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SUPPORT FOR A TOBACCO ENDGAME STRATEGY IN 18 EUROPEAN COUNTRIES

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ABSTRACT

Objective. The feasibility of a tobacco endgame strategy, aiming to bring smoking prevalence to near-zero levels, is currently under debate. We provide information on public support to such a strategy in Europe.

Methods. In 2010 we conducted a face-to-face representative survey in 18 European countries (Albania, Austria, Bulgaria, Czech Republic, Croatia, England, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Poland, Portugal, Romania, Spain and Sweden). The present analysis is based on 16,947 individuals aged ≥15 years with available information on the attitudes towards a complete ban of the use or sales of smoking.

Results. Overall, 34.9% of adults (32.8% in men and 37.0% in women; $p<0.001$) support a tobacco endgame strategy, 41.2% of never, 29.4% of ex- and 25.6% of current smokers. The highest support was observed in southern Europe (42.5%), followed by eastern (39.1%), northern (27.5%) and western European countries (23.0%; $p<0.001$). No trend with age was observed ($p=0.117$), whereas an inverse relation was observed with education ($p=0.001$).

Conclusion. Approximately one in three adults (and one of four smokers) supports a tobacco endgame intervention. This first study in Europe provides a baseline reference to evaluate future trends on public acceptance of extreme propositions to end or drastically cut smoking.

Keywords: tobacco smoking; endgame strategy; public support; Europe.

INTRODUCTION

A new, emerging and radical strategy to control tobacco has recently been introduced: the tobacco endgame strategy, aiming to bring smoking prevalence to near-zero levels (Malone, 2010). What seemed unrealistic only a few years ago appears to be feasible in the near future (Jenks, 2013; Smith, 2013). New Zealand and Finland, for example, are developing plans to completely ban the sale and use of cigarettes, thus creating a smoke-free society, by 2025 and 2040, respectively (Levy et al., 2012a; Maubach et al., 2012). The WHO is also considering the feasibility of proposing this strategy (Chan, 2013).

The advantages and gain from a public health perspective of such a radical resolution are evident (Jenks, 2013; Proctor, 2013; Warner, 2013; Wilson et al., 2013). However, the route to reach a successful tobacco endgame is complex and its feasibility is still unclear (Arnott, 2013; Malone, 2013). One of the main requirements to implement endgame approaches is the need for strong political will, which is driven by public support (Thomson et al., 2010; Wilson et al., 2013). Only a few studies from New Zealand, one from Australia and one from Hong Kong have been conducted to quantify the support towards such a strategy, which appeared to be relatively strong also among current smokers, i.e., backed by around 50% (Edwards et al., 2013; Hayes et al., 2014; Maubach et al., 2012; Wang et al., 2013). Here, we provide information on public attitudes towards prohibition of cigarette sales or smoking across Europe.

METHODS

Within the project 'Pricing Policies and Control of Tobacco in Europe (PPACTE)', in 2010 we conducted a face-to-face survey on smoking in 18 European countries (Albania, Austria, Bulgaria, Czech Republic, Croatia, England, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Poland, Portugal, Romania, Spain and Sweden) (Gallus and La Vecchia, 2012; Gallus et al., 2014; Gallus et al., 2012; Joossens et al., 2012). In each country, we enrolled a sample of around 1000 participants representative of the

general population aged 15 years or over (311 million Europeans) in terms of age, sex, geographic area and socio-economic characteristics.

In several countries (Albania, Croatia, Hungary, Italy, Poland and Romania) a multi-stage methodology was used. In the first stage, the primary unit of selection was a geographic area or voting centre. In the second stage, households or municipalities were selected. In the last stage, respondents were chosen randomly, in order to be representative of the population in terms of sex, age, geographic area and socio-economic characteristics. In those countries where adult respondents had been selected from electoral rolls, the quota method was used to select respondents aged 15 to 17. For other countries (Austria, England, Finland, France and Ireland) we used a quota method for the selection of the entire sample, stratifying the population according to selected variables including age, sex, and alternatively geographic area and/or occupation, in order to obtain a representative sample of the country population. For most of other countries, we used a stratified random method or a simple random method. For each country, statistical weights were used to generate estimates representative of various country populations.

Trained interviewers administered a standardized questionnaire on smoking. One question on attitudes towards a radical endgame strategy was included: "The government or the national political decision makers could adopt several strategies to control and limit tobacco use. How useful do you assess making smoking or cigarette sales illegal?" The present analysis is based on a total of 16,947 individuals with available information on that question (93.9% of survey respondents).

RESULTS

Overall, 40.8% of adults found making smoking illegal useless, 24.3% rather useless, 18.5% quite useful and 16.4% very useful. Thus, 34.9% of adults (32.8% in men and 37.0% in women; $p<0.001$) considered a tobacco endgame strategy useful, 41.2% among never smokers, 29.4% among ex- and 25.6% among current smokers (Table 1). No trend with age was observed ($p=0.117$), whereas an inverse relation was observed

with education – those with higher education being less likely to support an endgame strategy (p=0.001). Supporters of this strategy were more frequent in Albania (60.6%), Croatia (60.3%), Italy (57.8%) and Poland (49.7%) and less frequent in Hungary (11.3%), Portugal (18.3%), France (20.6%) and Sweden (20.8%). In Finland, support was 23.3% (14.4% among smokers). Support for most other countries, including Romania (28.6%), England (29.1%), Spain (30.9%) and Greece (31.4%) was around 30%. The highest support was observed in southern Europe (42.5%), followed by eastern (39.1%), northern (27.5%) and western European countries (23.0%; p<0.001). Subjects living in countries with a relatively low smoking prevalence had a higher support (46.7%) than those living in countries with intermediate (37.5%) or high smoking prevalence (34.6%; p for trend<0.001). A higher support was also observed in countries with limited implementation of tobacco control policies (36.6%) than in those with a better implementation (33.6%; p=0.001).

DISCUSSION

In our large survey, approximately one in three European adults (and one of four smokers) support a tobacco endgame strategy. The observation that one quarter of smokers are in favour confirms that smokers themselves dislike their habit (Proctor, 2013). Attitudes towards a smoke-free society were even higher in a few studies conducted among smokers in New Zealand (Edwards et al., 2013; Maubach et al., 2012) and in the general population in Australia (Hayes et al., 2014) and Hong Kong (Wang et al., 2013). In Finland, where a 2040 endpoint has been envisioned (Levy et al., 2012a), we found a relatively low support. However, in three European countries (Albania, Croatia and Italy), the majority of the overall adult population agrees with a total ban of cigarette sales. As expected, support was highest in countries with a relatively low smoking prevalence and lowest in those with a high smoking prevalence (Gallus et al., 2014). This pattern was consistent overall, and both in never and current smokers. More educated subjects less frequently supported a total ban of cigarettes in their countries, possibly due to their greater awareness of the difficulties implicit in implementing such a drastic approach.

Our data on public support for the tobacco endgame are based on beliefs and perceptions, and their reliability is therefore unclear. The main value of the present investigation is that it reports preliminary estimates on a topic largely debated on the basis of emotional stances (Scarpino et al., 1990). This first study in Europe provides therefore a baseline reference to evaluate future trends on the public's acceptance of radical propositions to end or drastically cut smoking within a growing tendency, globally, to de-normalize cigarette smoking. Strengths of our survey include the representativeness of the adult population of 18 European countries, the standardized use of a single definition of current smokers and the use of face-to-face interview (Gallus et al., 2014; Gallus et al., 2012). Moreover, this is by far the largest study providing data on the issue (Edwards et al., 2013; Maubach et al., 2012; Wang et al., 2013).

The public health community is aware of the favourable effects on the society of a smoke-free world (Malone, 2010; Proctor, 2013; Smith, 2013; Warner, 2013). It is however still not clear which is the best process towards a successful tobacco endgame strategy, whether or not to provide smokers access to safe, alternative nicotine products (Arnott, 2013; Malone, 2013) and if the electronic cigarette represents one of such alternatives (Arnott, 2013; Chapman, 2013; Etter, 2013; Fairchild et al., 2014; Flouris and Oikonomou, 2010; Malone, 2013). It is also not clear which solution is more practical and effective to reach the endpoint, when to envision the endpoint, whether transitions should be gradual or an abrupt change is needed, whether to totally ban tobacco use or to ban sales to those born after a particular year only (Berrick, 2013; Malone, 2013), and whether to ban all types or only certain types of (smoked) tobacco products (Malone, 2013; Smith, 2013), Finally, it is not clear which is the role of the tobacco industry (Malone, 2013; Warner, 2013).

Conversely, what it is clear is that to reach the goal, the public opinion, besides policy makers, should be convinced that aspiring to a complete smoke-free society is feasible and right. It is possible to take advantage from the smoking ban in public places. It was not obvious, before 2000, to imagine that in just a few years smoking would have been banned from European restaurants and pubs (Jenks, 2013; Malone, 2013; Warner, 2013). This, however, happened in a relatively short time period, starting

in Ireland and Scotland in 2004 and Italy in 2005 (Gallus et al., 2007; Gallus et al., 2006; IARC, 2009), and now most European restaurants and bars are smoke-free (Joossens and Raw, 2011). Before 2000 support for smoking bans in public places was appreciably low, but thanks to a growing public awareness of the harmful effects on health of second hand smoking, population support increased and further strengthened after the implementation of the regulation. Further, now the large majority of current smokers would not go back to the past of indiscriminate smoking in public places (Gallus et al., 2007; Gallus et al., 2006; IARC, 2009). Growing public support for a smoking ban in public places gave policy makers the backing to implement such a regulation. Learning from the process that brought smoke-free public places to daily life, it is important to monitor the trend of public support towards tobacco elimination.

The tobacco control community should familiarize with the concept of this novel tobacco control strategy (Warner, 2013). More importantly, in order to reduce the pathway to a smoke-free society, which currently, at least in Europe, appears still distant (Levy et al., 2012a; Levy et al., 2012b), the tobacco control movement should initiate a public conversation in order to let public opinion understand the benefits of a world without tobacco.

Conflict of interest statement: The authors declare that there are no conflicts of interest.

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Table 1: Percent distribution (%) of 16,947 European adults according to their perception of utility (quite to very useful) of making smoking or cigarette sales illegal as a tobacco control strategy, overall, and according to selected characteristics. PPACTE, 2010.

	Proportion (%)* supporting a tobacco endgame intervention			
		Smoking status		
	Total	Never smokers	Ex-smokers	Current smokers
Total	34.9	41.2	29.4	25.6
Sex				
Men	32.8	39.2	28.6	25.3
Women	37.0	42.6	30.5	25.9
Age group (years)				
<25	37.8	43.4	34.1	24.7
25-44	35.1	41.2	33.6	26.9
45-64	32.2	38.9	26.3	24.8
≥65	36.9	42.4	29.3	22.8
Level of education°				
Low	36.5	43.3	27.4	27.5
Medium	34.1	39.2	32.3	25.7
High	33.6	40.7	27.2	21.2
Geographic area#				
Northern Europe	27.5	29.8	27.8	22.6
Western Europe	23.0	26.5	17.7	20.5
Southern Europe	42.5	49.7	36.0	30.4
Eastern and central Europe	39.1	46.4	37.1	25.2
Country-specific smoking prevalence†				
Low (<26.5%)	46.7	33.4	30.3	40.5
Intermediate (26.5%-29.9%)	37.5	25.4	25.6	32.1
High (≥30.0%)	34.6	30.1	16.6	27.5
Tobacco Control Scale (TCS)^				
<45 (median value)	36.6	46.5	32.8	20.7
≥45 (median value)	33.6	38.8	28.0	26.6

* Prevalence estimates for the overall population were computed weighting each country in proportion to the country specific population aged 15 years or over.

° The sum does not add up to the total because of some missing values.

Northern Europe: FI, IE, SE, UK; western Europe: AT, FR; southern Europe: ES, GR, IT, PT; eastern and central Europe: AL, BG, CZ, HR, HU, LV, PL, RO.

† Low: SE, IT, UK, AL, FI, RO; intermediate: HR, FR, PL, CZ, LV, SP; high: AT, PT, HU, IE, GR, BG.

^ TCS<45: AT, BG, CZ, HU, LV, PL, PT; TCS ≥45: ES, FI, FR, IE, IT, RO, SE, UK. Albania and Croatia excluded.