania needs some improvements in the law and its acts as well as some amendments and supplements to the approved legislation, which need to be tested in the Albanian reality.

**Tob. Prev. Cessation 2019;5(Supplement):A99**  
DOI: 10.18332/tpc/105153

**Cigarette brand attachment among smokers in six European countries**

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**Introduction**

This study aims to evaluate if smokers from six European countries have a cigarette brand of choice, the degree of smokers' attachment to the brand, and the factors associated with choosing a specific brand.

**Methods**

Data from a sample of adult smokers from Germany, Greece, Hungary, Poland, Romania, and Spain (approximately 1000 smokers per country) was analysed cross-sectionally. The prevalence of smokers' having a usual brand of tobacco products (factory-made or roll-your-own cigarettes), smokers' brand of choice, the factors associated with choosing the brand, and the degree of commitment to the brand (from "not at all" to "a lot") were assessed by socio-demographics and smoking related variables.

**Results**

Approximately nine in ten smokers reported having a usual brand. Marlboro was the most popular brand in three of the six countries (ranging between 17.8% and 24.5% of the preference). Most participants were attached "a lot" to their brand of choice (44.4%). Their taste (83.2%) and their price (51.7%) were the reasons most reported for choosing a cigarette brand.

**Conclusions**

Brand attachment is high among factory-made and roll-your-own cigarette smokers in six European countries. Future research on longitudinal trends of brand loyalty is warranted to evaluate the effect of the implementation of the Tobacco Products Directive restrictions on cigarette additives and tobacco products labelling in these countries.

**Tob. Prev. Cessation 2019;5(Supplement):A100**  
DOI: 10.18332/tpc/105159

**The power of fingerprinting of volatiles constituents in fighting illicit and flavoured tobacco products**

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Manufacturers of tobacco products aim to attribute dedicated, by the consumer recognisable characteristics to their products. Volatile and semi-volatile organic compounds, are to a large degree determining the sensorial identity of the product. Their composition is influenced by both the tobacco blend and additives added to the product during production. However, for protecting the product identity, manufacturers do not disclose their composition.

Producers of illicit tobacco products will hardly be able to mimic the sensorial characteristics of genuine products. This fact offered the opportunity to discriminate genuine from counterfeit tobacco products by chemical analysis of the volatile and semi-volatile constituents, applying gas chromatography high resolution time of flight mass spectrometry. The developed multivariate statistical models allowed to distinguish branded cigarettes from each other, and from counterfeit products.

Chemical analysis of the volatile and semi-volatile fraction of tobacco products offers also the possibility to identify sensorial active substances at concentrations, which might attribute a characterising flavour to the respective tobacco product. Respective models were developed at the JRC for discriminating

cigarettes with characterising flavours from cigarettes currently on the EU market. The chemical analysis of the cigarettes has shown to be economic and reliable, leading to models with high accuracy. In this sense, it can be used either as a screening tool in monitoring exercises, and/or for confirmation of characteristics identified by a sensory panel.

**Tob. Prev. Cessation 2019;5(Supplement):A101**

**DOI: 10.18332/tpc/105284**

## Snus industry lobbying in Sweden has delayed tobacco control legislation for years

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From being in the forefront of tobacco control until around 2006 Sweden is now in 2019 more in the bottom than in the lead. In Scandinavia, only Denmark is behind Sweden. Tobacco control measures that have been discussed to control the tobacco industry such as a display van and standardized pictorial warnings have been stopped and moved from decisions in the Parliament. The latter despite support from the majority of the public. As a result, Sweden has dropped from the fifth place on the European Tobacco Control Scale in 2006 to the eleventh place in 2016.

The main explanation is the Swedish snus industry's influence on decision makers in the Government but also Parliament. As a result of the lobbying there is now a majority among the political parties in the parliament in support of a harm regulation agenda for tobacco based on the harm they cause.

This presentation will focus on the snus industry's main strategies in Sweden and how the snus industry has promoted snus and snus use during the last 20 years. In particular during the last years when the harm regulation agenda has been promoted among decision makers in Sweden at the cost of several failures to further regulate the marketing of tobacco products incl. the tobacco industry. The situation in Sweden can then be used as a warning example when other nicotine- and tobacco products are entering the markets with the risk of increased lobbying and support also for a harm regulation concept for such products impacting on the regulation of all tobacco products incl. the traditional cigarettes.

**Tob. Prev. Cessation 2019;5(Supplement):A102**

**DOI: 10.18332/tpc/105218**

## New challenges for WHO FCTC compliance in Russia and Eurasian Economic Union

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### Introduction

According to GATS 2009 vs 2016, prevalence of current smoking among adults in Russia declined from 39.4% to 30.9%; number of deaths from tobacco use in 2015 was about 300,000. New challenges for WHO FCTC compliance emerged.

### Methods

Review of official documents and industry sources.

### Results

Tobacco smoking and sales of cigarettes in Russia are declining, opposite for novel products: vapes, e-cigarettes and heated

tobacco. Legal provisions on smoking cessation for about 30 mln smokers did not materialize yet. National tobacco control strategy outlining legal regulations for 2010-5 expired; drafting for 2016/7/8/9 continues. Tobacco industry promotes novel products as harm reduction; provides massive foreign direct investment, enjoys concessions/privileges from State and support from business, education, research and health organizations, NGOs; PMI is leading. Russia in eyes of industry belongs to region of Eastern Europe, Middle East and Africa.

Regulation of novel tobacco products is absent. Taxation of tobacco products is inadequate, favors industry interests and novel products. Russia is turning into global center for production and dissemination, including illegal, of novel tobacco products. Pro-tobacco policy is increasingly formulated by supranational Eurasian economic union (EAEU), which is not party to WHO FCTC, and has no relations with WHO; EAEU regulations on tobacco excise might not correspond to WHO FCTC compliance by EAEU Member States; EAEU FTA favor tobacco.

### Conclusions

Tobacco use prevention and control based on WHO FCTC compliance is of primary importance for Russia and EAEU; EAEU should join Convention and Protocol to eliminate illicit trade in tobacco products.

**Tob. Prev. Cessation 2019;5(Supplement):A103**

**DOI: 10.18332/tpc/105224**

## Establishing a reference group of tobacco products representative of the EU market to support the decision on whether a tobacco product has a characterising flavour: Findings from the EUREST-FLAVOURS project

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### Introduction

The European Union (EU) Tobacco Product Directive (TPD) bans tobacco products with characterising flavours. The objective of the EUREST-FLAVOURS project is to support the European Commission in the specification of the methodology to support the decision on whether a tobacco product has a characterising flavour– based on a comparison with reference products. The aim of the current analysis was to propose a list of potential tobacco products, to be considered as part of a 'reference' group of products.

### Methods

We used a combination of data sources, including but not limited to commercial sales data and data submitted via the EU Common Entry Gate (EU-CEG) and applied a random sampling among strata approach.

### Results

The identified list of potential reference tobacco products includes leading and non-leading brands representing a broad geographical distribution of products across the EU. The potential reference products further cover a wide range of tobacco product characteristics.

### Conclusions

Using a robust methodology, we proposed two separate lists

(boxed cigarettes and RYO tobacco) of potential reference products. The final list of reference products will be a valid and comprehensive representation of tobacco products currently sold on the EU-market that are currently considered as not imparting a characterising flavour.

#### Funding

The EUREST-FLAVOURS Project takes place with the financial support of the European Commission Single framework Contract Chafea/2016/Health/36.

The content represents the views of the EUREST-FLAVOURS Consortium and is its sole responsibility; it can in no way be taken to reflect the views of the European Commission and/or Chafea or any other body of the European Union.

**Tob. Prev. Cessation 2019;5(Supplement):A104**

**DOI: 10.18332/tpc/105193**

## POSTERS

### E-cigarettes as a smoking cessation tool: efficacy versus addiction

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#### Introduction

Currently, there are conflicting data regarding the use e-cigarettes as a tool for smoking cessation. This study aims to evaluate the efficacy of e-cigarettes as a smoking tool among Romanian consumers.

#### Methods

A questionnaire was applied online on 22 profile groups (Rovapers, Carpathian Vapers, Romanian Vapers ets.) between May-November 2016. Were included all subjects that smoked or were currently smoking e-cigarettes and subjects that tried e-cigarettes. The statistical analysis was made using MedCalc Statistical Software version 17.5.5.

#### Results

810 out of 13 616 subjects that viewed the questionnaire filled it in. 13 questionnaire were not completed, so 797 subjects were left in the end. Median age was 24 years old, mostly men (63.5%), former smokers of classic cigars (46.8%). The main reason of starting smoking e-cigarettes was the need to reduce or cessation of classic cigarettes, especially in heavy smokers. Fewer negative health effects, the fact that it can be used without nicotine and has lower prices than classic tobacco were among the factors that contribute in switching to electronic device. 60.7 % of heavy smokers quit and 15% significantly reduced the cigars, after starting e-cigarettes.

#### Conclusions

The results of this study, alongside other data from the literature<sup>1,2</sup> are optimistic in recommending e-cigarettes as a safe smoking cessations tool, especially in heavy smokers<sup>3</sup>. However the lack of data regarding long term side effects and the fact that smoking E-cigarettes stimulated the need for classic cigars, or even increased the desire to smoke more impose some cautions preventing solid recommendation.

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**Tob. Prev. Cessation 2019;5(Supplement):A105**

**DOI: 10.18332/tpc/105305**

### Degree of adoption of WHO FCTC tobacco control measures in Portugal

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#### Introduction

In 2017, in Portugal, tobacco use accounted for 11,869 deaths and 313,944 disability-adjusted life years. In 2015, the prevalence of tobacco use was 24.9% in men and 12.7% in women. In Portugal, the WHO Framework Convention on Tobacco Control (WHO FCTC) was approved in 2005 through Decree No. 25-A / 2005. The aim of the study is to identify the degree of adoption of the tobacco control measures recommended by the WHO FCTC, from 2007 to 2018, in Portugal.

#### Methods

The identification of tobacco control measures, specifically tobacco supply and demand reduction measures, adopted by Portugal within the WHO FCTC was carried out through a documentary analysis of the Portuguese legislation, from 2007 to 2018, using Official Journal (Diário da República) database. The degree of adoption of each tobacco control measure was coded as 0 (not adopted), 0.5 (partially adopted) and 1 (fully adopted). The sum of the scores obtained for each tobacco control measure is the score of the degree of adoption of tobacco control measures recommended by WHO FCTC, which could vary between 0 and 11.

#### Results

In Portugal, although WHO FCTC was approved in 2005, it was only implemented in 2007 through Law 37/2007, which was updated in 2015 and 2017. The score of the degree of adoption of tobacco control measures obtained was eight.

#### Conclusions

To date, the WHO FCTC has played a key role in the adoption, nationally and globally, of tobacco control measures, whose effectiveness in reducing the prevalence of tobacco use is well established. Although Portugal has already adopted tobacco control measures recommended by WHO FCTC, the score obtained reflects that the country has room to strengthen and improve WHO FCTC implementation.

**Tob. Prev. Cessation 2019;5(Supplement):A106**

**DOI: 10.18332/tpc/105299**

### Knowledge on cancer education and prevention and its use in the context of tobacco smoking in Poland

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## Introduction

Cancer is the second most common cause of death in developed countries. Lung cancer is the most frequent cancer in the world and it occurs almost exclusively in smokers and people exposed to secondhand smoke. Evidence of the association between tobacco smoke and cancer appeared in the first half of the 20th century. In 1986, the International Agency for Research on Cancer (IARC) announced that smoking causes not only lung cancer but also respiratory, pancreatic and lower urinary tract cancers. In 2004, the official list of diseases caused by tobacco contained 14 different cancers. It is clear from this that tobacco smoke affects almost every internal organ.

## Methods

The data comes from the Awareness of Cancer and Prevention survey constructed as part of the National Program for Cancer Prevention by the Ministry of Health and conducted in 2014.

## Results

86.5% of Poles reckon that everyone should take care of their own health and 84.4% of them believe they do so. 93% of respondents heard that smoking causes lung cancer and 96.9% of people think that giving up smoking can protect against lung cancer.

29% of people with primary, 36.5% with basic vocational, 27.7% with secondary, and 18.9% of people with higher education do not apply to knowledge and declare that they smoke.

## Conclusions

Most Poles believe that they care about their own health, but declarations often differ from the actual state. Our knowledge does not always translate into behavior. The government should educate, train and implement preventive programs, thanks to which preventive actions will be associated not only with medical examinations but also with a healthy lifestyle. Preventive programs should be addressed especially to environments with a lower level of education.

**Tob. Prev. Cessation 2019;5(Supplement):A107**

**DOI: 10.18332/tpc/105287**

## Cigarette and e-cigarette use in parents and their adolescents

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## Introduction

Potential effects of parental e-cigarette use on adolescent tobacco use are understudied but have implications for tobacco and e-cigarette control. We investigated the associations of parental cigarette and e-cigarette use with adolescent use of these products.

## Methods

A cross-sectional questionnaire survey was conducted in 26648 secondary school students (mean age 14.8 years, 54.7% boys) in Hong Kong in 2016/17. We examined the associations of paternal and maternal cigarette and e-cigarette use (study factors: abstinence [reference]/cigarette use only/dual use of cigarettes and e-cigarettes/e-cigarette use only) with cigarette and e-cigarette use stages (never, not susceptible [reference]/never, susceptible/ever, not current/current) in adolescents, with mutual adjustment of the study factors and adjustment of age, sex, and perceived family affluence.

## Results

In general, parental cigarette use only, dual use, and e-cigarette

use only (vs abstinence) were all associated with adolescent cigarette and e-cigarette use. The associations were generally strongest for parental e-cigarette use only, followed by dual use and cigarette use only. For example, the adjusted odds ratios (AORs) of adolescent current cigarette use were 43.03 (95% CI 23.85-77.63) for maternal e-cigarette use only, 10.90 (6.25-19.01) for dual use, and 3.13 (2.65-3.71) for cigarette use only; the corresponding AORs of adolescent current e-cigarette use were 71.37 (37.83-134.64), 17.29 (10.95-27.30), and 2.98 (2.44-3.64).

## Conclusions

In Hong Kong adolescents, cigarette and e-cigarette use were generally more strongly associated with parental e-cigarette use than with parental cigarette use. These findings support the Government's proposal to ban e-cigarettes to protect the health of young people.

**Tob. Prev. Cessation 2019;5(Supplement):A108**

**DOI: 10.18332/tpc/105294**

## Mobilizing the Youth thru Smokefree Caravan

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The President of the Philippines signed Executive Order 26 entitled Providing for the Establishment of Smoke-Free Environments in Public and Enclosed Places on May 2017. This imposes a nationwide ban on smoking in all public places.

The SmokeFree Caravan campaign was launched to help popularize said measure. It is a travelling roadshow to highlight the successful Smokefree implementation and promote the adoption of local smokefree ordinances to other cities. The role of the youth in amplifying Smokefree initiatives especially in the digital sphere is a game-changer. They can be the primary arm for engagement, online and offline.

The Caravan went to 12 cities, each city hosting different events to promote tobacco control. These range from mural competitions, dance and fitness sessions, media events, advocacy workshops, etc. The campaign was also promoted on social media and Filipinos shared images and comments inspired by the campaign using the hashtag #SmokeFreePH. Student volunteers were mobilized to help in the different Caravan activities all throughout the country. They manned the booths, attended social media workshops, interviewed and produced videos, all pushing for SmokeFree implementation.

In all of the cities that the SmokeFree Caravan visited, SmokeFree ordinances were enhanced and implementation was strengthened. This can be partly attributed to the contribution of youth advocates, posting and tweeting in all of the major island groups of the Philippines.

Social media and the rest of the digital sphere is owned by the youth. We can have them play a crucial role in creating a spike in online chatter, changing the conversation in favor of tobacco control issues. Achieving to be in the top ten Twitter trending topic, for example, cannot be done without the help of the youth advocates. They play a very important role in magnifying our message in creating favourable public opinion for tobacco control.

**Tob. Prev. Cessation 2019;5(Supplement):A109**

**DOI: 10.18332/tpc/105292**

## The benefits of quitting smoking for people with cancer

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### Introduction

Smoking has been linked to cancer occurrence and survival rates for a long time. However, there is little research into the impacts of smoking on oncological treatments. The aim of the study is to show the impact that smoking can have on the effects of cancer therapy.

### Methods

Epidemiological situation analysis of the malignant diseases based on the data of incidence and mortality and the impact of smoking on the results of treatment.

### Results

At the time of establishing the diagnosis, the incidence of smoking varies from 10 to 95 per cent (<5% for breast cancer and > 60% for lung cancer).

The previous research indicates that continuing smoking after the establishment of a diagnosis can impact the treatment outcomes and is related to worse prognosis and survival rate. Active smoking can be connected to lower survival rates with advanced non-small cell lung cancer, limited small cell lung cancer, bladder cancer, and upper tract urothelial cancer. The smokers suffering from prostate cancer have a higher risk of death outcomes and worse prognoses after the treatment.

The research has shown that there is a link between smoking and slower wound healing in operated patients and that it can also intensify the side-effects of chemotherapy and prolong the responses to radiation.

### Conclusions

It is essential to increase knowledge about the health benefits of quitting smoking in order to advance the results of oncological treatments. Implemented smoking cessation programs need to be adapted to oncology patients.

**Tob. Prev. Cessation 2019;5(Supplement):A110**

**DOI: 10.18332/tpc/105288**

## Error Correction Model Analysis of Tobacco Consumption in Kosovo

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Information for cigarette consumption during the time period 2005-2017, was utilized to assess the price and income elasticity effects on smoking intensity in Kosovo. The analysis was conducted by applying the error-correction model to estimate both the long-term and short-term smokers' sensitivity to changes in price and income. The study revealed that the short run price elasticity is -0.33, and -0.68 in the long run. Contrary to the price effect, income showed positive correlation to cigarette consumption in Kosovo. Based in the information revealed, it can be concluded that increasing taxes on cigarette results in lower consumption at the macro level.

**Tob. Prev. Cessation 2019;5(Supplement):A111**

**DOI: 10.18332/tpc/105272**

## Varieties of gender differences in tobacco smoking behaviours

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### Introduction

The presence of gender differences is well known in a wide variety of areas, including employment, education, and income. In most European Union countries, size of the gender differences in tobacco smoking decreases with size of place of residence and education and increases with age until late adulthood. Measures aimed at narrowing the gender gap in socio-economic indicators are justified in the Partnership agreements on the European structural and investment funds which have been signed between the European Commission and member states.

### Methods

This study analyses gender gap in tobacco-smoking behaviours according to the results of a two-wave study Awareness of Cancer and Prevention, which was carried out on a stratified random sample of n=2·8,000 Poles aged 18+. Cramér's V was used to assess the size of gender differences. The two-way analysis was followed by propensity score matching.

### Results

According to the propensity score matching, being male currently affects tobacco smoking behaviours in terms of average treatment effect, even when controlling for socio-demographic characteristics, health status, and knowledge of lung cancer prevention. In Poland, in terms of Cramér's V, the size of gender differences in tobacco non-use had not changed considerably between 2006 and 2014 (16.5 pp and 17.2 pp). The pattern of gender gap in tobacco non-use by size of place of residence and age had remained generally similar. However, a large increase in gender gap in tobacco non-use in the population with higher education was observed between 2006 and 2014 (2.5 pp and 11.8 pp). Men with higher education were the only gender-education group, which recorded a decrease in non-smoking.

### Conclusions

Within the conceptualization by Rosenberg and Hovland (1960), high gender differences apply to the behavioural component of lung cancer prevention rather than affective and cognitive domains. Observed decrease in tobacco non-smoking in men with higher education demands additional actions.

**Tob. Prev. Cessation 2019;5(Supplement):A112**

**DOI: 10.18332/tpc/105269**

## Verification of the prognosis of lung cancer mortality in Poland based on data about smoking habits

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### Introduction

Lung cancer is the most common cancer among males worldwide and one of the most common cancers among females. Poland is among European countries of the high risk of lung cancer for men. Although there are several factors influencing the risk of developing lung cancer, tobacco smoking is well established as the main risk factor. Thus, changes in lung cancer mortality may reflect changes in smoking habits in a given population.

**Methods**

The population data and its forecast up to 2030 come from the Central Statistical Office and the lung cancer mortality data from the Department of Epidemiology of Maria Skłodowska Institute – Oncology Centre. The frequencies of smoking habits were smoothed based on the survey done by Central Statistical Office in 1996, 2004, 2009, 2014. The present model was based on model-based smoothing of the smoking habit – specific risk ratios estimated for males and females in Europe.

**Results**

Among men, the scenario in which about 20% of smokers quit smoking every 5 years turned out to be too pessimistic. The real change in lung cancer mortality turned out to be deeper. In 2015, lung cancer mortality among men was more than 25% lower than it was from the forecast. Among women, a scenario in which only 10% quits smoking works. This is too little to reduce women's lung cancer mortality.

**Conclusions**

The results obtained clearly indicate that cutting down on the number of smokers translates directly into a considerable reduction of the lung cancer incidence rate. Lung cancer is a disease to be easily avoided. Smoking cessation is the best way to reduce risk of lung cancer among human population.

**Tob. Prev. Cessation 2019;5(Supplement):A113**

**DOI: 10.18332/tpc/105261**

## Building Capacity of Portuguese Nurses to be Tobacco Control Champions

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**Introduction**

Tobacco consumption is a known significant risk factor for many avoidable diseases, making it an important target in health promotion efforts worldwide. There are over 71,800 nurses in Portugal, but most of them are not trained in tobacco control. Previous experiences showed Training-of-Trainers design efficacy. The present work aimed at filling this educational gap and build capacity among Portuguese nurses for evidence-based cessation interventions in clinical practice.

**Methods**

Education workshops and webcasts on tobacco dependence treatment were applied from October 2017 to January 2019 and its efficacy evaluated using a descriptive, pre-post design. Statistical analysis was performed using IBM® SPSS® Statistics vs.24.0 software at a confidence level of 95%. Comparisons of the responses between the initial moment and the final moment were performed using the Wilcoxon test.

**Results**

A total of 72 nurses attended the 5 workshops at different locations in continental Portugal. After the program, we observed an increase in the number of nurses that: 1) advise patients to stop smoking ( $p=0,002$ ); 2) assess whether patients are interested in quitting smoking ( $p=0,001$ ); 3) recommend using a telephone line for smoking cessation ( $p=0,001$ ); 4) analyse the barriers to cessation with patients who are not interested in trying to cease ( $p=0,002$ ); and 5) advise patients and their families to create a

smoke-free home environment after hospital discharge ( $p=0,002$ ).

**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.

**Tob. Prev. Cessation 2019;5(Supplement):A114**

**DOI: 10.18332/tpc/105235**

## Magnitude and socio-economic effects of tobacco use among youths in resource limited settings

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Tobacco use continue to endanger the health and welfare of youths globally. Tobacco use poses a threat to economic and social development. The dependence on tobacco is often aggravated by low socio-economic development status, which undermines human socio economic development especially in resource limited settings. Despite the problems caused by tobacco use, the magnitude and effects among youths in is not known. Main objective was to determine magnitude and socio-economic effects of tobacco use among youths while specific objectives were to determine the level of tobacco use, contributing factors to tobacco use and the perceived effects of use among youths in resource limited settings. The study utilized a cross-sectional study design. A total of 415 youths aged 15-24 were involved in the study. Simple random sampling was used to select study participants. An interviewer-administered questionnaire was used to collect quantitative data and focused group discussion guide for qualitative data. Reliability and validity of tools were tested. Quantitative data was analysed using SPSS. Chi- Square and Odds Ratio were used to test for significance of association. 36.6 % of the respondents reported to be currently using tobacco. Majority used sniffed tobacco (24.1%) while cigarettes smoking was 12.5%. Tobacco use and gender of the respondents was statistically significant at 95% confidence level with  $\chi^2=107.0$ ;  $df=1$ ;  $p=0.0001$ . Odds Ratio showed that males were 7.5 times more likely to use tobacco than female. Main source of tobacco was in markets (78%) and from friends (22%). Sniffed tobacco was the most readily available. Peer pressure was reported by 48% as the main factor that drives youths to tobacco use. 56.6% of the respondents did not know of any health effects of tobacco use. The recommended intervention included awareness creation, reduction of accessibility to tobacco, health education and functional youth friendly centres.

**Tob. Prev. Cessation 2019;5(Supplement):A115**

**DOI: 10.18332/tpc/105231**

## Challenges for building consensus for adoption and full compliance with 100% smoke free law in Serbia

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In Serbia, 37% of adults smoke and more than half of the population is exposed to tobacco smoke in enclosed places. The hospitality sector is exempted from the smoking ban and compliance with current legislation is low.

From March 2017, Institute of Public Health of Serbia

implemented a project aimed at building consensus for adoption and full compliance with 100% smoke free law in Serbia. The project was funded by Bloomberg Philanthropies and managed by the International Union Against Tuberculosis and Lung Disease. Project supported conferences and other events, contributed to the continuous presence in the media and built up informational resources to advocate for the smoke free environment which will be useful in the next period. New partnerships were established leading to an increase in a number of partners who will further work in tobacco control field.

Based on the findings from surveys, conclusions from the multisectorial events and media content analysis, next steps and challenges were identified. In the next period, together with advocacy measures aimed at decision makers, it is important to focus on the general public and health professionals so they accept and advocate for evidence based tobacco control measures. Social norms changes are needed due to strong correlation between social norms and policy implementation. Moreover, it is necessary to conduct campaigns to change the perception of economic benefits of tobacco. New challenges such as heated tobacco products amplify the importance of the provision of accurate information on tobacco control best practice to decision makers, general public and health professionals. Findings from 2018 survey conducted as part of the project showed that only 26% of smokers and 64% of nonsmokers think smoking in the hospitality sector violates right to smoke free air, indicating the need of incorporating human rights approaches into further actions.

**Tob. Prev. Cessation 2019;5(Supplement):A116**

**DOI: 10.18332/tpc/105212**

## Economics of Smokeless Tobacco Taxation in Bangladesh

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### Introduction

With 22.0 million (20.6%) adult people using smokeless tobacco (SLT), Bangladesh is one of the largest SLT consuming countries in the world (WHO, GATS, 2017). Of SLT users, 16.2% are men and 24.8% are women. The Global Youth Tobacco Survey (GYTS), 2013 reveals that more students were SLT users (4.5%) than smokers (2.9%). The prevalence of SLT use is alarming because Bangladesh ranks the second (next to India) in 34 high SLT burden countries (Sinha and Yadav, 2017).

### Objectives and methods

The study attempts to examine the present structure of SLT taxes in Bangladesh, and estimate the own-and cross-price elasticities of demand for SLT products with a view to suggesting more appropriate SLT tax pricing strategies for designing effective SLT tax policy in Bangladesh. For examining the SLT tax structure, we have used the secondary data collected from the National Board of Revenue (NBR), and other relevant data. In order to estimate the price elasticities of demand for SLT products, we have used Deaton Model (1997) which exploits price variation over space to estimate price elasticities using household survey data. We have used Household Income and Expenditure Survey (HIES) 2016 data of Bangladesh Bureau of Statistics (BBS) for estimating price elasticities of demand for SLT products.

### Significance of the study

The significance of undertaking this study is due to several reasons.

Firstly, SLT has received little attention in terms of quality research and evidence-based policy making in Bangladesh. Secondly, the HIES, 2016 of the BBS shows that on average, the consumption of SLT products accounts for the largest share being 1.4 per cent of the total household budget. Thirdly, SLT holds the potential for increasing the tax revenue of the government as the revenue share of SLT products is only 0.14 per cent of the NBR revenue.

### Results

The government has developed a complex multi-tiered ad valorem SLT tax system, which creates a number of problems. The tax base for SLT is tariff value, which is much lower than the retail price. The overall taxation on SLT remains generally low, making it readily affordable to people especially women. Low SLT price also encourages downward substitution from smoked to SLT and discourages quitting behavior. The estimate of own-price elasticity of demand for SLT products is -0.24 (inelastic demand), which is consistent with the available evidence (Nargis et al, 2014). Rural households are found to be more responsive to change in prices of SLT products than urban households. The poor households are more responsive to the changes in the price of SLT products than the rich households.

### Conclusions

Our findings suggest that using the tax system to increase significantly the prices of SLT products would lead to a substantial reduction in SLT use while increasing government revenue. The tax base for SLT needs to be changed from tariff value to retail price. Measures may be taken to harmonize tax rates across tobacco products to avoid substitution of one tobacco product by another. Policymakers may introduce specific excise system replacing the existing ad valorem for substantially contributing to the revenue collection from SLT products.

**Tob. Prev. Cessation 2019;5(Supplement):A117**

**DOI: 10.18332/tpc/105199**

## Experimentation of cannabis according to e-cigarette and tobacco regular use among young Parisians

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### Introduction

France is the European country where the prohibition of cannabis is the strongest in EU. France is also a country where cannabis use is the highest. Since 2012 the emergence of the electronic cigarette (ecig) has profoundly changed the consumption of tobacco among Parisian teenagers. We wanted to study the cannabis used in ecig users, compared to tobacco users.

### Methods

We analyzed the 2012-2018 cross-sectional surveys of Paris sans tabac conducted on 2% of classes randomly designed from the list of school authorities of Paris.

### Results

The rate of the 20 829 students who report cannabis experimentation is 11.6% among the 16592 no tobacco or vape users the last 30 days, 38.4% among the 625 only ecig-users, 68.0% among the 2596 only tobacco users, 78.8% among the 1 014 dual (ecig and tobacco) users.

### Conclusions

There is a strong negative relationship between regular

consumption of ecig and low rate of use of cannabis. No causal link can be established from our data. The most likely hypothesis is a preferential experimentation of ecig by young students who don't want experiment bad products (tobacco, cannabis,...). Tobacco users have more temperament to use all products including cannabis and alcohol (data non-reported). Overall, while the increase of cannabis use has been constant for 10 years, since 2012, the emergence of ecig was associated with a decrease of cannabis use among students. If no causal link could be established, present data's are inconsistent with a gateway effect of ecig use on cannabis experimentation.

**Tob. Prev. Cessation 2019;5(Supplement):A118**

**DOI: 10.18332/tpc/105194**

### Dissertation study on associations and students' views of smoking in vocational school setting

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#### Introduction

Internationally adolescent smoking among vocational schools are similar to unemployed youth. In Finland, smoking among vocational schools (36%) is 4.5 times more common than in upper secondary schools (8%).

#### Methods

The study used two types of datasets: 1) the first phase of the study utilized Health Promotion study (2013), a quantitative nationally representative sample (n= 34776) collected by the Institute for Health and Welfare and 2) the second phase used qualitative focus group interviews (N=29). First, the association between adolescent smoking and social involvement using statistical methods such as multinomial regression analyses. Second, discourse analysis analyzed qualitative focus group interviews.

#### Results

Parental involvement reflected less adolescent smoking. Students who smoked daily perceived getting less support for teachers, liked school less and were absent for truancy more than those who did not smoke. Moreover, having a close friend/friends, school staff smoking at school premises and bullying increased the likelihood of smoking. Nursing assistant students normalized smoking, felt that they smoked responsibly, thought that their smoking was under control and felt that smoking was a part of their identity.

#### Conclusions

The information produced by the study may enhance parents' knowledge of the importance of involvement with their teen's life and to acknowledge the impact of their smoking on adolescent smoking uptake. Vocational training should be further developed, increasing student connectedness, decreasing bullying and prohibiting smoking in school surroundings in accordance with the law of tobacco (2016). In cessation guidance and programs, strong peer attachment and smoker identity should be more acknowledged.

**Tob. Prev. Cessation 2019;5(Supplement):A119**

**DOI: 10.18332/tpc/105192**

### Factors associated with moderate to high nicotine dependence in a sample of Romanian pregnant women

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#### Introduction

Despite maternal smoking being linked with poor maternal and pregnancy outcomes, 15% of Romanian women continue smoking during pregnancy emphasizing the need for cessation programs. The study aims to identify predictors of moderate to high nicotine dependence in a sample of smoker Romanian pregnant women.

#### Methodology

Data was collected through an ongoing cross-sectional pilot study from 91 smoker pregnant women enrolled from Facebook, forums, or online groups. We assessed smoking behaviors, socio-demographics, medical and reproductive history, emotional health, and quality of relationship with the partner. Nicotine dependence was measured using the Heaviness of smoking index, calculated according to the Fagerstorm Test for Nicotine Dependence Instrument. We conducted descriptive statistics and binary logistic regressions to identify predictors of moderate to high nicotine dependence among smoker pregnant women (N=91) from our sample.

#### Results

The mean age of the participants was of 29.95 years (SD=5.279; range 19-41). Around 63.7% (N=58) pregnant women had moderate to high nicotine dependence. Logistic regressions showed that pregnant women aged over 31 (Odds ratio: 11,215, p=0.67, CI: .843-149,220) were more likely to have a moderate to high nicotine dependence as opposed to their younger counterparts. Negative partner interaction was also a predictor of a moderate to high nicotine dependence in pregnant women (Odds ratio: 1,302, p=0.95, CI: .955-1,775).

#### Conclusions

Our results suggest a need to design couple-based smoking cessation programs to encourage positive partner interactions and support pregnant women to quit smoking.

**Tob. Prev. Cessation 2019;5(Supplement):A120**

**DOI: 10.18332/tpc/105190**

### Perception and practices of Shisha smoking among Kafr El-Sheikh University students, Egypt

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#### Introduction

College life is a critical transition stage through which young adults set out to discover tobacco use.

#### Objectives

To identify students' perception and practices towards Shisha smoking and factors influencing it.

#### Methods

The study included 953 randomly chosen students from faculties of medicine and engineering using a structured questionnaire for data collection.

#### Results

Ever Shisha smokers represented 26.1% of study participants, and 22.5% were current Shisha smokers. Current smokers among engineering students represented 43.6% compared to 3.8% of

medical students. In faculty of engineering 51.3% of Shisha smokers reported smoking Shisha only compared to 42.1% among medical students. Smoking for two or more years was reported by 47.4% of medical students compared to 34.9% of engineering students. Traditional Café was the preferred place for shisha smoking for both medical and engineering students (68.4% & 63.6%, respectively). Peer pressures was cause for starting Shisha smoking (63.1%) followed by curiosity (29.4%), then entertainment (26.2%). Regarding reasons for continuing Shisha smoking, more than two thirds of participants reported “Anxiety or tension”, followed by “Keeping pace with friends or relatives” (69.6% & 66.4%, respectively). Nearly two fifths (39.7%) of Shisha smokers tried to quit. Nearly two fifths (42.4%) couldn't quit for more than one month, and 10.6% tried to quit for about one year but failed.

#### Conclusion

Shisha smoking prevalence was relatively not high. Anti-smoking interventions and campaigns should be implemented for university students to keep it low.

**Tob. Prev. Cessation 2019;5(Supplement):A121**

**DOI: 10.18332/tpc/105187**

### Ten steps process for establish 'Smoke Free cities' against Second hand Smoking in Sri Lanka

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Secondhand Tobacco Smoke (SHS) is a serious public health problem, and different approaches were employed all over the world to overcome it. World Health Organization Framework Convention for Tobacco Control (WHO-FCTC) introduced smoke free cities as an effective strategy to control SHS. The National Authority on Tobacco and Alcohol of Sri Lanka has commenced a National Program of establishing 'Smoke Free Cities' (SFC) for combating SHS in 2016. Stakeholders have followed their own methods in this regard due to lack of a systematic process or guideline and sustainability was restricted to 16 ( $\pm 12$ ) months. Therefore, this study focused on developing a systematic process for establishing SFC in Sri Lanka.

There were 53 SFC from 20 out of 25 administrative districts were studied for developing this process and self-administered questionnaire survey (n=15), group discussions (n=21) and in-depth interviews (n=17) were employed in data collection. Chi-square test was performed to study the relationships between variables and framework analyzing method was used in qualitative data analysis. Finally, the outcome was forwarded to an expert committee recommendation in order to ensure the quality.

Authors have introduced a 10 steps process to establishing SFC in Sri Lanka for future endeavors. This 10 steps process could be used to establish SFC in Sri Lanka and further studies would be needed to research the possibility to practice this process in other countries which have similar socio-economic and cultural background as well as preventive healthcare system.

**Tob. Prev. Cessation 2019;5(Supplement):A122**

**DOI: 10.18332/tpc/105179**

### Tobacco prevention and treatment Program with Srilankan Arm Forces

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#### Introduction

Tobacco prevalence rate in Sri Lanka between the age of 18 and 30 is 34% during the past few years and this rate was decreasing by 5% per year. One of the main reasons for this 34% was the tobacco allowance (Rs.500 per person) given to the three forces by the government. Tobacco industry built up a huge market in forces by doing this a strategic move. When the forces people who are considered as heroes, use tobacco eventually the community took it as an example.

#### Intervention

ADIC together with the Defense Ministry carried out Tobacco prevention programs island wide.

For all three forces (Army, Navy & Air force). This process included tobacco awareness sessions, short movies and video programs which were aimed at how the tobacco company attracts the individuals into tobacco usage. Also the methods and the strategies the tobacco company uses to tactfully attract young people. All the officials in the three forces and the other ranks were included in the programmes and 35,000 individuals were given the trainings during the year 2017-2018 through direct discussions and awareness sessions. Over 42 Navy camps, 37 Air Force bases and 73 Army camps were covered under these sessions. According to the researches carried out before the beginning of the program the tobacco usage was around 48% in the selected samples. End of the program we managed to bring it down to 28% which was a drastic drop. The research results proved that 20% had quit the tobacco usage. Sample evaluation reports indicated that 7700 individuals have completely stopped the usage of tobacco and nearly another 8200 have reduced the usage after the programmes. For the worst addicted group ADIC provided counseling services to first, reduce the usage of tobacco and aiming to completely quit tobacco usage eventually.

#### Results

Further they went to the extent of requesting the authorities to stop tobacco allowance for the three forces. As a result the defense ministry has introduced a policy to stop the tobacco allowance. The Ministry is in the verge of introducing a new policy to recognize and reward the nonsmokers in all three forces.

In 2018 Army commander ordered to all army premises must stop tobacco selling.

We identified 498 forces family's that increase their savings after Quit their fathers tobacco usage.

#### Conclusion

Discussions and the awareness sessions carried out were effective mechanisms for reducing tobacco usage in all three forces.

**Tob. Prev. Cessation 2019;5(Supplement):A123**

**DOI: 10.18332/tpc/105177**

### Tobacco prevention program Focusing 22 Areas in Kandy district Sri Lanka

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<sup>1</sup>Social mobilization Unit, Sri Lanka

#### Challenge

According to alcohol and drug information center 2017 spot survey is observed the total expenditure which is occurred due

to cigarette usage during the preliminary tobacco prevention program in 22 areas in Kandy District. Investigation reveals that most of the money which spent for cigarette is the 10 areas in the thalatuoya where it belongs to the hewaheta secretariat division in Kandy district Sri Lanka.

Investigation continues by using 75 boutiques in the area and reveals that 42.6 million rupee cash flow in one month to the tobacco company from their families over 11,400 populations in the area. (Expenditure based on money which used to buy cigarettes during one month period).

Observation reveals that 60 percent of the people who used to smoke cigarette are low income people in the population of 11,400 in the area. According to the divisional health records, it is identified that most of the children in this area are suffering from weight loss due to downturn of economical level per family.

#### **Intervention and responded**

Actions are planned by the intervention of the divisional health officers, public health officers and educational health officers.

Merchandisers are gathered and advised on adverse effects perform by the tobacco company to the general public by the aid of merchandising association of the division. Then it is observed that the merchandisers are also responsible for the poverty and social failures of the people in the area due to this inappropriate business. Programs are conducted for the general public in the area which explains the adverse effects of using cigarettes by 14 community based organizations.

School children are advised the tactics of the tobacco company perform in their promotional campaigns and explained the way that parents can be avoided from the cigarettes as well.

Further merchandisers are explained that the cigarettes are no more a ordinary commodity.

#### **Results**

- 62 of the merchandisers stopped selling cigarettes in the area.
- Each and every merchandiser is appreciated and rewarded with certificates for their good work by the aid of school children and the public servant of the area.
- Over 9,000 people are advised and help to enhance their knowledge about adverse effects of using cigarettes and strategies use by the tobacco company in order to make profits.
- Living standard of the people in the area is improved and able to save over 40 million rupees per month due to stoppage of cigarette consumption.
- We have identified and increase monthly revenue in 10 family's after quitting the fathers tobacco usage
- 06 families have completed the constructions of their homes after quitting the use of cigarettes

Another tactic of the tobacco company is prevented by the aid of the people as they try to give some rewards and benefits to the selected boutiques in the area.

#### **Conclusion**

It is important to make sure that all the people in the area must be involved in order to take necessary steps to avoid cigarette consumption of the area and need to educate people on its adverse effects to their lives.

**Tob. Prev. Cessation 2019;5(Supplement):A124**

**DOI: 10.18332/tpc/105171**

**Vaping among French adolescents aged 17: results from the ESCAPAD 2017 survey (n = 39 115)**

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#### **Introduction**

Electronic nicotine delivery systems (ENDS) use has spread out in France since 2010, including among adolescents. However, its use in relation to smoking and other factors is not well understood today.

#### **Methods**

The data used come from the ESCAPAD 2017 survey, a nationally representative cross-sectional survey taking place at a 1-day session of civic and military information compulsory for all French nationals around 17 (39 115 respondents). Descriptive analyses and multivariate regressions (Poisson with robust variance) were undertaken to describe the recent use of ENDS at 17 and its associated factors.

#### **Results**

ENDS were experimented by 52.4 % of 17 years old, and used by 16.8 % in the preceding month, 1,9 % daily. Most recent users were also daily smokers (62.5 %), and only 7.6 % never experimented smoking before. They were mostly boys (PR=1.39). No difference related to the parental socioeconomic status was highlighted. Recent vapers were more likely to have retaken a school year (PR=1,25) and were less likely out of school (PR=0,80). The associate uses of other products were the most striking factors: daily smoking (PR=2,73), regular alcohol drinking (PR=1,20), cannabis use in the last year (PR=1,60), ever use of hookah (PR=2,31) and ever use of another illicit drug (PR=1,11).

#### **Conclusions**

Those robust and representative results about vaping among French adolescents are essential to understand this trend. Although most French adolescents experiment with vaping, they are fewer to use it regularly and most of regular vapers are also daily smokers. The relationship between smoking and vaping will have to be further investigated.

#### **Funding**

This work was supported by the French Cancer League as part of the PETAL research program on adolescent smoking.

**Tob. Prev. Cessation 2019;5(Supplement):A125**

**DOI: 10.18332/tpc/105169**

#### **Tobacco Cessation Clinic**

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Pakistan has the high prevalence of cigarette smoking (15.6 million) among top 10 countries in the world. Tobacco kills 160,000 every year, 5000 admitted to hospital every day, children between 6 to 15 age start smoking every day. 2 in 5 smokers start smoking before the age of ten. 39% households expose to second hand smoke daily. However 76% want to quit. Smoking Cessation Services at government level are not available in Pakistan. With my efforts 1st Government funded a Tobacco Cessation Clinic was established in 2013, providing cessation services to smokers, till to date only two institutes are providing the quitting services.

**Tob. Prev. Cessation 2019;5(Supplement):A126**

**DOI: 10.18332/tpc/105161**

## Taxation & illicit trade study to encounter TI arguments

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Our research study report in November 2018 to assess the volume of sale of illicit cigarette brands in Islamabad Capital Territory (ICT) and test the recent claims mostly made by the tobacco industry that the market share of illicit brands in Pakistan has risen exponentially due to high tobacco taxes and now stands at 43.7% percent of the total cigarette market, on the base of this data, in 2017-18 Government introduce 3rd Tier of low tax rate. We conducted a House Hold survey to quantify the burden of illicit trade in ICT to encounter the TI claim. Our evidence base findings reveal the illicit trade is 15.8 % .The study also shows that the TI has shifted her brands into 3rd tier which has 80% market share, in result 50% decrease in revenue & increase in consumption.

**Tob. Prev. Cessation 2019;5(Supplement):A127**

**DOI: 10.18332/tpc/105154**

## Factors influencing farmers turning into tobacco cultivation in the Khulna division of Bangladesh: an empirical study

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### Introduction

Farmers of Khulna division of Bangladesh cultivate both tobacco and traditional crops in winter season. Some tobacco companies (TCs) operate there and make formal contracts with farmers. The study attempted to identify factors responsible for turning traditional crop growers (TCGs) into tobacco growers.

### Methods

The research investigated 285 tobaccos and 174 traditional farmers, chosen randomly from three districts in 2015, and used Logistic regression (with marginal effect) for data analysis.

### Results

Limitations of traditional crops in both input and output markets, prudent role of TCs, and distinctive features of tobacco itself were responsible for farmers' shift towards tobacco cultivation.

Traditional crops experienced insufficient input support, non-guaranteed sale, and price instability. TCs' counter-incentives in inputs and guaranteed sale encouraged farmers to cultivate tobacco where 76 percent tobacco growers and only 22 percent TCGs received input subsidy. Moreover, 100 percent contractual tobacco farmers enjoyed sales guarantee, even before production, where no TCG enjoyed that. Non-contractual tobacco farmers also enjoyed almost full-sale. About 20 percent TCG and 5 percent TG reported unsold product. Tobacco companies provided full payment immediately after sale, where 83 percent TCGs experienced credit-sale even through intermediary. One-time yield and zero in-house consumption supported tobacco's 98 percent sale. Despite higher production cost, tobacco had higher profit than TCGs. Neighbours and land-neighbours also influenced to grow tobacco. Statistically significant variables increasing probability of tobacco production over traditional crops were sales guarantee, price stability, input incentives, profit, sales-production ratio, and land neighbours' crop choice.

### Conclusions

The main challenges of traditional crops including unstable price, volatility in sales guarantee and insufficient input incentive should be taken care by the authority to reduce tobacco cultivation.

**Tob. Prev. Cessation 2019;5(Supplement):A128**

**DOI: 10.18332/tpc/105152**

## Evaluating the effectiveness of the Quitline Service in Ukraine

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### Introduction

Overall, 20 % of adults in Ukraine currently smoked tobacco daily (36 % among males and 7 % among females). Among daily tobacco smokers, 69 % reported first smoking tobacco within 30 minutes after awakening. Almost two in five (39 %) tobacco smokers had attempted to quit in the last 12 months. Overall, 63 % of current tobacco smokers (5.1 million) stated they were interested in quitting, and 7 % stated they were ready to quit smoking within the next month.

### Methods

An analysis of the effectiveness of counseling was conducted by the telephone of the National Free Quitline. The investigate of the consultation period was 1.5 years from the time the Service was founded until now (June 2017 - January 2019). Smokers receive the initial consultations (reactive calls), and then, if desired, supporting advices (proactive calls). Those who refrain from smoking 6 months or more, we consider those who gave up smoking.

### Results

Of the 975 smokers who were received advised by the phone, the following was true.

41% (398 smokers) made the quit plan, appointed the day of quitting and switched to a proactive stage of counseling. 22% of smokers who are absent from smoking (215 clients) are in the phase of termination (up to 6 months) and receive supportive counseling. Also, 13% (130 clients) refrain from smoking 6 months or more.

### Conclusions

Considering that on average 7% of respondents successfully quit smoking throughout Ukraine in a variety of methods, including by yourself. With the help of Quitline, this figure doubled and made up 13%. We can compare this indicator and state the increase of the level the refusal of smoking by means of quitline consultations. This effect is important to support smoking cessation system for the smokers who want to quit smoking.

**Tob. Prev. Cessation 2019;5(Supplement):A129**

**DOI: 10.18332/tpc/105150**

## Attitudes and Awareness of Employees Towards the Implementation of a Smoke-free Campus at a Private College in Greece

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## Introduction

Given that smoking is prohibited in all places of Healthcare and Education in Greece including uncovered areas, the aim of the current study was to report smoking prevalence, awareness of smoking health effects and attitudes towards the implementation of a smoke-free campus at a private college that provides secondary and tertiary education to students over 11 years old.

## Methods

A sample of 219 employees including faculty and staff of the college volunteered to complete an electronic survey in 2018, consisting of questions regarding attitudes and beliefs on the smoking ban law and health effects of active and passive smoking.

## Results

Age distribution of the sample was 5% between ages 20-29, 23.3% between 30-39, 36.1% between 40-49, and 33.8% over 50 years old. Gender distribution was 33% males and 67% females. Smoking prevalence of college employees was 22.8%, in which 64% reported they would like to quit. Among non-smokers, 50.7% reported they had never smoked, while 26.5% reported being an ex-smoker. 98.6% of employees were aware that nicotine is addictive and that smoking causes lung cancer and/or other types of cancer, while 25.6% were aware that nicotine cravings last six seconds. 95.4% were aware of the harm from passive smoking and 93.6% reported they agree with the implementation of smoking bans in indoor public places. 59.8% reported they would contribute to the gradual implementation of a smoke-free campus.

## Conclusions

Smoking prevalence among the college employees was lower than that of the Greek public reported in 2017. There was a high percentage of ex-smokers and high rate of cessation attempts among current smokers. All the employees were highly aware of health effects of smoking and were supportive towards the implementation of a smoke-free campus.

**Tob. Prev. Cessation 2019;5(Supplement):A130**

**DOI: 10.18332/tpc/105149**

## Tobacco taxation and illicit tobacco in Georgia

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### Introduction

The limited research has been undertaken on tobacco taxation and illicit tobacco trade levels in Georgia. Taxation policy has responsiveness to tobacco control policies in Georgia, because of the FCTC and EU Associate membership obligations. These taxes are a critical tool in reducing tobacco consumption and improving public health status in Georgia. However, the tobacco industry claims that tobacco tax increases will drive up illicit tobacco trade. There is need to inform decision makers regarding win win policy study in Georgia.

### Methods

We analyzed different statistical and survey data, also legislation, policy documents to learn the current situation related to taxation policy and tobacco illicit trade. Institute of Social Studies and Analyses (ISSA) together with the University of Cape Town conducted household survey In 2017, in five regions in Georgia. The survey was conducted with 2997 households to ascertain smoking prevalence, purchasing behavior and perceptions around illicit tobacco trade. Smokers were also asked to show available

cigarette packs, which were examined for the presence of tax stamps and health warnings to identify products not intended for the Georgian market.

### Results

In general, illicit trade rate in Georgia was very high when country had lowest tax rates on tobacco products. The main reason for the increased illegal turnover was high level of corruption until 2004. After reforms inside financial institutes the level of illegal tobacco decreased dramatically. Tobacco industry and their front groups still spreading misleading information. But after ISSA survey results, we defined that illicit cigarette trade in Georgia is low (1.5%), but there are regional differences. Most of the illicit packs were detected the Zugdidi region where the prevalence of illicit reached 6%, while the majority of illicit cigarettes were purchased in kiosks or at informal outlets.

### Conclusions

Tobacco tax rate is very low to compare with EU requirements. Despite recent increases of tobacco taxes, the illicit cigarette trade penetration of Georgia is negligible. Strong administrative measures, presence of SICPA control and ban of tobacco sales at kiosks and informal outlets would allow better control of illicit market and could address the persistent issue of illegal single cigarette sales.

### Funding

Cancer Research UK (IRMA Number 30845).

**Tob. Prev. Cessation 2019;5(Supplement):A131**

**DOI: 10.18332/tpc/105140**

## Can Miguel Delibes change the opinion about tobacco in a school of Zaragoza?

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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 María Auxiliadora (Zaragoza-Spain) 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 are compared with the result of the article "Can Miguel Delibes change the opinion about tobacco?" (Torres-Remírez et al. 2018). The study of the answers have been realized by four variables (age, sex, nivel of study and the degree that the student have studied).

**Tob. Prev. Cessation 2019;5(Supplement):A132**

**DOI: 10.18332/tpc/105135**

## Tax Elasticity in Spain (2005–2013)

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This work assesses the influence of taxes on tobacco in Spain during a term of 8 years (2005-2013). We use the same econometric model than Pan American Health Organization. We have got a tax's elasticity of -0,6855 and an important negative relevance of the law.

**Tob. Prev. Cessation 2019;5(Supplement):A133**

**DOI: 10.18332/tpc/105131**







**ENSP**

*European Network  
for Smoking and Tobacco Prevention*



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