



## European Network for Smoking and Tobacco Prevention aisbl

### Information Release 2

**SILNE - Tackling socio-economic inequalities in smoking:  
learning from natural experiments by time trend analyses and cross-national comparisons**

# SILNE

A three-year European project co-ordinated by the University of Amsterdam, Department of Public Health, Academic Medical Centre, the Netherlands and receiving financial support from the European Commission in the frame of Seventh Framework Programme (grant agreement no. 278273).



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SILNE was launched in January 2012. The overall aim of the project is to analyse several “natural experiments” available within Europe in order to generate new empirical evidence to inform strategies to reduce socioeconomic inequalities in smoking. The project has three specific objectives:

1. to assess, using trend analysis for several European countries, whether changes in specific national tobacco control policies since 1990s were associated with changes in socioeconomic inequalities in smoking cessation and related factors;
2. to assess, through comparisons between European countries, whether differences in specific tobacco control policies and in educational systems are associated with differences in socioeconomic inequalities in smoking initiation and related factors;
3. to review the evidence of published intervention studies on their impact on socioeconomic inequalities in smoking, to integrate this with the evidence generated in the current project, and to disseminate the combined evidence across Europe, including stakeholders and those involved in the development of tobacco control policies and health-related policies.

It will contribute evidence on the differential health effects of policy interventions, and the impact of alternative options for enhancing equity. Because of its focus on smoking, the project is able to provide new evidence on the differential effect of tobacco control policies, thereby offering direct input to an important field of public health action.

## Coordination

The kick-off meeting had been held in Amsterdam on 30 and 31 January 2012. The objectives for this first meeting of the steering committee were for all the partners to get acquainted and to formally start the project and each of its works packages.

A second coordination meeting was held in Amsterdam on 11 and 12 June 2012 and the third one in Brussels on 21 and 22 January 2013. They gathered representatives of eleven partner organisations, with most of them participating in both sessions:



An interim workshop with experts and stakeholders was organized in Athens in June 2013, in coordination with the ENSP network meeting, to evaluate the approaches and the first results of the project, and to make recommendations for further work.

Participants from 12 European countries actively contributed to the discussions:

Behrakis Panagiotis	Hellenic Coalition Against Tobacco
Bizel Pierre	Institut Provincial de Promotion de la santé du Hainaut (Belgium)
Clancy Luke	Research Institute for a Tobacco Free Society (RIFTFS) (Ireland)
Dautzenberg Bertrand	Office français de prévention du tabagisme (OFT) and French Alliance against Tobacco
Demin Andrey	Medical and Rehabilitation Centre (Russia)
Eremia Marius	Aer Pur Romania
Falk Jorgen	National Board of Health and Danish Coalition on Tobacco Prevention

Fernandez Esteve	Global Network for Tobacco Free Health Care Services (ENSH)
Grogna Francis	ENSP Secretariat
Joossens Luk	ECL / Fondation belge contre le cancer
Kjaer, Niels Them	Danish Coalition on Tobacco Prevention
Kostouros John	Hellenic Coalition Against Tobacco
Kunst Anton	University of Amsterdam
Mourier Nina	Danish Lung Association
Radu-Loghin Cornel	ENSP Secretariat
Savli Roberta	European Federation of Allergy and Airways Diseases Patients' Associations (EFA)
Segaar Dewi	Stivoro (NL)
Skipalskyi Andriy	Regional Advocacy Center LIFE (Ukraine)
Talu Ingrid	Teachers Against Tobacco (Sweden)
Thommes Lucienne	Fondation Cancer (Luxembourg)
Zabala Joseba	Comité Nacional de Prevención del Tabaquismo (Spain)

The audience, which was impressed by the project and the preliminary results of the studies. Each work package was presented and commented. Their conclusions and recommendations will be of great support in the final phase of the Silne project implementation.



The workshop was followed by the Silne Advisory Board meeting, attended by Luke Clancy, Esteve Fernandez, Francis Grogna, Luk Joossens, Anton Kunst and Roberta Savli.

The roles of the Advisory Board are to:

- ⇒ provide a judgement on the timeliness, contents and quality of the work in individual work packages, and in the project at large;
- ⇒ give advice, both solicited and unsolicited, with regards to the scientific issues to be addressed, problems to be tackled, and dissemination of the results;

The Advisory Board Members expressed their general satisfaction about the project and the way it was moving on, and made some recommendations to maximize its smooth implementation and its impact.

## **Outputs to date**

### *Specific objective 1: Smoking cessation*

To address the first specific objective, WP2 (Analysis of data of the ITC survey) and WP3 (Analysis of trends in eastern and southern Europe) have started a series of analyses with the aim to assess whether changes in specific national tobacco control policies were associated with changes in inequalities in smoking cessation. Both work packages have completed the work planned for the reporting period.

WP2 aimed to utilize data of the international ITC survey. This survey includes longitudinal data on smoking cessation and related factors that is comparable across six Western European countries. WP2 aims to analyze these data using quasi-experimental methods. Currently, one paper is completed and a second paper is in its final stage.

In one paper, we examine income differences in the impact of a national reimbursement policy for smoking cessation treatment and accompanying media attention in the Netherlands in 2011. This paper is now in the final drafting stage and will be submitted to an international scientific journal soon.

The other paper explored the use of ITC data for international comparisons. It aimed to describe socioeconomic inequalities in cross-border purchasing of cigarettes in six European countries. In French and German provinces/states bordering countries with lower cigarette prices, about 20% of smokers reported purchasing cigarettes frequently outside their country. Elsewhere this proportion was 2-7 %. Cross-border cigarette purchasing was more common reported by smokers with higher education and income. A possible explanation is that cross-border purchasing incurs travel costs, which smokers with lower education and income may not be able to pay up-front.

WP3 aimed to complement WP2 by analyses of trends in smoking cessation in Southern and Eastern European countries. We first prepared an overview of trends in tobacco control policies in European countries since the early 1990s (for Western European countries) or 2000's (for Eastern European countries). Based on this overviews, we identified specific changes in tobacco control policies (or "natural experiments") of interest for further analyses.

Next, we obtained data from national health interview surveys with information on smoking in several years. For example, we acquired micro-level data sets of the Spanish national interview surveys that have been carried out at regular intervals since the late 1980's. For Baltic countries, we got access to micro-level data of the FINBALT survey, which has been carried bi-annually since the mid 1990's. Currently, we are analyzing these data with the aim to describe trends in smoking cessation according to socioeconomic group before and after the occurrence of the "natural experiments".

For example, a description of tobacco control policies in Lithuania since 1995 showed that tobacco control policies intensified in 2000 and 2007. Smoking cessation rates tended to increase between 1995 and 2010. We observed a positive relationship with tobacco control: the more tobacco control, the more ever-smokers had quit. This relationship was stronger among high educated than low educated people. This negative equity impact (i.e. widening of inequalities) was observed especially among men. Now, we are assessing whether recent developments in tobacco control in Estonia and Latvia had a similar impact.

### *Specific objective 2: Youth smoking*

To address the second specific objective, WP4 (Analysis of data of the HBSC survey ) has started a series of analyses with the aim to make comparisons between countries in inequalities in youth smoking. Moreover, WP5 (New survey among 16-17 year old adolescents) has carried out the field work of a new survey that will provide new data to be used for in-depth cross-national analyses.

WP4 aimed to utilize data of the international HBSC survey. This survey includes data on smoking and related factors among adolescents 11-15 years in 38 European countries. WP4 aims to analyze these data using comparative methods. We developed a data set with outcome and intermediate measures needed for the comparative analysis. This data set is now being analysed. Currently, one paper is completed and two other papers are in progress.

The specific objective of the first paper was to investigate the association between national wealth and socioeconomic inequalities in adolescent smoking. We identified socioeconomic inequalities in early smoking initiation and maintenance of smoking at 15 years of age in most European countries. Inequalities were larger among girls than among boys. Remarkably, wealthier nations showed larger inequalities for all measures of adolescent smoking than less affluent nations.

In one additional paper, we aim to understand these observed patterns by including information on characteristics of countries. We aim to determine the role of educational systems, and more specifically the degree to 'educational differentiation'.

In another paper, we aim to understand these observed patterns by including information on characteristics of individual children and their environments. We analyse the extent to which inequalities in smoking in Europe could be attributed specific characteristics of children, their families, their peers, and their schools. These analyses are carried out both for individual countries and for Europe as a whole.

In WP5, we have designed and implemented a new survey on smoking among 16 year old school pupils in six European countries. The survey is especially aimed to facilitate social network analyses of smoking in a parallel way in different countries.

To date, we have requested authorizations including ethics approval. Within each country, we selected a city of medium size and median income level. In each city, 6 to 8 secondary schools were selected with purposive sampling. At the same time, we designed and piloted questionnaires to be administered to pupils. In each country, the questionnaire was translated (and back translated) and piloted within one school.

We administered the survey to pupils at the age of about 16 years. Per school, each class room pertaining to corresponding grades was included, and all students per classroom were invited to participate. At least 200 students were eligible for interviewing in most schools. For the 6 countries together, we obtained questionnaires for about 9,300 pupils.

We carefully monitored response rates and the quality of information. Data were stored in one single data base for all countries. Using standardised software, we are now checking the quality of the data for all countries using similar procedures. In addition to the pupil-level data, we obtained school-level data on the school environment and smoking policies. Analysis of these data is planned for the second reporting period.

### *Specific objective 3: Review and dissemination*

To address the third specific objective, WP6 (Review and synthesis) reviewed the evidence of published intervention studies on their impact on socioeconomic inequalities in smoking. A previous systematic review was broadened to encompass a wider number of countries and a wider range of tobacco control interventions. The team systematically searched among different literature databases. This was supplemented by a search through the SILNE and ENSP networks for publications of grey literature available within different European countries.

Articles that are retrieved from the literature searches were screened by title and then by abstract. Full articles were assessed according to set inclusion and exclusion criteria. The results of selected studies were processed using a systematic approach to evaluation and reporting. Three reports were written, as narrative syntheses, on (a) effects of interventions on youth smoking, (b) effects of public health interventions on adult smoking, and (c) effects of individual-level smoking cessation support.

The youth report concluded that very few studies have assessed the equity impact of policies and interventions on smoking among youth. There is a strong need to strengthen the evidence base for the equity impact of tobacco control interventions which target young people. The adult report conclude that, though 116 studies were identified, only limited conclusions can be drawn about which types of tobacco control interventions are likely to reduce inequalities in smoking. The clearest and most consistent evidence of a positive equity impact was for price/tax increases.

In WP7 (Dissemination), several dissemination activities were developed. We developed and maintained a project website ([silne.ensp.org](http://silne.ensp.org)). We set up a network of interested policy makers, professionals and other stakeholders. We organised an interim workshop with experts and stakeholders, to evaluate the approaches and the first results of the project, and to make recommendations for further work (Athens, June 2013). Finally, we ensured dissemination within the scientific community through presentations at scientific conferences and submission of articles to international journals.

**Do not hesitate to visit the project webpage on [silne.ensp.org](http://silne.ensp.org) for more information.**

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