



OPEN ACCESS

# Strategies and barriers to achieving the goal of Finland's tobacco endgame

David S Timberlake <sup>1,2</sup>, Ulla Laitinen,<sup>2</sup> Jaana M Kinnunen <sup>2</sup>, Arja H Rimpela<sup>2,3,4</sup>

<sup>1</sup>Program in Public Health, University of California, Irvine, Irvine, California, USA

<sup>2</sup>Faculty of Social Sciences, Health Sciences, Tampere University, Tampere, Finland

<sup>3</sup>PERLA - Tampere Centre for Childhood, Youth and Family Research, Tampere University, Tampere, Finland

<sup>4</sup>Department of Adolescent Psychiatry, Pitkänieki Hospital, Tampere University Hospital, Nokia, Finland

## Correspondence to

Dr David S Timberlake, Program in Public Health, University of California, Irvine, Irvine, CA 92617, USA; dtimberl@uci.edu

Received 9 October 2018

Revised 3 May 2019

Accepted 8 May 2019

Published Online First

31 May 2019

## ABSTRACT

**Objectives** Finland boldly legislated the end of tobacco use in its 2010 Tobacco Act, and subsequently expanded the goal in 2016 to eradicate other nicotine-containing products. This study explored stakeholders' perceptions about the strengths, barriers, solutions and rationale for Finland's comprehensive but conventional strategy to achieve its nicotine-free goal.

**Design** Study participants were selected based on expertise in policy or practice of tobacco control (n=32). Semi-structured interviews, conducted in 2017 and 2018, covered topics ranging from consensus among stakeholders to Finland's ranking on the 2016 Tobacco Control Scale. The framework method was chosen for analysing interview transcripts.

**Results** A perceived strength of Tobacco-Free Finland 2030 was the consensus and cooperation among members of the tobacco control community. The objective of becoming a nicotine- versus smoke-free society had almost unanimous support, challenged by a small minority who argued for greater discussion of harm reduction approaches. The need for maintaining legitimacy and historical successes in tobacco control were reasons for using a conventional strategy. Barriers to achieving the endgame goal included insufficient funding and over-reliance on non-governmental organisations, political/legal constraints, impact of institutional practices on tobacco disparities, ambivalence about the role of mass media and lack of prioritising smoking cessation.

**Conclusions** Stakeholders' broad confidence in reaching the goal of Finland's tobacco endgame suggests that future policy initiatives will reflect the current, conventional strategy. If the Finnish government chooses to continue this approach, then it should designate separate funds for Tobacco-Free Finland 2030 and implement structural changes that will facilitate tobacco control initiatives.

## INTRODUCTION

In 2010, Finland became the first country to legislate the end of tobacco use, raising the question "Can Finland spark a tobacco-free world?".<sup>1</sup> The Ministry of Social Affairs and Health subsequently published its Action Plan to achieve the endgame goal,<sup>2</sup> which included comprehensive but conventional measures to prevent initiation (eg, regular tax increases), promote cessation (eg, training of healthcare providers) and protect against exposure to secondhand smoke (eg, more smoke-free municipalities). Many of the proposed measures are effective in reducing smoking rates below 20%, but, may not be sufficient in reaching the goal of most tobacco endgames (<5%).<sup>3</sup> Thus, it has been suggested that

a tobacco endgame incorporate measures to change the "... structural, political and social dynamics that sustain the (tobacco) epidemic".<sup>4</sup>

Scholars have focused much of their attention on innovative interventions that restrict the supply of tobacco (eg, "sinking lid").<sup>5-7</sup> A distinguishing feature of the "sinking lid" is that an end date to tobacco can be clearly established. This is not the case for the measures proposed in Finland's 2014 Action Plan<sup>2</sup> and 2018 updated recommendations (eg, plain packaging),<sup>8</sup> which are incremental, largely demand-sided and based on Framework Convention on Tobacco Control guidelines.<sup>9</sup> As noted by Malone,<sup>10</sup> a tobacco endgame needs to address systems issues to a greater degree than individual behaviour. For example, Finnish policymakers once considered the novel strategy of limiting tobacco sales to individuals born before the year 2000 (ie, tobacco-free generation). More recently, the government legislated an increase in the maximum fee for a tobacco retail license (ie, €500/cash register) in an effort to reduce the supply of tobacco. Yet, the government has excluded innovative supply-side measures (eg, government-controlled tobacco outlets) from its current plan, which raises the question of whether Finland will reach the goal of its tobacco endgame.

Since legislating tobacco's eradication in 2010, Finland has experienced a decline in smoking so impressive that the prevalence in 2017-2018 in males (14%) and females (11%)<sup>11</sup> has practically reached the prevalence projected by 2040 in a simulated model (12% overall).<sup>12</sup> As smoking declined, the end date was moved to 2030 and the endgame goal was expanded to include eradication of other nicotine-containing products that are toxic and addictive, as stated in the 2016 Tobacco Act. The 2016 Tobacco Act also includes measures that exceeded those mandated by the European Union's 2014 Tobacco Products Directive (EU's TPD), such as marketing restrictions on electronic cigarettes. Such actions reflect Finland's impressive ranking on the 2016 Tobacco Control Scale (TCS) among European countries (6<sup>th</sup> among 35).<sup>13</sup>

Despite its strengths in tobacco control, Finland is deficient according to the 2016 TCS in smoking cessation (5/10 points) and public information campaigns (3/15 points), the latter of which is consistent with Finland's absence of an anti-smoking social movement.<sup>14</sup> Also, demographical disparities in tobacco use persist in Finland. The prevalence of daily smoking among adults with a high level of education decreased by 36% from 2013 to 2016 (0.073 to 0.047);<sup>15</sup> in contrast, only a 10% decline occurred during the same period for adults with a low level of education (0.209 to



© Author(s) (or their employer(s)) 2020. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

**To cite:** Timberlake DS, Laitinen U, Kinnunen JM, et al. *Tob Control* 2020;**29**:398-404.

0.188). In promoting tobacco control legislation, Finland has historically relied on a cadre of state health administrators and non-governmental organisations (NGOs; for example, Finnish Cancer Society). The dependence on this small group of professionals was an initial concern because of the need for widespread public support, which can be a decisive factor in endgame planning.<sup>4</sup>

An in-depth examination of stakeholders' perceptions of Finland's endgame strategy will provide insight on the likelihood of future policy initiatives. It is important to project such initiatives because of the nascency of research on tobacco endgames. If simulations continue to support innovative supply-side measures,<sup>16</sup> then Finnish policymakers may consider changing course in their strategic thinking. This study was intended to assess such thinking through interviews about perceived strengths, barriers, solutions and rationale for the current strategy to achieve Finland's 2030 goal.

## METHODS

### Selection of participants

Participants were chosen for their expertise in either the policy or practice of tobacco control (n=32). They were selected through snowball sampling, starting with initial contacts well known within the tobacco control community in Helsinki, Finland. Professionals with expertise in policy-related matters were recruited from academic centres, government research organisations, government ministries and the Finnish Parliament. Many of these experts played key roles in formulating Finland's tobacco control policy and, thus, are likely to influence future initiatives aimed at reaching the 2030 goal. Professionals with expertise in the practice of tobacco control were recruited from advocacy groups, city-wide initiatives (eg, Helsinki Tobacco-Free Municipality) and several non-governmental organisations (NGOs) working in the prevention and cessation of tobacco use. Most interviews (29/32), which lasted approximately 50 min, were conducted in English and in person by the primary author (DST) between September, 2017, and June, 2018. Three other interviews were conducted by DST via telephone. Audio recordings of the interviews were transcribed into text using the online service Trint,<sup>17</sup> and subsequently corrected by the second co-author (UL) to ensure that the text was verbatim. The project was approved by University of California, Irvine's Institutional Review Board.

### Content of interviews

The semi-structured interview was chosen as the primary methodology to explore endgame perceptions that would not be captured in a survey.<sup>18</sup> Policy experts were first asked about the rationale for Finland's current strategy versus innovative strategies that focus on the product, user and supply of tobacco.<sup>7</sup> While all innovative strategies were open to discussion, three were given particular attention: (1) the "sinking lid" because of its high probability of success,<sup>16</sup> (2) the prospect of government-controlled tobacco outlets being modelled after Alko,<sup>19</sup> Finland's hard alcohol retailer and (3) reasons why Finnish policymakers are no longer pursuing the "tobacco-free generation". Participants were then queried about the impact of the EU's 2014 TPD on the endgame, including new regulations on electronic cigarettes, notification requirements for new products, prohibition on characterising flavours versus all additives<sup>20</sup> and invocation of Article 24 of the TPD to ban a certain category of tobacco. Participants were then queried about Finland's exclusion of

**Table 1** Perceived strengths of stakeholder agreement and the case for a conventional strategy

#### Theme: stakeholder agreement and cooperation

Cooperation among various stakeholders *"We have a long tradition of cooperation among NGOs, governmental institutes and researchers – we are working together."*

Political consensus *"...all the different political parties agreed to the (goal). So this is a subject in which we don't have big differences whether you are from the left, right, middle or whatever."*

Shared views *"I just love it when we meet with these tobacco control people because it's like we have a joint religion because we have the same views."*

#### Theme: conventional, demand-side policies

Strategical success *"So the emphasis, and I think it's also been the WHO policy, should be reducing demand. And we are doing it so well that why change that policy."*

Legislative success *"We've had the advertising ban since the first Finnish Tobacco Act and it's been written in such a way that when the e-cigarette came, we were able to implement it."*

Outcome success *"Now the (goal) seems very good at the moment because youth smoking is going down quite quickly, even more than was predicted when this SimSmoke was made."*

NGOs, non-governmental organisations.

"harm reduction strategies" in the goal of becoming a nicotine-versus smoke-free society.

Practitioners of tobacco control and policy experts were asked about the prospect of achieving the 2030 goal with conventional measures proposed in the government's 2014 Action Plan. Particular attention was given to measures aimed at rectifying deficiencies reported in the TCS.<sup>13</sup> Topics included the role of targeted mass information campaigns in changing social norms about tobacco use; challenges of combating the high prevalence of daily smoking among students attending vocational track schools (23.2%) versus academic track schools (3.4%)<sup>21</sup>; the provision of smoking cessation services and corresponding impact of the social and healthcare reform (SOTE); the prospect of the Smoke-Free Helsinki Programme serving as a blueprint for other Finnish municipalities; concerns about the cross-border trafficking of tobacco products (eg, Swedish snus); consensus and cooperation among stakeholders; and Finland's dependence on NGOs for tobacco prevention and cessation.

### Analysis of interview transcripts

The framework method was chosen for the content analysis of transcripts because of its systematic approach, multi-disciplinary appeal and frequent application to the semi-structured interview.<sup>22</sup> The coding process involved a broad deductive approach in which codes were first pre-selected based on a review of academic papers and government documents.<sup>2-4 12 14 19 23-25</sup> Additional codes were then developed through the open coding of four transcripts, which were independently examined by three co-authors. The final analytical framework, which was applied to the remaining transcripts using the qualitative software programme Atlas.ti V.8.2,<sup>26</sup> consisted of 12 categories and 138 codes. The themes, which emerged from a systematic comparison of codes across transcripts,<sup>27</sup> are summarised in tables 1-3.

**Table 2** Perceived barriers to Finland's tobacco endgame

<b>Theme: insufficient funding</b>	
Too few resources for the 2030 Initiative	"So there's basically no one who is really doing full-time work on 2030 Tobacco-Free Finland... ASH Finland is more or less doing it as kind of a side job."
NGOs indispensable to tobacco control	"... the public agencies don't do the campaigning. It's the NGOs that run the campaigns and I have noticed that's a little different compared with many countries, for example, Denmark."
Activities of NGOs are not well coordinated	"...because (quitline) is run by one (NGO), the NGO is not really recognised as part of smoking cessation - at least not officially. But we have been around for 15 years."
<b>Theme: political and legal barriers</b>	
Compromise among political parties	"... unlike other Nordic countries, we don't have one big body which could have a hegemonic position to introduce policies; so we have a coalition government."
Compromise among government ministries	"... the Ministry of Social Affairs and Health is not totally free to create their own policies. They have to negotiate with the Ministry of Finance and Ministry of Trade."
Supply-side strategies won't work in the EU	"Reducing supply if there is demand is a very problematic situation since we are in the middle of Europe with free trade."
<b>Theme: institutional practices</b>	
Low quality of health ed. in vocational school	"(Vocational students) are more likely to be disadvantaged... school health facilities, health education, etc is actually dealt worse than if you go into academic track school."
Compliance w/ school smoking policy varies	"(Vocational schools) have this one leader in a very high level, then they have several unit leaders or unit chiefs that are responsible for what happens in the specific unit."
Employee smoking and school leadership	"So if you have a lot of personnel smoking in (vocational schools), you don't really have a committed school head master - it's not school board in Finland, it's school leaders."
<b>Theme: ambivalence about mass media</b>	
Mass media campaigns are viewed ineffective	"I'm a firm believer of campaigns. But when it comes to general non-targeted mass media campaigns, I have very little confidence in their efficacy or power to change thinking."
Mass media campaigns are not the priority	"So why is the Ministry of Health not asking THL* to implement a huge Tobacco-free 2030 campaign and give the resources to do it? That's a good question."
Mass campaigns are incompatible w/ culture	"... (Finns) are not that easy to jump on those movements."
<b>Theme: lack of prioritising smoking cessation</b>	
Low priority for standardising services	"The Ministry is not earmarking resources at the national level to develop a system where in every health centre, in every hospital, at all levels of healthcare there would be standardised system on smoking cessation. That is a big issue."
Cessation services not well-known/marketed	"...in order to get physicians to (advise patients to quit smoking), they need to know where to refer patients. This is the link that is missing."
Healthcare not viewed as a cessation resource	"(Patients) don't see healthcare as a place to stop smoking... And then all the expertise at the moment in Finland is in healthcare."

\*National Institute for Health and Welfare (THL).

EU, European Union; NGOs, non-governmental organisations; ed., education; w/, with.

## RESULTS

### Perceived strengths and case for a conventional strategy

The most consistent message conveyed in the interviews was the strong consensus and cooperation among members of the tobacco control community, legislators from various political parties and administrators in government ministries (table 1). The stakeholders' consensus is best illustrated by the almost unanimous support for a nicotine- versus smoke-free Finland, which can be traced to the country's experience with Swedish snus. The origins of the nicotine-free goal could be political and cultural, dating back to the time Finland joined the European Union. One participant stated "...the EU was against snus and the (Finnish) authorities didn't want to make a special issue around snus. We were more concerned about alcohol monopoly." The same participant proceeded to describe how snus was unpopular at this time ("a Swedish thing"), but has since gained favour among young Finnish males.<sup>28</sup> Several participants expressed dismay at the growing popularity of snus and its use for reasons other than harm reduction. Others mentioned the challenge of conveying coherent messages on the relative risks of snus and

other products, such as electronic cigarettes. The strong views against a harm reduction strategy were frequently expressed in terms of the problematical relationship with Swedish Match. In the words of one stakeholder, "The policy that Sweden has is really challenging for us (because) they should not be marketing the product to Finland...yet, they are still doing it." Another stakeholder stated that the main reason for not instituting a harm reduction strategy is that "...we already started seeing results (smoking reduction) with the current policy". A minority of participants challenged the overwhelming support for a nicotine-free Finland. One said "...consensus discussion has not always been academically logical, (and has been) driven by strong personalities over the years". Expressing a similar sentiment, another participant said that the tobacco control community in Finland does not have the "manpower to ask the hard questions".

Study participants repeatedly referred to the strategical and legislative successes that contributed to the reduction in Finland's smoking prevalence. They often alluded to Finland's pioneering initiatives in tobacco control policy, ranging from advertising restrictions in the 1970s to the more recent tobacco endgame

**Table 3** Perceptions about the impact of external factors on 2030 tobacco-free Finland**Theme: minimal influence of external factors**

## EU's 2014 TPD\*

Finland is a step ahead of the EU

"... somehow we have always been ahead of the EU in tobacco control and that's why the new Directive is not going to give so many (new) things."

Finland is autonomous in developing policy

"I think that the display ban is a really effective means and it doesn't come from the EU, it's a national measure. And we have had a display ban since 2010."

## Tobacco industry

Industry is viewed as a non-entity in Finland

"One thing is that we don't have tobacco industry which is very important for us when we are preparing things and so it's easier for us to present these things and so on."

Industry works through a third party

"(PR agencies) are advising different interest groups in dealing with politicians. So many political advisors have moved from politics to work for those agencies. So Philip Morris is cooperating with or buying services from those agencies."

## SOTE reform†

Fate of SOTE is unclear

"(SOTE) is a very political issue and nobody knows what will happen. That's why it is difficult to make proposals on how smoking prevention services should be organised."

Health promotion is not the main priority

"... there will be very little room for health promotion in the new system. It's more about freedom to choose your own doctor which is the dominant discourse of SOTE."

\*European Union's 2014 Tobacco Products Directive.

†the proposed social and health care healthcare reform in Finland.

EU, European Union; PR, public relations; SOTE, social and healthcare reform.

in 2010. Stakeholders discussed Finland's successes in tobacco control in terms of demand-side policies (table 1). One stakeholder, for example, alluded to the comprehensiveness of the original Tobacco Act, whose restrictions on tobacco advertising were easily revised to include electronic cigarettes and accessories. The Finnish government's exemplary record of passing effective legislation could be viewed as a strength of Tobacco-Free Finland 2030; but, some indicated that the success could stymie innovation. One participant said "I think the problem is that Finland has such a long history of being successful in developing legislation. So it's sort of blind." The same participant aptly used the phrase "trapped by our former success" in describing the challenges of developing innovative policy.

**Barriers to achieving the 2030 goal**

The lack of designated funds for Tobacco-Free Finland 2030 was perceived to contribute to the continued dependency on NGOs for tobacco control (table 2). Some participants expressed concern that the NGOs, which handle tobacco control functions at provincial and national levels, will not have sufficient resources to reach the 2030 goal. With limited funding and lack of public health services designated by the government, one participant felt that "...the (NGOs) can't do it by themselves". Representatives from various NGOs conveyed the challenges of accomplishing their objectives with short-term government grants, donations and other sources. The discontinuity in funding has created challenges for large-scale implementation of innovative programme, such as smoking cessation coaches. In the words of one participant, "...we are lucky if (our project) will be adopted

by the public sector". Another stakeholder expressed frustration at having to seek funding for the nation's quitline on an annual basis. An even greater challenge is the lack of coordination between NGOs and the healthcare system, which, for example, hinders systematic referrals to smoking cessation services.

Despite policymakers' support for a conventional strategy, some acknowledged the barriers and limitations of not implementing a bold, innovative measure. The most common response was that such an intervention (eg, "sinking lid"), implemented without the public's support, could be detrimental to the tobacco endgame. One stakeholder said that "...if we proposed measures not accepted by the general public, then it could have a backlash on other areas of tobacco control". Others referred to legal barriers, such as free trade established by the European Union, and political barriers of the opposing views held by representatives of Finland's coalition government (table 2). The current trend in liberalising Finnish alcohol policy was one participant's explanation for why the government is not contemplating government-controlled tobacco outlets. Several participants mentioned the constitutional constraint of instituting the tobacco-free generation, which could be perceived, according to one stakeholder, as being inequitable.

Disparities in tobacco use were largely attributed to the socio-economical gradient that is common in other high-income countries. In the case of vocational schools, institutional practices may also play a role in students' high prevalence of smoking. Stakeholders mentioned the low quality of health education, variability in compliance with the smoke-free policy due to autonomy of unit leaders and poor leadership exemplified by personnel smoking in the vocational schools. But, others provided a more nuanced explanation for the disparity based on the concept of equity in Nordic countries. One participant said "... living in a Nordic welfare state, we think that one spoon is enough for everybody. So positive discrimination is really difficult for countries like Finland". Providing extra programme for specific groups could pose a challenge for tobacco-control professionals.

Among all of the topics discussed, the issue of whether Finland should institute a large media campaign to change social norms about tobacco use had the least consensus. One participant stated that the current media strategy was not very coherent in the sense that "(we) have this year a pregnancy campaign and we forget that next year somebody might get pregnant". As expected, the professionals who developed media campaigns targeted to high-risk groups (eg, vocational students) were less focused on changing social norms of the general population. Some felt that a campaign directed to the masses would have little impact because of the segmentation of tobacco users. As conveyed by senior stakeholders, younger policymakers were not exposed to the successful campaigns that aired decades ago in Finland. Some key informants who had experienced the mass campaigns in the 1980s felt passionately about the need for a nationwide anti-smoking campaign. These individuals argued that mobilising the public was necessary in order to change social norms and combat "generational forgetting". Some participants perceived mass media campaigns as being incompatible with the Finnish culture, particularly the ones modelled after American-style campaigns. Others expressed that a large-scale campaign would be unnecessary because of public support for tobacco control and mandatory health education in Finnish schools.

Deficiencies in smoking cessation services were regarded by many as the greatest challenge to Tobacco-Free Finland 2030. Most of the problem was attributed to the lack of an organised system of cessation services in healthcare, leading to variability

in the availability and quality of services across hospitals and municipalities. Stakeholders also noted the limited awareness of existing services among patients and physicians, the perception that smoking is not treated in the health centre because it is a private matter, healthcare professionals' insufficient training in smoking cessation and other barriers to the delivery of cessation treatment, such as nurses' excessive workload.

### Potential solutions for achieving the 2030 goal

New policy initiatives in tobacco control were not uniformly viewed as the top priority for achieving the 2030 goal. In fact, one leading advisor expressed that tobacco policy has reached its limit via the statement "...when I say those traditional tobacco products, like cigarettes, it's already more or less case closed; I mean politically and legally." The same individual then suggested that policymakers direct their attention to more pressing problems such as alcohol, drugs and domestic violence.

Participants frequently mentioned the need for improving services and promoting initiatives aimed at tobacco cessation, including smoke-free surgeries; support for smoking cessation specialists; role of former smokers as cessation coaches; incentives for general practitioners to specialise in primary healthcare; more health promotion in medical curriculum; an app for smoking cessation and a website cataloguing the various cessation services throughout Finland. Limiting the sales of nicotine replacement therapy to pharmacies, an initiative currently being debated, was supported by some participants. But, not all supported the paradigm of treating smoking behaviour with medication and behavioural therapy. In lieu of improving cessation services, one participant promoted tobacco taxation as a means of incentivising smokers to quit.

Modelling Finnish municipalities after the Smoke-Free Helsinki Programme was perceived as another means of improving cessation services. The Programme's organised system was praised for facilitating the referral of smokers to a tobacco clinic. One stakeholder was impressed by the fact that "...the city of Helsinki has done a lot for tobacco control that is not in any legislation". Others noted that Helsinki's success was attributed to its educated populace and a strong political commitment from its city officials.

### Impact of external factors on 2030 goal

Factors that extend beyond Finland's own tobacco policy were perceived by most stakeholders as neither impeding nor facilitating Tobacco-Free Finland 2030 (table 3). Regarding the EU's 2014 TPD, participants expressed confidence that the Finnish government was capable of enacting effective policy independent of the European Union. Many felt that Finland was autonomous and more progressive than the EU in tobacco control policy. Some participants noted that the EU's TPD has aided Finland's own initiative through a common framework, which, for example, reduces the smuggling of products across European countries. Others expressed concern that the TPD has opened the door to electronic cigarettes, which were previously unavailable in Finnish markets. The second factor, the tobacco industry, was seldom discussed by participants because the industry was viewed as a non-entity in Finland. One participant, however, noted that Philip Morris International has been working with former political advisors employed by public relations firms.

The third factor, the proposed SOTE, plans to transfer services from small municipalities to larger districts in Finland. SOTE was viewed by participants as having great potential for standardising the delivery of smoking cessation services. But,

many acknowledged that the fate of SOTE was unclear due to political debate and protracted negotiations. Some raised the spectre that even if SOTE were approved, it would have minimal impact on smoking cessation services because health promotion is secondary in priority to provider choice. One participant expressed concern that the bifurcation of services into medical care (districts) and health promotion (municipalities) could lead to fewer physician interventions for smoking cessation.

### DISCUSSION

The implementation of conventional and incremental measures, as opposed to bold interventions (eg, "sinking lid"), was perceived by experts as the most feasible means of achieving Finland's 2030 goal. On the one hand, this was unexpected based on the growing body of literature endorsing innovative supply-side strategies.<sup>6 29</sup> On the other hand, an incremental approach was sensible given its perceived effectiveness to date in Finland, and its perception of being politically and publicly acceptable. Policymakers from other countries have conveyed their support for an incremental approach. California state legislators and staff, for example, expressed greater interest in annual reductions in licenses of tobacco retailers, versus a total sales ban, because gradual implementation would provide smokers time to adjust to fewer outlets.<sup>30</sup> Similarly, the increase in the fee for a tobacco retail license, specified in Finland's 2016 Tobacco Act, corresponded to a reduction in the number of licensed retailers from over 10 000 (prior to the Act) to approximately 7250 in October, 2018 (*personal comm.*<sup>31</sup>). The increased fee complements Finland's strong record of regulating the tobacco retail environment, as evidenced by its display ban. Regulation of the retail environment is a likely indicator of achieving an endgame goal.<sup>32</sup> Yet, even a substantial reduction in tobacco retail outlets (ie, 95% reduction) may not suffice in reaching an endgame goal.<sup>33</sup>

The question of whether Finland should employ a conventional versus innovative strategy may not be the sole determinant of endgame success. Other elements include a government's explicit intent, a target date specified within two decades and a prevalence that is either low or rapidly declining.<sup>34</sup> Finland meets all three criteria in addition to having a unified tobacco control community. The strong opposition to harm reduction, which exemplifies stakeholders' unity and consensus on strategy, will likely dictate future policies aimed at curtailing exposure and access to alternative tobacco products. Evidence supporting this assertion can be traced to a working group's recent recommendation of reducing the passenger import of snus from 1000 grams to 100 grams.<sup>8</sup> It is likely that the Finnish government will remain unreceptive to a harm reduction strategy because the policymakers interviewed in this study argued that the nicotine-free goal is rooted in their negative experience with Swedish snus. Also, as perceived by stakeholders, the EU's TPD may not hinder Finnish policymakers from restricting exposure and access to alternative tobacco. Stakeholders mentioned that Finland is autonomous from the EU in formulating progressive policy, such as restrictions on the marketing of electronic cigarettes. In some cases, the Finnish government has successfully navigated EU policy, as evidenced by its ban on chewing tobacco and nasal snuff via Article 24 of the TPD.<sup>35</sup> A minority of stakeholders argued for an internal discussion on harm reduction, which has been proposed as part of an integrated endgame strategy.<sup>3</sup> Absent such discussion, it is unlikely that harm reduction will ever play a role in Finland's tobacco endgame.

The role of leadership has been cited as a critical element to the success of a tobacco endgame.<sup>4</sup> A few participants, who are largely responsible for Tobacco-Free Finland 2030, played instrumental roles in public health dating back to the North Karelia Project in 1972.<sup>36</sup> The seniority of these individuals bears resemblance to US Congress members who have advocated for tobacco regulations,<sup>37</sup> raising the spectre that the political champions may not be replaced by younger lawmakers in the coming decades. This concern is compounded by perceptions that the battle against tobacco is over, and that smokers are invisible to policymakers.<sup>29</sup> Finland's legislative successes and outstanding progress in tobacco control could pose a challenge for lawmakers who are complacent and feel that legislation has reached its limit. The complacency is furthered by the perception that most politicians, the public and media have supported strong tobacco regulations in recent years. But, this support does not necessarily yield the leadership required to achieve an endgame goal.

This study benefited from in-depth interviews with most of the key stakeholders in Tobacco-Free Finland 2030. The findings are likely representative of the small community of policymakers and tobacco control advocates in Finland. Yet, there is the possibility that some viewpoints may have been excluded due to our use of snowball sampling. The study was also limited by having conducted most interviews (31/32) prior to the release of the 2018 updated recommendations.<sup>8</sup> Despite the progressivity of the latest measures (eg, plain packaging), the updated recommendations continue to endorse a fairly conventional and incremental approach to ending tobacco use.

This study revealed stakeholders' broad confidence in reaching the goal of Finland's tobacco endgame, which suggests that future policy initiatives will reflect the current, conventional strategy. If the Finnish government chooses to continue this approach, as indicated from our interviews, then it should consider dedicating longer-term funding for tobacco control and greater coordination with the healthcare system (eg, nation's quitline). One might argue that support for the tobacco endgame, expressed by 80% of Finns polled in a recent survey,<sup>38</sup> negates the need for a mass media campaign. While the findings of this study cannot speak to this issue, the observed ambivalence about mass media highlights the need for greater discussion about prioritising a mass campaign versus a series of targeted campaigns. Such discussion

would likely benefit from the input of senior stakeholders who played key roles in prior campaigns and expressed strong views on preventing the "generational forgetting" of tobacco harms.

**Acknowledgements** We would like to thank the study participants for their insight on Tobacco-Free Finland 2030. We would also like to thank Terhi Molsa and the staff at the Fulbright Finland Foundation for their support and hospitality. Without them, this project would not have been possible. Lastly, we acknowledge the Editor-in-Chief, Ruth Malone, PhD, Elizabeth Smith, PhD and two other reviewers for their helpful suggestions in improving the clarity of the manuscript and interpretation of findings.

**Contributors** DT and AR developed the research questions and study methodology. AR provided contacts for the initial interviews. DT conducted the interviews and UL edited the transcripts for coding. DT, UL and JMK reviewed the interviews, developed the codebook and coded the transcripts. DT formulated themes from the transcripts and wrote most of the manuscript. UL, JMK and AR assisted with the editing of the manuscript.

**Funding** Research reported in this publication was supported by the Fulbright Finland Foundation and Tampere University.

**Disclaimer** The content is solely the responsibility of the authors.

**Competing interests** None declared.

**Patient consent for publication** Not required.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data sharing statement** Data are available upon reasonable request.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

#### ORCID iDs

David S Timberlake <http://orcid.org/0000-0002-4450-0862>

Jaana M Kinnunen <http://orcid.org/0000-0002-2772-7969>

#### REFERENCES

- Senthilingam M. Can Finland spark a tobacco-free world? *CNN* 2017.
- Ministry of Social Affairs and Health. *Roadmap to a tobacco-free Finland: action plan on tobacco control*. Helsinki, Finland, 2014.
- van der Eijk Y. Development of an integrated tobacco endgame strategy. *Tob Control* 2015;24:336–40.
- Malone RE. The race to a tobacco endgame. *Tob Control* 2016;25:607–8.
- Schwartz R, Chaiton M. *Evidence and the endgame: opportunities and challenges*. San Francisco, California: SRNT Annual Meeting, 2019.
- Thomson G, Wilson N, Blakely T, et al. Ending appreciable tobacco use in a nation: using a sinking lid on supply. *Tob Control* 2010;19:431–5.
- McDaniel PA, Smith EA, Malone RE. The tobacco endgame: a qualitative review and synthesis. *Tob Control* 2016;25:594–604.
- Ministry of Social Affairs and Health. Working group: Smoke-free Finland through better tobacco and nicotine policy, 2018. Available: [https://stm.fi/artikkelii/-asset\\_publisher/tyoryhma-tupakka-ja-nikotiini-politiikka-kehittamalla-suomi-savuttomaksi](https://stm.fi/artikkelii/-asset_publisher/tyoryhma-tupakka-ja-nikotiini-politiikka-kehittamalla-suomi-savuttomaksi) [Accessed 31 May 2018].
- Gravely S, Giovino GA, Craig L, et al. Implementation of key demand-reduction measures of the WHO framework convention on tobacco control and change in smoking prevalence in 126 countries: an association study. *Lancet Public Health* 2017;2:e166–74.
- Malone RE. Tobacco endgames: what they are and are not, issues for tobacco control strategic planning and a possible us scenario. *Tob Control* 2013;22 Suppl 1(suppl 1):i42–4.
- Pentala-Nikula O, Koskela T, Parikka S, et al. Kansallisen terveysterveys-, hyvinvointi JA palvelututkimus FinSoten perustulokset. (*FinSote survey - Basic results*) 2017.
- Levy DT, Blackman K, Currie LM, et al. SimSmokeFinn: how far can tobacco control policies move Finland toward tobacco-free 2040 goals? *Scand J Public Health* 2012;40:544–52.
- Joossens L, Raw M. *The tobacco control scale 2016 in Europe*. Belgium, Brussels: AoEC L, 2017.
- Hakkarainen P. Tobacco Road Finland - how did an accepted pleasure turn into an avoidable risk behaviour? *Soc Sci Med* 2013;98:253–9.
- Murto J, Kaikkonen R, Pentala-Nikula O, et al. *Basic results from regional health and wellbeing survey 2010-2016*. Helsinki, Finland: National Institute for Health and Welfare, 2017.

#### What this paper adds

- ▶ Finland has a long and successful past of enacting effective policy in tobacco control.
- ▶ No published study has qualitatively examined factors perceived to influence the outcome of Tobacco-Free Finland 2030.
- ▶ Stakeholders' broad confidence in reaching the goal of Finland's tobacco endgame suggests that future policy initiatives will reflect the current, conventional strategy.
- ▶ Stakeholders' strong consensus on Finland's nicotine-free goal lends to a united front; yet, some perceive the need for internal discussion of harm reduction.
- ▶ Incremental measures to achieve the endgame goal will need to be accompanied by better coordination between non-governmental organisations and the healthcare system.
- ▶ Key informants are ambivalent about the need for a mass media campaign, which should be discussed with input from senior stakeholders.

- 16 van der Deen FS, Wilson N, Cleghorn CL, *et al.* Impact of five tobacco endgame strategies on future smoking prevalence, population health and health system costs: two modelling studies to inform the tobacco endgame. *Tob Control* 2018;27:278–86.
- 17 Transcription Revolutionized. Available: <https://trint.com>
- 18 Barriball KL, While A. Collecting data using a semi-structured interview: a discussion paper. *J Adv Nurs* 1994;19:328–35.
- 19 Smith EA, McDaniel PA, Hiilamo H, *et al.* Policy coherence, integration, and proportionality in tobacco control: should tobacco sales be limited to government outlets? *J Public Health Policy* 2017;38:345–58.
- 20 Henkler F, Luch A. European tobacco product Directive: how to address characterizing flavors as a matter of attractiveness? *Arch Toxicol* 2015;89:1395–8.
- 21 National Institute for Health and Welfare (THL). The school health promotion study 2017. Basic education 8th and 9th grades, general upper secondary school, vocational upper secondary school. Available: [https://sampo.thl.fi/pivot/prod/fi/ktk/ktk1/summary\\_perustulokset?alue\\_0=87869&mittarit\\_0=200537&mittarit\\_1=200573&mittarit\\_2=199289&vuosi\\_2017\\_0=v2017#](https://sampo.thl.fi/pivot/prod/fi/ktk/ktk1/summary_perustulokset?alue_0=87869&mittarit_0=200537&mittarit_1=200573&mittarit_2=199289&vuosi_2017_0=v2017#) [Accessed 3 Jan 2019].
- 22 Gale NK, Heath G, Cameron E, *et al.* Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol* 2013;13.
- 23 Gallus S, Lugo A, Fernandez E, *et al.* Support for a tobacco endgame strategy in 18 European countries. *Prev Med* 2014;67:255–8.
- 24 Melkas T. Health in all policies as a priority in Finnish health policy: a case study on national health policy development. *Scand J Public Health* 2013;41(11 Suppl):3–28.
- 25 Berteletti F, King J, Burch J, *et al.* Campaign for a revised tobacco products Directive in the European Union: lessons learnt. *Tob Control* 2017;26:464–7.
- 26 Atlas.ti. *Qualitative data analysis*, 2002.
- 27 Vaismoradi M, Jones J, Turunen H, *et al.* Theme development in qualitative content analysis and thematic analysis. *J Nurs Educ Pract* 2016;6:100–10.
- 28 Mattila VM, Raisamo S, Pihlajamäki H, *et al.* Sports activity and the use of cigarettes and snus among young males in Finland in 1999–2010. *BMC Public Health* 2012;12.
- 29 Edwards R, Russell M, Thomson G, *et al.* Daring to DREAM: Reactions to tobacco endgame ideas among policy-makers, media and public health practitioners. *BMC Public Health* 2011;11.
- 30 Smith EA, McDaniel PA, Malone RE. Leadership perceptions of endgame strategies for tobacco control in California. *J Public Health Manag Pract* 2018. doi:10.1097/PHH.0000000000000791
- 31 Lencione I. *National Supervisory Authority for Welfare and Health (Valvira)*.
- 32 Henriksen L. The retail environment for tobacco: a barometer of progress towards the endgame. *Tob Control* 2015;24:e1–2.
- 33 Pearson AL, van der Deen FS, Wilson N, *et al.* Theoretical impacts of a range of major tobacco retail outlet reduction interventions: modelling results in a country with a smoke-free nation goal. *Tob Control* 2015;24:e32–8.
- 34 Thomson G, Edwards R, Wilson N, *et al.* What are the elements of the tobacco endgame? *Tob Control* 2012;21:293–5.
- 35 Andriukaitis V. *Commission implementing decision of 26.7.2016 concerning national provisions notified by Finland prohibiting the placing on the market of certain categories of smokeless tobacco products*. Brussels: European Commission, 2016.
- 36 Heloma A, Puska P. Tobacco control: from North Karelia to the national level. *Glob Heart* 2016;11:185–9.
- 37 Rabe BG. Political impediments to a tobacco endgame. *Tob Control* 2013;22 Suppl 1(suppl 1):i52–4.
- 38 Finland's Action on Smoking and Health. *Suomalaisista valtaosa kannattaa tupakatonta ja nikotiinitonta Suomea* [Majority of the Finns support tobacco-free and nicotine-free Finland], 2018. Available: <https://suomenash.fi/tiedotteet/2018/suomalaisista-valtaosa-kannattaa-tupakatonta-ja-nikotiinitonta-suomea/> [Accessed 27 Nov 2018].