

DIVERSION

Absinthe—is its history relevant for current public health?

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This paper briefly addresses the history of the social experience with absinthe in France during the 19th century and the beginning of the 20th. We draw on some important parallels of this history with that of smoking to demonstrate that public health threats in the form of (ill-)health related behaviour recur in different disguises, while the social causes if these threats are left to endure. Probably the most important of the parallels between absinthe and smoking is their association with social disadvantage. Nevertheless, it appears that it is not yet fully realized that tackling these threats requires an equity approach

Keywords Absinthe, tobacco, public health, social inequalities

Absinthe—its history and parallels with smoking

Absinthe is an emerald coloured liquor, with a distinctive bitter taste, and high concentrations of alcohol (~70%). In its traditional form, it is said to have some mild hallucinatory qualities, which cannot be found in any other liquor.^{1–3} It is often associated with bohemian artistic life during 19th century in France, with the life of painters and poets, and nowadays quite some reference is made to it in popular culture again. Absinthe currently, if anything else, is being associated with romance and mystique. Yet, the history of absinthe presents an interesting story for those who are interested in public health as well. Absinthe drinking in France was quite common in the 19th century, and the beginning of the 20th, until it was banned there in 1915. From the view of public health, absinthe drinking in this period should be seen in the broader context of alcohol use, and alcoholism, but public and political sentiments at the time singled out absinthe in particular in the polemic against the social problems related to alcoholism, while ignoring other beverages like wine, which was often more widely used than absinthe.⁴

It is this latter aspect of the public reaction against absinthe that is of interest to public health professionals. It shows how general norms and values changed within a time frame of several decades, from widespread acceptance and use of a specific substance, to political indignation leading up to a complete ban of the substance. Currently, most countries in the EU have lifted their ban on absinthe, although the amount of the ingredient that has been linked to its hallucinatory effects—thujone—that is allowed in absinthe production nowadays is under strict EU regulations. However, this article is concerned primarily with the history of absinthe and parallels of this history with that of tobacco.

Absinthe and tobacco before industrialization

Both the main ingredient of absinthe (wormwood) and tobacco have been known to mankind for their qualities for centuries. The oldest known reference to medical use of wormwood dates from about 1552 BC, in the Egyptian Ebers Papyrus.⁵ In the middle-ages, wormwood was known and used primarily because of its assumed medicinal qualities.⁵ A recipe for an alcoholic drink based on dried leaves of wormwood (absinthe) was developed in 1789 by Dr Ordinaire. He used it as treatment for illness, but this recipe later became the basis of the industrially produced absinthe, which commenced with the founding of the Pernod-fils distillery in 1798.

Widespread tobacco use in eastern North America, where the tobacco leaf is native to, dates back to at least 2000 years ago.⁶

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The oldest existing illustration of a smoker is a Mayan illustration of a smoking God.⁷ Accounts of the smoking of tobacco can be found in the manuscripts and journals of European explorers of the New World. Gradually, using tobacco in all kinds of forms (e.g. snuff, cigars, cigarettes) was introduced into Europe as well. Tobacco was introduced into France by 1556, in Portugal by 1558 and in Spain by 1559.⁸ But widespread smoking was greatly promoted after 1880, with the invention of a cigarette-rolling machine to replace the time consuming hand-rolling of cigarettes.

The diffusion of absinthe and of tobacco

With the transition from manual to industrial production of absinthe, in 1798 by the Pernod-fils distillery, it was introduced to a wider population. However, this initially primarily included the elite of France, including the idle rich. In retrospect, an editorial in the *Lancet* of 1868 stated it eloquently: '[...] absinthe was beginning to make a noise in Paris, by reason of its having become the drink of fashionable idlers, instead of being the vulgar luxury of peasants and labourers [...].'⁹ Only later did absinthe begin to change its social character, and more and more became the drink of choice of the lower social classes, and the penniless artists through whose work we can nowadays still sample its role in French society at that time (Absinthe figured in the paintings of among others Van Gogh, Manet and Degas. Poets like Rimbaud, Verlaine and Ernest Dowson drank absinthe and rhymed to its glory. Oscar Wilde said of absinthe: 'A glass of absinthe is as poetical as anything in the world. What difference is there between a glass of absinthe and a sunset?' Yet, in the words of the novelist Huysmans: 'Even when made less offensive by a trickle of sugar, absinthe still reeks of copper, and leaves on the palate the taste of a metal button slowly sucked.'). One of the causes of this change in the social pattern of absinthe use was a drop in the price of absinthe. Absinthe was relatively expensive until the grape alcohol that was traditionally used in the manufacturing process was replaced by alcohol from beets and grain, which made it much cheaper. Absinthe manufacturers turned to this other type of alcohol because phylloxera had plagued the French vineyards.⁴ Not only did absinthe get cheaper because of this; wine on the other hand got more expensive. A glass of absinthe could be bought for 15 centimes, which was about a third of the price of a loaf of bread.¹⁰ This happened in the early 1880s, and from then on the lower classes could afford their share of absinthe. By the end of the century, lower social classes were fully submerged in the habit of drinking absinthe. A paper in *The Economic Journal* singled out this habit as a major threat to wine consumption in France. 'Wine is no longer the one and only national French beverage, as for centuries it was wont to be. It has many rivals. The English have taught the Frenchman to drink tea; the Germans have taught him to drink beer. [...] For the present, indeed, these new habits are peculiar to the well-to-do classes, and have not yet penetrated to the tables of the million. But there wine is confronted by another and far more formidable rival, that is, alcohol in the shape of absinthe [...].'¹¹

The differential diffusion of absinthe across social classes in France corresponds with what has been observed for smoking almost a century later, as well as for other health-related behaviours (such as illegal drug use). Cigarette consumption in the Western world increased after the 1880s, with the invention of the Bonsack cigarette-rolling machine, together with mass marketing and the invention of safety matches.⁷ Worldwide the burden of tobacco-related disease is still rising.^{12,13} But in western countries, the distribution of smoking is increasingly becoming more concentrated among the lower socioeconomic groups.¹⁴⁻¹⁹ The social shift in smoking started around the time that the Surgeon General's Advisory Committee published their report on smoking and health in 1964. The relevance of this diffusion pattern for public health should be obvious: the differences in the diffusion of tobacco between socioeconomic groups play an important role in the causation of socioeconomic inequalities in health.^{20,21}

The diffusion of absinthe in France and the diffusion of tobacco in many developed countries are both grim examples of the relevancy of Rogers' diffusion of innovations theory for understanding the dynamics of socioeconomic inequalities in health.²² This theory describes the processes in which an innovation is disseminated over time among members of a social system. It recognizes that the spread of an innovation (from cars, to Internet, to tobacco, to absinthe...) is often socially stratified. The so-called 'early adopters' of an innovation are mostly found in the higher socioeconomic groups. In the case of absinthe, it were the 'fashionable idlers' who picked it up. In the case of smoking, it were doctors who ranked high among the early adopters. Widespread adoption in lower socioeconomic groups often occurs much later. In the case of tobacco use in many developed countries, such as in Western Europe, the prevalence in lower socioeconomic groups was rising by the time a decline was observed among higher socioeconomic groups.¹⁸

It is true that there may be multiple forces driving the distribution during different 'epidemics'. With regard to absinthe, the change in price that made absinthe more accessible to the lower classes was probably of utmost importance in its social distribution. Cigarettes on the other hand have rarely been so expensive that poor people in western societies could not afford them. Other candidate forces behind the social distribution of tobacco may be mass marketing and specific targeting of vulnerable groups by the tobacco industry.^{23,24} Nevertheless, as long as specific substances can be used to buffer the effects of (poverty-related) stress and become available to everyone, we believe that they should always be expected to lead to a disproportionate burden in the lower social classes. It is important to realize that we cannot understand the prevalence of health-related behaviour and their social distributions without seeing them as a consequence of social conditions. Warner (2001) wrote about the reaction of British physicians and parliament in the 18th century to the 'gin-craze': '[...] while gin was doubtless bad for a good many people, its effects were inevitably compounded by social conditions that neither the physicians nor their allies in parliament had any intention of tackling, were they malnutrition, overcrowding, poor sanitation, disease or simply poverty in general'.²⁵ The same can be said of the polemic against absinthe drinking by the lower classes in France and currently for some

reactions to smoking (for instance when price policies are not backed up by increased efforts to help people from lower social groups, who on average experience more difficulty with quitting, to tackle their addiction).

Reactions from the medical and political communities

It was with the changing social distribution that absinthe increasingly began to be regarded more and more as a social vice. Medical scientists were in the forefront of those who expressed worries about the consequences of widespread absinthe use. Doctors in France even debated on the existence of a specific disorder that was linked to the use of absinthe called absinthism.^{3,5,26,27} Heavy users were said to experience constant feelings of uneasiness, anxiety, giddiness and constant tingling in the ears and often hallucinations of sight and hearing.²⁷ The question that many medical specialists were interested in was whether or not absinthe had any special effect on health other than the effect of alcohol itself which would indicate the existence of a specific syndrome, distinct from alcoholism. In order to demonstrate the existence of this syndrome, Dr Valentin Magnan, a physician to the Ste Anne Asylum in Paris conducted an experiment, where he had a dog ingest oil of wormwood. He noted that the effects of this essence of absinthe were qualitatively different from the effects observed when a dog was submitted to a dose of alcohol only. The doctor likened the effects of the absinthe essence in large doses to epileptic attacks: 'the animal loses consciousness, falls, and stiffens in the tonic convulsions which form the first stage of the fit. [...] To the tonic convulsions succeed, after the lapse of a few seconds, clonic convulsions, with snapping of the jaws, foam (sometimes bloody) on the lips, and biting of the tongue; and one sees the evacuation of urine and faecal matters, and even of semen, occur in some cases'.²⁸ Magnan published his findings in the *Lancet* in 1874.

The worries of doctors and psychiatrists gradually spread to the political community, where absinthe drinking and absinthe advertising (Figure 1) was attacked vehemently by some of its members (even though other politicians were more indifferent with regard to the status of absinthe, and others rose to its defence). Politicians worried that the French race was degenerating because of its fondness for the green liquor. Degeneration theory at that time was popular (Valentin Magnan was one of its proponents²⁹) and it was believed that people who suffered from physical and mental symptoms because of overconsumption of absinthe would pass on these defects to their progeny. Thus, it was believed that 'absintheurs' would not only endanger their own health, but also that of others, and more importantly, that of the whole nation. These concerns should be understood against the background of animosity of the French with the Germans at the time. The Franco-Prussian war of 1870–71 developed dramatically for the French and ended with a humiliating defeat, severely wounding French pride. And this was not forgotten with the dawn of a new century, when Franco-German relations were tense. The French race, so it seemed, was degenerating, and if no measures were taken, the French would have to bow again to the 'beer-bred Teuton'.³⁰



Figure 1 Absinthe advertisement poster

Similar worries with regard to tobacco's effects on the public's health surfaced during Nazi rule in Germany.^{31,32} The German pre-occupation with tobacco in the 1930s and 1940s has been described before. A lot of efforts were put into anti-tobacco campaigning and into scientific research on tobacco epidemiology. Degeneration and eugenics theory were still quite influential,³³ and it was the time of the Germans to be concerned about a threat to the overall health of the race, and smoking was thought to pose a significant threat.

Only recently have medical researchers and policy makers again pursued the strategy of laying blame at tobacco companies' doorsteps for damaging national health, i.e. the health of people who have not been smokers themselves. As was true with the case against absinthe, the medical and political communities currently are stressing the deleterious effects of smoking on people's health that in fact is brought about by the habits of others [in the case of smoking through environmental tobacco smoke (ETS), in the case of absinthe through heredity]. Research demonstrating the health damaging effect of ETS has been the pillar on which clean indoor air legislation is built.³⁴

Political and economic power of absinthe manufacturers and tobacco companies

It was with the industrialization that the production of absinthe and tobacco led large masses to become dependent users. Industrialization not only improved production methods so that huge quantities could be manufactured in less time, it led to important shifts in the command of resources such as wealth and political power. It made absinthe manufacturers and tobacco companies major players in the national—and in the case of tobacco: global—economy. Interestingly, this process worked out differently for absinthe manufacturers on the one hand, and tobacco companies on the other. Absinthe manufacturers found themselves beset not only by doctors and politicians, but also by the powerful wine industry, which felt threatened by absinthe's success. The wine industry had a much longer national tradition than did absinthe. Furthermore, wine generally was not regarded as being among the dangers of 'alcohol', which in France at that time was taken to mean spirits, and therefore was not a target of the medical case as absinthe was.

Tobacco companies never had such a formidable rival (other than competition amongst themselves) and they seem to have access to substantial resources to battle against medical research and legislation. Just how powerful the tobacco industry has become is being brought under the intention of researchers through investigations of internal documents of tobacco companies like Philip Morris, RJ Reynolds and British American Tobacco. It has now become quite clear that these companies developed strategies to influence legislation at high political levels,^{35,36} to subvert research on the health effects of tobacco and ETS,^{37–40} and to target specific vulnerable groups in society through marketing campaigns.^{23,24}

The ban on absinthe

In the end, absinthe manufacturers could not parry the torrents of negative attention given to absinthe by politicians, the medical community, the media, the wine industry and the blue cross. Absinthe was constantly and continuously being associated with madness, suicide, criminal behaviour and national degeneration. One particular affair illustrates the sentiment that prevailed among many at the beginning of the 20th century. A Swiss peasant, Jean Lanfray, was found one morning lying on top of the dead body of his daughter in his yard, lying asleep. The day before he had killed his family, his pregnant wife and two daughters, with his old army rifle, but he had no recollection of doing it when he was taken to see their corpses by the police. When the police investigation showed that Lanfray had drunk two glasses of absinthe, the murders quickly became known as the 'absinthe murders' (even though Lanfray also had several glasses of wine, a crème de menthe and brandy).³⁰ Finally, by 1908, following the Lanfray-affair, Switzerland put the ban on absinthe. France followed in 1915, during World War I.

Absinthe today

Silence has surrounded absinthe for almost a century, after it was banned. Nowadays it seems to be coming back in style, while most countries in the EU have lifted the ban on absinthe again. Absinthe figured in a number of recent popular Hollywood movies; for instance 'From Hell' (2001), starring Johnny Depp as the opium–laudanum–absinthe-addicted detective who is investigating the Jack the Ripper murders in London; 'Moulin Rouge' (2001) a movie celebrating the bohemian culture of 19th century France, when absinthe (and the Moulin) had its heyday; and 'Murder by numbers' (2002), in which two brilliant but bored high school students try to commit the perfect murder. One of the students is seen reading Rimbaud's poem 'The Drunken Boat' (In the poem, the drunken boat stands for the drunken body (or mind), which travels on various imaginary fluids. The states of intoxication of the narrator change as the fluids change. The intoxication that is associated with the 'green water' is deeper than that due to the wine.⁴¹) and drinking absinthe.

With the return of absinthe, worries have been expressed about its resurgence as a popular drug through opportunities of purchasing it through the Internet.⁴² Some have argued to put absinthe under public health hazard on account of the active ingredients in it, and of its high grade of alcohol.⁴³ However, such reactions to a recurring use of absinthe from the scientific community have been few. Yet it is now again fairly easy to obtain a bottle in most countries, either through the Internet, or in bars and liquor stores. What then is the difference between now and then?

The absinthe that is currently sold is not the same as the absinthe that people drank before it was banned, because of current restrictions in the amount of thujone (no more than 35 mg/kg) that beverages can contain according to EU laws.⁴⁴ Thujone is a neurotoxin and an active ingredient in wormwood oil,⁴⁵ which is used in the manufacturing process of absinthe. Thujone has a blocking effect on GABA_A neurotransmitter receptors in the central nervous system, which are involved in decreasing anxiety (in contrast to thujone, ethanol/alcohol and benzodiazepines facilitate binding to these receptors, leading to decreased levels of anxiety). Therefore, the present-day absinthe is arguably a more innocent substance than the absinthe of old (although a concentration of about 70% of alcohol is staggering!), which had much higher concentrations of thujone (sometimes about 25 times as much⁴⁵), and consequently served as a stimulant (because of the thujone) and a relaxant (because of the alcohol) at the same time. However, the negative effect of absinthe use as it was perceived by French society by the time it was banned was primarily determined by its social distribution and by its relation with poverty. Besides, the negative image of absinthe as a cause of grave mental illness and suicide may have been based more on the polemic of doctors, writers and politicians, than on sound empirical research.⁴⁶

It seems that the worries with regard to absinthe that have been uttered at present are dwarfed by the worries that it elicited in the late-19th and early-20th century in France (Interested readers are referred to the following books: 'Absinthe; history in a bottle', by Barnaby Conrad, and 'The book of absinthe; a cultural history' by Phil Baker, or to

www.oxygenee.com for more elaborate descriptions of the history of absinthe.). Maybe, our minds are just more occupied by present-day public health problems, such as those surrounding tobacco.

Is there something to be learned from the absinthe case?

What we can learn from the example of absinthe in France (and by later experiences with smoking), is that social inequalities in health as a result of inequalities in health-related behaviours—especially substance use—should be prevented when epidemics of such behaviours are identified in their early phases, before they have become fully diffused into the lower social strata. With regard to smoking in many Western European countries we have already missed the boat. But in other countries, a lot of socioeconomic inequalities in smoking, and hence in smoking-related ill health, can still be prevented!²⁰ Also, applying an equity approach in reaction to the obesity epidemic in western countries may prevent increasing inequalities in obesity related ill health in the future.

A related lesson that can be drawn from the absinthe experience is that once such behaviours become fully entrenched in our culture and economy, they become increasingly unlikely to be tackled by short-term, decentralized, approaches aimed at downstream factors. It took massive effort before France was ready to put the ban on absinthe and for this it required the 'help' of the powerful wine industry, the threat of war (absinthe was banned during World War I) in combination with the fear of degeneration of the population, and several decennia of efforts to promote anti-absinthe attitudes and norms. Thus, the ban was as much a result of complex social and political changes as it was the result of targeted efforts by politicians and doctors. Besides, as long as no attention is paid to the underlying stress of being at the bottom of the social hierarchy such apparent successes are likely to be offset by increases in other compensating behaviours that may be equally bad for people's health.

We also want to stress that public health efforts geared towards tobacco use have improved in important respects as compared with similar efforts in the absinthe era. Some of the weapons that were vigorously employed in the anti-absinthe movement in France as well as in the anti-tobacco movement in Nazi Germany were fear appeals and anti-absinthe and anti-tobacco advertising. Examples of anti-absinthe advertising were posters of skulls shouting: 'Absinthe it's death!' (Figure 2), and posters with a bottle of absinthe stating: 'Alcohol, that's the enemy!' (Figure 3). Such forms of advertising were forwarded by the blue cross, the French temperance league movement. It is difficult to assess now what effect these campaigns of the temperance league really had; but we should probably see these anti-absinthe advertisements as being part of a larger, national process of raising awareness of the dangers that were thought to go hand in hand with widespread absinthe use, and promoting more negative social norms against it. Such fear appeals have also been used presently in anti-smoking messages, most notably in the Canadian experience with



Figure 2 Absinthe, it's death!



Figure 3 Alcohol! Behold the enemy

shocking colour pictures on cigarette packages.⁴⁷ But these have been employed in tandem with successful efforts to *inform* the public about the deleterious effects of smoking,^{48,49} and, in reaction to insights from the psychological literature,⁵⁰ are also accompanied by messages about where to get help with quitting smoking. This indicates a more humane approach toward improving public health.

On the other hand, the effectiveness of such approaches have been questioned. And it can be considered surprising that we do not have enough convincing empirical evidence about their effectiveness, even though such types of measures have been employed for decades—at least since the absinthe era. On the contrary, Proctor³² indicates that the prevalence of cigarette consumption during Nazi rule kept rising, despite heavy use of anti-tobacco advertising and messages on packages, indicating

that at that time they did not have any positive effect on reducing the number of smokers at all. Such measures are nonetheless being advocated as being among the main pillars of the tobacco control effort.

Presently, the successes in tobacco control are attributed to the comprehensive approach combining anti-tobacco health education campaigns, personalized help aimed at smoking cessation, as well as rules and regulations on smoking bans and tobacco taxation.⁵¹ A comprehensive set of measures and social changes has eventually resulted in the reductions in absinthe use, and such an approach is now also advocated to fight the present day obesity epidemic.⁵²

Yet, it apparently has not been fully realized that an equity approach is necessary in efforts to reduce smoking, judging from the lack of information about interventions that can help us reduce smoking in lower socioeconomic groups specifically,^{53,54} even though we should have been aware of the continuous link between poverty and social disadvantage with public health threats. This can be gathered indirectly too from the recent green paper of the European Commission on policy options related to making Europe 'tobacco free'. The subsection on estimated effects of proposed policy on social equity just contains a very general statement that '[...] an action on smoke-free environments might be expected to bring the biggest benefits to the most deprived groups in society'.³⁴ Furthermore, while the whole 'green paper' is thoroughly referenced throughout, there is no reference to be found in the subsection on social equity. Attempts to close this gap in the evidence base are among the first steps that should be taken by public health researchers. Not only because these can help us

reduce social inequalities in smoking in the near future, but also because they might bear wider relevance, and might be extended to other current (the obesity epidemic) and future socially patterned threats to public health.

Thus, current public health officials and researchers, where possible should focus their attention on preventing the rise of social inequalities in smoking and in obesity, and they should put more emphasis on taking an equity approach in interventions where social inequalities have already arisen. It should be realized that interventions aimed primarily at the proximate will not have lasting public health benefits in the long run, because these do not target underlying social causes. Research can still be much better geared towards providing policy makers with the necessary tools for these purposes, e.g. by rigorous evaluation of measures that currently constitute an important share of policies (such as health-warnings and graphic images on tobacco packages) and by estimation of the effects of designed and implemented intervention studies and policies on different social groups.

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KEY MESSAGES

- Major threats to public health in the form of health-related behaviour, such as absinthe and tobacco use, show similar patterns of diffusion across populations and links with social disadvantage.
- Taking notice of these recurring patterns may help public health officials and researchers to react more quickly and more efficiently to new public health threats in the form of health-related behaviour.
- It seems that similar public health threats recur in different disguises, while the social causes of these threats are left to endure.

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