The TackSHS survey:
a cross-sectional study on secondhand smoke in 12 European countries

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BACKGROUND AND RATIONALE

Secondhand tobacco smoke (SHS) is a complex mixture of thousands of compounds, including particulate matter emitted by the combustion of tobacco products and from smoke exhaled by smokers [1]. It contains about 70 chemicals recognized as known or probable human carcinogens, other animal carcinogens, and many toxic and irritant agents [2]. Over the past two decades, SHS has been shown to cause adverse health effects on adults and children, including heart diseases, cardiovascular and respiratory disorders, lung cancer and other selected neoplasms [1, 2]. Of the 5.7 million deaths attributable each year to tobacco smoking, more than 600,000 (i.e., around 1% of all deaths worldwide) refer to subjects who never smoked and that prematurely die due to their lifetime exposure to SHS [3, 4]. Consequently, the World Health Organization (WHO) in its Framework Convention for Tobacco Control (FCTC) states the need to develop smoke-free policies to protect non-smokers from the consequences of SHS [5]. According to various population-based cross-sectional surveys, it has been estimated that between 20% and 60% of European non-smokers are exposed to SHS [6-11]. However, important reductions in SHS exposure have been found in selected indoor settings, including workplaces and hospitality venues such as bars and restaurants [12], after the implementation of smoke-free legislations.

Electronic cigarettes (e-cigarettes), the most common "electronic nicotine delivery systems", have irrupted in the market over the last 5 years, and their sales and popularity have rapidly and considerably grown worldwide and across the European Union (EU).
In Europe, there is certain variability in the prevalence of e-cigarette use among studies, depending on the population and the questions used in the surveys [13-16]. According to the 2012 Eurobarometer survey, 7% of the European citizens, in particular current smokers, have tried e-cigarettes [17, 18]. In Italy, a survey conducted in 2013 showed that awareness of e-cigarettes was 91.1%, lowest among some vulnerable populations such as women, the elderly, and less educated subjects [19]. In Italy, ever e-cigarette use was 6.8% overall, and was inversely related to age, whereas no difference was observed according to sex [19]. In Spain, awareness of e-cigarettes was lower than in Italy (82.3%), but a similar prevalence of ever e-cigarette use (6.5%) was observed (1.6% current use, 2.2% past use and 2.7% e-cigarette experimentation). Moreover, 90% and 75% of ever e-cigarette users were current smokers respectively in Italy [19] and Spain [16, 20]. E-cigarettes have been presented as a "safe" alternative for smokers by some behavioural and individual-risk scientists, while others, in view of the lack of sound evidence on their health effects, recommend a more cautious approach to their use and regulation.

In 2015, the TackSHS Project ("Tackling secondhand tobacco smoke and e-cigarette emissions: exposure assessment, novel interventions, impact on lung diseases and economic burden in diverse European populations"; www.tackshs.eu), coordinated by the Institut Català d'Oncologia (Spain), has been funded by the European Commission (EC) within the Horizon 2020 research grants (grant agreement number: 681040). This 4-year project will try to elucidate the comprehensive impact that SHS and e-cigarette aerosol have on the respiratory health of the European population, and how health impacts vary according to socio-economic parameters, with particular emphasis on specific vulnerable groups. The TackSHS Project will put together for the first time various research teams, and, by means of an integrated series of work packages (WP), will result in a step forward to tackle exposure to SHS and e-cigarette emissions. Within the TackSHS Project, selected WPs (i.e., WP3, WP9 and WP10) involve the conduction of a survey in 12 EU countries: the TackSHS survey.

OBJECTIVES

The TackSHS Project includes three WPs involving the collection of cross-sectional individual-level data in 12 EU countries (the TackSHS survey). The three WPs are:
- <u>WP3</u>, coordinated by "Mario Negri" Institute (Milan, Italy): Survey on secondhand smoke and electronic cigarettes in Europe;
- <u>WP9</u>, coordinated by ISPO (Florence, Italy): Attributable mortality and morbidity to secondhand smoke in Europe;
- <u>WP10</u>, coordinated by Universidad Politécnica de Cartagena (Cartagena, Spain): Economic impact of secondhand tobacco smoke on morbidity and mortality and Return on Investment of Intervention.

<u>Objectives</u> of this cross-sectional study are:
- to estimate prevalence of current smokers, electronic cigarette users (and, for Italy, heat-not-burn cigarette users), and exposure to SHS and passive exposure to emissions from electronic cigarettes in selected European countries (WP3);
- to investigate the determinants of SHS exposure in those countries (WP3);
- to analyze the attitudes and perceptions of the adult European population towards policies to control tobacco and to limit SHS exposure (WP3);
- to study knowledge and believes of current smokers and the general adult population on the harmful effects of SHS (WP3);
- to compare smoking patterns, electronic cigarette use, and, particularly, SHS exposure between selected middle- and high-income countries in Europe (WP3);
- to compare smoking patterns, voluntary home smoking ban, and perception on the efficacy of smoking ban as a tobacco control policy between the new data in the selected European countries, and data from a companion pan-European survey conducted in 2010 (WP3);
- to assess: i) mortality attributable to SHS for lung cancer and ischaemic heart diseases among non-smoking adults; ii) morbidity (e.g., induction of asthma) attributable to SHS in non-smoking adults; iii) mortality attributable to SHS in children (e.g., Sudden Infant Death Syndrome [SIDS]); iv) morbidity (e.g., lower respiratory infections; asthma onset; acute otitis media) attributable to SHS in children (WP9);
- to quantify the economic burden associated to the exposure to SHS and e-cigarette aerosol in Europe (WP10).

METHODS

Study design
To achieve the aims of this study, we will conduct a face-to-face population-based cross-sectional survey in 12 strategically selected European countries (Bulgaria, England, France, Germany, Greece, Ireland, Italy, Latvia, Poland, Portugal, Romania, and Spain).
The study methodology will be similar to a previous companion pan-European survey, conducted in 18 European countries in 2010 within an EU Seventh Framework Programme (FP7) Project, entitled "Pricing Policies And Control of Tobacco in Europe" (PPACTE; Grant Agreement HEALTH-F2-2009-223323) [21]. Briefly, in each country, the study sample will be representative of the general population aged 15 years and over in terms of age, sex, geographic area, and socio-economic characteristics. The multi-stage methodology will be used as the preferred sampling methodology. In the first stage, the primary unit of selection will be geographic area or voting centre. In the second stage, households or municipalities will be selected. In the last stage,

respondents will be chosen randomly, in order to be representative of the population. In those countries where adult respondents will be selected from electoral rolls, the quota method will be used to select minors (i.e., aged 15 to 17). Other methods, including stratified or simple sampling or quota methods, will also be accepted wherever it is not possible to conduct a multistage random sampling.

Selection of countries

For the present study, an appropriate sample of 12 European countries – all EU Member States (MS) – representing geographical, legislative and cultural variations across the EU, has been selected.

The selected European countries are the following: Bulgaria (BG), England (UK), France (FR), Germany (DE), Greece (GR), Ireland (IE), Italy (IT), Latvia (LV), Poland (PL), Portugal (PT), Romania (RO), and Spain (ES).

These countries were selected after taking into account several aspects, including: i) different geographical distribution; ii) different level of per capita income; iii) different national smoking prevalence [21]; iv) different adoption of tobacco control strategies at a national level (i.e., Tobacco Control Scale, TCS) [22]; v) different tobacco ban legislations [22]; vi) high population size; vii) inclusion in a previous PPACTE survey [21].

According to geographic area, we considered countries from northern (IE, UK), central/western (DE, FR), central/eastern (BG, LV, PL, RO), and southern Europe (ES, IT, GR, PT). Moreover, the selection includes the 7 most populated EU MS (DE, ES, FR, IT, UK, PL, RO), and, among less populated countries, we prioritized middle-income countries (BG, RO). Finally, besides Germany, all the other countries were included in the 2010 PPACTE survey. Overall, the 12 selected EU MS represent 78.8% of the EU28 overall population.

Study population

In each of the 12 selected European countries, approximately 1000 individuals, representative of the general population aged 15 years and over in terms of age, sex, geographic area, and socio-economic characteristics, will be enrolled in this cross-sectional study. The final sample will therefore include a total of approximately 12,000 subjects.

Inclusion criteria

- individuals aged 15 years and over;
- individuals resident of the 12 selected countries;
- individuals able to understand and answer the questions of the questionnaire of the study in the country-specific language;
- individuals who formally accept to participate in the study.

Exclusion criteria

No specific exclusion criteria are considered.

Sample size computation

The sample size in each specific country will allow us to obtain prevalence estimates with a maximum standard error (SE) lower than ± 1.6%. Therefore, with such a sample size we will be able to provide stable prevalence estimates (with a relatively small 95% confidence interval), overall but also in each specific country.

Data collection

In each country, individuals will be surveyed by trained interviewers through face-to-face interviews using a structured standardized questionnaire. Data collection will be coordinated by DOXA, a leading market research organization and Italian branch of the Worldwide Independent Network/Gallup International Association (WIN/GIA), and performed in collaboration with its

European partners (see "Selection of the subcontractor performing data collection" paragraph). Whenever possible, data will be collected within computer assisted personal interviews (CAPI). Alternatively, paper and pencil (P&P) interviews will be accepted. Data collection will start once obtained the approval from the Ethics Committee of the 12 European countries involved in the study. The fieldworks will last two to three months in each country.

The English version of the questionnaire (Annex 4) has been developed through the collaboration with the partners of the TackSHS consortium. Before fieldwork, DOXA and its European partners will translate the questionnaire, under the supervision of the TackSHS consortium, in various country-specific languages. Some questions are identical to those formulated in a previously conducted pan-European survey (the PPACTE survey), in order to allow comparisons in time.

The first part of the questionnaire includes country-specific data to be provided by DOXA and its European partners for each European country. These data include i) <u>information on sampling methodology</u> (e.g., sampling method used, response rate, fieldwork dates, age range), and ii) <u>country-specific information</u> (e.g., country population size, price of cigarette packs, gross domestic product, structure of the school system, and current policies regulating tobacco smoking and electronic cigarette use implemented at a national level, with a focus on indoor public/private places and transports, and outdoor public places).

The second part of the questionnaire is designed to collect individual-level information for each survey participant, and is divided in four sections:

A. <u>socio-economic and demographic characteristics</u> (e.g., sex, age, level of education, and profession);
B. <u>cigarette smoking habit and e-cigarette use</u> (e.g., smoking status, use of e-cigarette –and, in Italy, use of heat-not-burn tobacco cigarette-, smoking/vaping intensity and duration, and consequences of e-cigarette use on smoking behaviour);
C. <u>cigarette smoking, e-cigarette consumption, and SHS and e-cigarette aerosol exposures in different sites</u> (e.g., exposure to SHS in indoor public places, workplaces, private venues, also in presence of minors, homes, transports, and selected outdoor places);
D. <u>attitudes and perceptions on smoke-free regulations and awareness of SHS harmful effects</u>.

Statistical analysis plan
<u>Creation of the survey dataset</u>
This task is included in the WP3 of the TackSHS Project. Once the fieldwork is completed, DOXA will collect data from its European partners, and, after internal checks, will provide to "Mario Negri" Institute, the 12 anonymous data files in text format, with the corresponding codebook in English language. The 12 data files will be managed by the expert biostatisticians at the Department of Epidemiology of "Mario Negri" Institute. Through the use of the statistical package SAS, version 9.4 (SAS Institute, Cary, NC, USA), they will perform the input of the 12 textual data file into 12 corresponding SAS datasets, and then create a unique final dataset SAS. This dataset will be checked for coherence and for the presence of possible errors, cleaned, and finalized through the generation of queries which will be addressed by DOXA and its European partners.

<u>Statistical analyses for WP3</u>
Statistical analyses required to achieve objectives related to WP3 will be conducted by expert biostatisticians at the Department of Epidemiology of "Mario Negri" Institute, using SAS statistical package.

Prevalence of current smokers and e-cigarette users, and prevalence of exposure to SHS and e-cigarette aerosol, will be estimated through univariate statistical analyses (i.e., descriptive statistics for categorical data, including absolute or relative frequencies), overall, by country, and in strata of selected demographic and socio-economic (individual and country-specific) characteristics.

Continuous variables (e.g., age at starting or quitting smoking, number of cigarettes smoked per day, number of e-cigarette puffs per day) will be summarized through the use of means and standard deviations. Alternatively, they will be categorized, and thus described through absolute or relative frequencies.

Multivariate analyses will also be considered to identify sub-groups of the population (e.g., young vs. other age groups, unemployed vs. other working status, low vs. high educated subjects) or clusters of countries (e.g., middle vs. high income countries, low vs. high TCS, low vs. high smoking prevalence) more frequently adopting selected tobacco-related behaviours or more frequently exposed to SHS. Thus, odds ratios (OR), and the corresponding 95% confidence intervals (CI), will be estimated through logistic regression models after adjustment for age, sex, socio-economic status, and other selected individual-level characteristics. Multi-level procedures will also be considered.

The aforementioned statistical approaches will be used also to describe: i) the attitudes and perceptions of the adult European population towards policies to control tobacco and to limit SHS exposure; and ii) the knowledge and believes of current smokers and the general adult population on the harmful effects of SHS.

To evaluate the changes in time of selected smoking-related aspects, including smoking prevalence and patterns, voluntary home smoking ban, and perceptions on the efficacy of smoking bans as tobacco control policies, TackSHS data will be compared with data from a previous companion European survey (the PPACTE survey). A unique SAS dataset including common variables will be created for the 11 European countries considered in both surveys (i.e., BG, UK, FR, GR, IE, IT, LV, PL, PT, RO, and ES). Significance of differences between the two survey periods will be performed both through univariate (χ^2 test for categorical variables and t-test for continuous ones) and multivariate analysis (regression models).

Statistical analyses for WP9

The statistical analyses needed to achieve objectives related to WP9 will be conducted at ISPO. To achieve WP9 aims, researchers at ISPO will conduct a review of the scientific literature on the methods to estimate attributable mortality and morbidity (AMM) to SHS, using various research engines, including PubMed. Moreover, they will update the list of health effects and their corresponding relative risks (RR) in terms of mortality and morbidity causally linked to SHS included in the IARC Monograph on involuntary smoking [1]. Within WP9 we will assess mortality attributable to SHS for lung cancer, ischaemic heart diseases, and morbidity attributable to SHS (e.g., induction of asthma) in non-smoking adults. Moreover, among children we will assess mortality attributable to SHS (e.g., Sudden Infant Death Syndrome, SIDS, in children aged <1 year) and morbidity attributable to SHS (lower respiratory infections in children aged <3 years; asthma onset in children aged <14 years; acute otitis media in children aged <14 years). In order to estimate AMM to SHS, ISPO researchers will use: i) mortality and morbidity figures of SHS-related diseases in Europe, and ii) prevalence of exposure to SHS of the European population. Mortality and morbidity figures of SHS-related diseases in EU-28 will be obtained through the collaboration with the World Health Organization-Global Burden of Disease (WHO-GBD) algorithm. Prevalence of SHS exposure will be derived from data collected within the TackSHS survey in the 12 European countries considered. Eurobarometer surveys will be used to obtain prevalence of SHS exposure in the remaining EU-28 countries and to validate estimates from the TackSHS survey. Moreover, sensitivity analyses of AMM to SHS will be conducted varying different assumptions (e.g., using upper and lower 95% confidence limit of RRs or ORs from meta-analyses, using different hypotheses of susceptibility of current and ex-smokers to SHS, changing other assumptions).

Statistical analyses for WP10

The statistical analyses needed to achieve objectives related to WP10 will be conducted at the University of Cartagena. To accomplish WP10 objectives, researchers will evaluate policies aimed at reducing exposure to SHS across European countries, through the development of a model (Return On Investment – ROI – model) able to assess the cost-effectiveness, budget impact and a wider set of social return on investment metrics of these policies.

The choice of policies and interventions to be considered will be guided by the work developed in other WPs of the TackSHS Project, as well as by the review of the scientific literature. The choice of diseases, as well as the corresponding AMM parameters, will be guided by the results of WP9. The outcomes of the model will comprise not only standard cost-effectiveness and cost-utility ratios over these horizons but also a fully disaggregated list of health outcomes and resource use consequences over shorter time horizons.

Country-specific versions of the model will be also constructed. The initial core of countries will be Germany, Spain and UK. This core is composed by the intersection of countries covered by the TackSHS survey and the countries for which there exist a high quality data set on the health and economic consequences of smoking related diseases resulting from the EU FP7 EQUIPT project [23] or the NICE ROI model. Evidence on exposure to SHS for these three core countries will be obtained from the TackSHS survey. Moreover, since this survey covers other additional EU MS, including two middle-income countries (Bulgaria and Romania), the initial core will be extended to include a selection of these countries. The criteria for inclusion will be based primarily on the availability of good quality data on costs of interventions, as well as prevalence and incidence of smoking-related diseases. Data requirements will consist of point estimates for the model parameters plus their confidence intervals in order to enable both deterministic and probabilistic sensitivity analyses.

Smoke-free policies, comprising one or several interventions will be evaluated accounting for cost and health consequences. The results will be expressed in terms of several metrics of interest for stakeholders and decision makers (i.e., budget impact, incremental cost-benefit ratios, incremental cost-effectiveness ratios, averted mortality and morbidity, gains in life years and quality adjusted life years).

ETHICAL AND ADMINISTRATIVE ASPECTS

Informed consent

At recruitment, information on survey characteristics will be given to all participants by suitably qualified professionals, who will be able to provide answers to any possible questions and to eliminate any concern respondents may have. This information will be provided through the Information Sheet (Annex 5 for adults and Annex 5bis for minors), and will be translated in various languages and provided to survey participants in a clear, jargon free way, using fully understandable terms and language. This document includes:

- the purpose of the information to be collected, including aims, methods and implications of the research;
- the extent to which personal data is used and accessed by various partners;
- the participant right to withdraw from participation in the study.

Although in EU countries, according to their current legislation, written consent is not mandatory for this type of study, following the request of the EC all participants will be asked to sign the informed consent form for participation in the study. Written informed consent will thus be obtained from each adult participant, and, in case of minors, representing approximately 5% of the survey sample, from one of their parents or legal tutors. In countries collecting data with CAPI method

(using computer or tablet), participants will have the possibility to tick an electronic document in order to express their willingness to participate in the study. No written signature will therefore be required. In those countries using P&P interviews, participants will be asked to sign the Consent Form (Annex 6 for adults and Annex 6bis for minors), containing personal details of participants. Wherever obtained, the signed document will be sent to the "Mario Negri" Institute by those DOXA partners using P&P interviews, and will be stored in "Mario Negri" Institute in archives with the access allowed only to part of the staff involved in the survey.

Privacy observance procedures

Survey data will be in electronic format. Only a selected number of pre-designated members of the data collection team will have access to the laptops protected password. Once data collection is complete, all data will be uploaded into a single database and reliably and completely deleted from the laptops.

Selected personal data, including the names of respondents, will be collected to enable quality assurance procedures and to allow participants willing to withdraw from participation in the survey to have their records deleted from the database. Once quality assurance procedures are complete (within 4 months of the completion of data collection), names and other unique personal identifiers (such as full address) will be reliably and completely deleted.

During the quality assurance procedures, "Mario Negri" Institute will obtain an anonymous copy of the analysis database, i.e., without names of participants but with encrypted (not personally identifiable) codes. The encryption key is kept by DOXA and its European partners in a place separated from the research group. All access to the encryption key will be logged. This encryption key will be destroyed once quality assurance procedures are complete. After this procedure, there will not be anymore the possibility to identify the participant record and consequently to delete it from the database.

The analysis database will be held securely on a password protected file server at the "Mario Negri" Institute, and only a limited number of researchers from its team or the consortium will have the possibility to access this analysis database.

All data will be managed anonymously, in respect of the privacy regulations in force, only for scientific purposes, without any lucrative aim. Moreover, results of the study will not consist in individual-level data, but aggregated data, and summary results will be disseminated, thus not allowing to identify the survey participants.

These and other measures are in agreement with national and current or forthcoming EU (i.e., Directive 95/46/EC) regulations. After evaluation of the Italian Ethics Committee (i.e., the Ethics Committee of the study coordinator), the study protocol will be submitted for evaluation to the Ethics Committees of the other 11 countries where data will be collected. In addition, the study protocol will be approved by the Data Monitoring Board and an External Ethics Advisor of the TackSHS team.

Access to personal data and withdrawal from the study

In the survey no sensitive personal data (e.g., health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction), genetic information, or data involving tracking or observation of participants will be collected. According to other personal data, in the Information Sheet it has been made clear that subjects are completely free to withdraw their records from participation in the survey, and that the consent given by participants in the project can be withdrawn, without any explanation or justification. In this case, all data pertaining to the subjects in question will be destroyed.

Selection of the subcontractor performing data collection

The development of the questionnaire and the data managing, analysis and interpretation will be carried out by the Department of Epidemiology of "Mario Negri" Institute, in collaboration with other TackSHS Project partners. However, the TackSHS consortium is not able to carry out the fieldwork, particularly in a cost-effectiveness manner and/or in a satisfactorily short period of time. Therefore, data collection of the European cross-sectional survey will be performed with the support of a leading market research organization, which will be involved as a subcontractor of "Mario Negri" Institute.

"Mario Negri" Institute, a non-for-profit private institute, had no obligation at a national or EU level, to launch a call for tender to select the most suitable market research organization, since "Mario Negri" Institute is not a contracting authority/contracting entity. However, in respect of the current practice at EU level, "Mario Negri" Institute requested a series of quotations from selected research market institute before the project submission. The 6th of February 2015, formal quotes have been required by e-mail four leading research market institutes offering a network of representatives throughout Europe with trained surveyors (i.e., DOXA, GfK-Eurisko, IPSOS and TNS). For a scenario of a face-to-face survey with 1000 participants in each of 12 countries, 12-14 minutes of interview, DOXA quoted € 225,000 + VAT for completion of this work, GfK-Eurisko requested € 315,000 + VAT, IPSOS requested € 325,680 + VAT and TNS requested € 421,000 + VAT. Therefore, DOXA provided by far the lowest quotation. Moreover, "Mario Negri" Institute has been collaborating with DOXA for several years to carry out annual national surveys on smoking since 2001. Therefore, the collaboration has been established before the beginning of the project. More importantly, in 2010, within the PPACTE project, "Mario Negri" Institute, in collaboration with DOXA and its European partners, already conducted a face-to-face representative survey on economic aspects of smoking in 18 European countries, using the same sample size, sampling methodology, and population proposed for the present investigation. A specific objective of the TackSHS survey refers to the comparison between data provided by the new survey and PPACTE data. Having DOXA as a subcontractor assures the identical country-specific sampling methodology. This allows us to obtain a more accurate comparison of selected smoking characteristics.

On the basis of the quotes received, the "best value for money" principle, and the long lasting collaboration with the Department of Epidemiology of "Mario Negri" Institute, DOXA has been identified as the best provider for the service.

Secondary used database

For comparison purposes, a previously collected personal dataset will be analysed. These data come from a companion pan-European face-to-face survey, conducted in 2010 within the PPACTE Project, financially supported by the EC FP7. That survey was conducted in 18 European countries (Albania, Austria, Bulgaria, Czech Republic, Croatia, England, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Poland, Portugal, Romania, Spain and Sweden), on a total of 18,056 participants, representative for each country of the population aged ≥15 years. The study protocol was approved by the Institutional Review Board of the "Mario Negri" Institute. The procedures for recruitment of subjects, informed consent, data collection, storage and protection (based on anonymous identification code) were in accordance with the country specific legislation. This was ratified and signed by DOXA (the market research organization in charge of data collection) and each of its European partners. "Mario Negri" Institute was the owner/manager of the dataset, and therefore permission to use those data is not required.

Ownership of the data

Individual-level anonymous data sent from DOXA and its European partners, and stored at the "Mario Negri" Institute, will be the property of the study coordinator. Selected data will be made available to other TackSHS partners in order to pursue the aims of other WPs.

RELEVANCE AND IMPLICATIONS

One of the expected outcomes of the TackSHS European survey is the characterization of exposure to SHS and to e-cigarette aerosol in populations with different socioeconomic level and from various European countries. These results will have important implications on multiple aspects of public health and prevention for the European population and, when appropriate, will be disseminated in order to guide the development or the improvement of current smoke-free laws to protect the health of non-smokers.

Moreover, through the collaboration with other WPs of the TackSHS Project, we will also provide the first estimates of morbidity and mortality due to SHS exposure at the European level, and the cost impact of interventions to control SHS exposure through purpose-built economic models. This information will be country-specific and will allow the evaluation of the cost-effectiveness of interventions, as well as their budgetary impact and return on investment at different scales of implementation. At the societal level, we aim to focus on the hazards derived from SHS, and possibly from e-cigarettes aerosol, by strengthening our efforts to disseminate the results of the TackSHS Project, not only for policy makers and stakeholders, but also among patients and consumers organizations, both at the national and European level.

DISSEMINATION

The main channels of dissemination of the results of the TackSHS survey will be international peer-reviewed open-access journals. Open access journals will allow the free dissemination of the project's results among the scientific community. The dissemination will be followed critically and professionally, to maximize the project's impact on both scientific knowledge and on public health. A final report will also summarize the main findings of various WPs. All these documents will be also made available on the TackSHS Project website (www.tackshs.eu). The webpage will be constantly updated to include the publications, with direct links to the PubMed abstract and to the full text of the paper (when available). Main results regarding the economic evaluations of policies aimed at reducing exposure to SHS across European countries (WP10) will be also used, in conjunction with the results from the rest of WPs, to formulate policy proposals. Finally, key findings from the WPs will be presented in tobacco control or public health conferences, and we will likely produce other written and audio-visual materials (like "video capsules" of 1-2 minutes with key information of the project for patients, scientists, and the public, or fact sheets) and use other varied forms of communications to promote awareness of the project results to organizations involved in the field of tobacco control, health promotion, and public health.

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