

The case for a smoker's license.

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Abstract

Pharmaceuticals, which are designed to save lives and promote health, require a "temporary license" in the form of a prescription for users to access limited quantities. By contrast, tobacco will cause the death of an estimated one billion people this century, but access to tobacco products is virtually unrestricted. This paper sets out the case for introducing a smoker's smart card license designed to limit access. Key elements involve smokers setting daily limits, financial incentives for permanent license surrender and a test of health risk knowledge for commencing smokers. Six benefits of the scheme are explained and nine potential objections addressed.

Tobacco is a commodity where prolonged use causes the death of about half its users [1]. During this century, a billion people are predicted to die from tobacco caused disease[2]. In particular, the cigarette is an exceptionally dangerous product. No other consumed product or human activity remotely causes a comparable number of annual deaths.

The history of tobacco control has seen the introduction of policies initially considered radical, but which rapidly came to be considered normal[3] and essential to the goals of reducing use and the burden of disease that tobacco causes. No other consumer product is subject to total advertising bans. None are required to be sold in plain packaging, as will be the case in Australia from December 2012[4]. Again uniquely, 47 nations now require large graphic warnings on tobacco packaging [5]. Smokefree public transport, workplaces, restaurants, bars, and stadiums are now the rule rather than the exception in an increasingly large number of nations. The legally binding World Health Organisation's Framework Convention on Tobacco Control which requires such measures has been ratified by 174 nations [6].

Despite these developments, the sale of tobacco and cigarettes is subject to trivial controls compared with other dangerous products that threaten both public or personal safety. In this paper, I outline a proposal for a major new development with potential to reduce tobacco use: the tobacco user's license, and consider its likely benefits and the main objections.

Tobacco vs pharmaceuticals access Access to firearms, explosives and dangerous chemicals is often heavily restricted for both personal and public safety reasons, but the most instructive comparison with the way that tobacco products are sold is with the way that governments regulate the sale of pharmaceutical drugs. Those known to be benign with little potential for harm or which are unlikely to create dependency in users, tend to be freely available as over-the-counter products in pharmacies and increasingly, in supermarkets and convenience stores. Mild analgesics, cough and cold remedies and bronchodilators are good examples.

However pharmaceuticals likely to cause health problems if used incorrectly, for too long or which require users to be monitored so the drug or dosage can be modified, are sold to patients by registered pharmacists to those who have been issued with prescriptions issued by medical practitioners and increasingly, nurses [7].

Prescriptions are “temporary licenses” Consider the hundreds of millions around the world living with strong pain and requiring stronger analgesia than available over-the-counter; women wanting oral contraceptives; or those with hypertension. To obtain their drugs, such people must attend a doctor who will have typically had a minimum of 4-6 years university training plus postgraduate continuing education; pay sometimes significant money for the consultation; and if assessed as needing their drugs, must then visit a pharmacist to obtain them. There, they will be required to again pay an often substantial price to receive a limited supply of the drug, sometimes with provision for several repeats. But after a period, the users will be required to return to a prescribing doctor should they need to continue using.

While prescriptions are strictly speaking a prescriber’s note of authority to a pharmacist to dispense restricted drugs to a named individual, the prescription system is in effect a system of temporary licensing to use restricted substances. Travelers carrying restricted drugs across borders can be required to show that they have a “license” to be in possession of some drugs. It is a criminal offence to supply prescription drugs to those without a prescription and those doing so can face pharmacy or medical deregistration, fines and possibly imprisonment in serious cases.

This is how nearly all nations regulate drugs designed to ease pain, reduce symptoms, prevent disease and prolong life. It is seen as a sensible, long standing system designed to prevent misuse of drugs and to better ensure that access to such drugs is supervised in the interest of patient health.

By contrast, tobacco products can be sold by any retailer. Mixed businesses, supermarkets, newsagents, petrol stations, kiosks, barbers, hotels and vending machines are examples of the nearly ubiquitous tobacco retailing environment. Unlike prescribed pharmaceuticals, smokers can buy unlimited quantities of tobacco. Many nations outlaw sales to minors, but prosecutions are rare and so sales to children are common. In contrast to the way we allow access to life-saving and health-enhancing pharmaceuticals, this is how we regulate access to a product that

kills half of its long term users. *Prima facie*, there would seem to be a case for redressing this inconsistency.

The tobacco user's license

I will now describe an alternative form of access regulation – the smoker's license - that merits serious consideration as a major platform in the tobacco control endgame now being played out in nations with advanced records of reducing smoking. Earlier, less elaborated accounts have been described in 2005 [9], and by LeGrande et al in 2007[10] and 2009[11].

Smart card technology All licensed smokers would be required to have a smart swipecard [12]. This would be required to transact any purchase from a licensed tobacco retailer. No stock could be sold that was not linked via the in-store scanner to a tobacco user's license. Retailers could not sell to anyone without a card, because there would need to be perfect reconciliation between tobacco stock supplied by wholesalers to retailers and that sold to licensed smokers. Penalties for unreconciled sales would be severe, with threat of loss of retail license, as now applies with pharmacists supplying restricted drugs anyone without a prescription.

Application for a license could be made on-line or at authorized tobacconists, with supported data-linkable, proof-of-age cross-referencing (passport, driver's license, birth certificate) required to validate identity. The licensing authority would be able to validate these identities via data linkage.

Pre-commitment to a maximum daily consumption The smartcard license would be encoded with a maximum purchase limit selected by the licensee at the time license application. There could be three grades of license: 1-10 cigarettes per day (max.70 per week), 11-20 (max. 140 per week), and 21-50 (max. 350 per week). Loose tobacco and cigar equivalents could be calculated. A smoker wanting to purchase a new pack or supply of loose tobacco would request their brand and swipe their license in the smartcard terminal. With the speed that credit card and EFTPOS terminals now approve or deny a transaction, the terminal would instantly confirm that the licensee was either able to purchase a new supply or that the pre-selected limit had been reached, in which case the terminal would display the earliest date when a new supply could be purchased. Limits would be calculated over a 14 day period.

The more cigarettes a licensee opted for, the higher the license fee would be. Some 90% of smokers regret having started smoking [13] and 40% make a quit attempt each year [14], most failing. Many smokers are known to welcome and support tobacco control policies like tax rises, smoking restrictions and graphic warnings because they believe such measures will assist them to quit or reduce their consumption [15,16]. It is likely that some smokers may use the opportunity to set a lower daily limit via a licensing scheme than they might normally smoke in an effort to reduce their usual consumption. Smokers could also adjust their consumption limit upwards by going on-line and paying the extra licensing fee, in the way

consumers are used to doing with changing their internet download limits. At annual license renewal time they could also elect to change their limit.

Maximum daily limit. There would be an upper limit of 50 cigarettes per day, averaged across 14 days. Very few smokers consume more than this. To allow purchasers to buy more than 50 may encourage some to obtain a license with the intent of on-selling tobacco to unlicensed smokers. A limit of 50 cigarettes is unlikely to attract such enterprise as it would not provide the on-seller with substantial profit.

Licensed smokers could purchase their pre-committed quota as infrequently as once every two weeks, to avoid the imposition of any need to visit retailers more often.

Cost of license fee The license fee would neither be trivial nor astronomical. It would be set at a sufficient level to give smokers some pause in deciding whether to obtain or renew their license. Market research could be used to determine the appropriate level. For the sake of illustration, assume that the lowest level (up to 10 cigarettes per day) would be \$100 a year (just 27c a day) and the highest \$200 (54c a day). This could be paid in quarterly installments or in full.

Periodic renewal The license would need to be renewed each year. As with initial application, this could be done on-line, just as many annual or periodic payments are made, or at authorized tobacconists. The status of the renewal would be recognized by smart card terminals in every retail outlet, as would any change in the smoker-determined weekly limit.

Incentive to surrender license. All license fees paid during a smoker's licensed smoking history would be fully refundable, with compound interest, as an incentive to quit. Surrender of the license would be permanent and reapplication not permitted, and would involve a cooling off period (see below). If a license fee was \$100 for under 10 cigarettes per day, someone commencing at 18 could collect \$1000 plus interest if deciding to quit a decade later. Consideration should be given to ending this provision in middle age (say 40 years) as a large incentive to encourage quitting. The 50 year follow-up of the British doctor's cohort study showed that "those who stopped before middle age ... had a pattern of survival similar to that of men who had never smoked"[1]. This information could be heavily publicized to promote permanent license surrender at the start of middle age. Those who at the start of the scheme had obtained their first license when aged over 40 could have this extended to 50; 50 to 60 and so on.

Existing, adult smokers The government would announce the scheme a year in advance of its implementation and encourage early application with "early bird" discounts. Consumers are used to such dates with for example, the introduction of mandatory vehicle highway toll windscreen transponders. Anyone already aged 18 or more who wanted a smoker's license could be thus "grandfathered" and allowed to buy a license if they chose to do so.

New smokers to pass a test of risk knowledge A person turning 18 who wished to henceforth legally purchase tobacco could apply for a license. However, unlike the commencing cohort of adult smokers at the start of the scheme, newly licensed smokers would have to pass a knowledge of risk test (see examples in the box). Applicants for their first driving license must pass knowledge tests. Sometimes these are elementary, but can also involve learning detailed information about breaking distances at different speeds and the meaning of a large variety of road signage. To better ensure that new smokers were making an informed choice, something the tobacco industry has long declared that it believes applies to smokers' decisions ("The tobacco industry believes that people who smoke do so fully informed of the reported health risks of smoking") [17], new applicants would be required to demonstrate a level of knowledge that might encompass issues like:

- Probabilities of various diseases in smokers vs non-smokers
- The impact on day-to-day functioning of diseases like emphysema and heart disease
- Average number of years lost by continuing smokers
- Financial cost of smoking to an individual across increasing durations of smoking
- Chemical additives used in cigarette manufacture

Applicants would be given on-line educational material of direct relevance to the test, and a large, growing question bank would be developed based on this material, with random on-screen questions being given to each applicant. Such a test would disadvantage applicants who had intellectual impairment or very low IQ (see below). However, the same concerns apply to any knowledge test such as for a driving license or requirement to demonstrate understanding of a contract, lease or other legal transaction.

The tobacco industry might well find the legal implications of such "informed consent to smoke" attractive. Any smoker seeking legal redress later from a tobacco company for having been misled, would have passed the test, making such a line of argument difficult to sustain.

Box: Examples of multiple choice questions that might be asked of new applicants for a smoking license

- If 100 people were diagnosed with lung cancer, how many would we expect to be alive in 5 years time?
- What fraction of smokers do you believe will die early because of their smoking?
- On average, how much longer do non-smokers live than people who have smoked for a long time?
- A long term smoker who dies from a disease caused by his or her smoking can expect to lose how many years off normal life expectancy?
- If a person smokes an average of less than 10 cigarettes a day during their lifetime, their chances of dying from a smoking caused disease compared to a 20+ a day smoker are?[list options]:
- How many times would a typical 20 a day smoker inhale smoke deep into their lungs between the ages of 20 and 40?
- If 100 people try to stop smoking, regardless of which method they use, on average how many do you think will not be smoking 12 months later?
- How many known carcinogens (chemicals which are known to cause cancer) are there in cigarette smoke?

Gradual increase in the minimum age for purchase. A Singaporean group[18] has proposed that commencing with the birth cohort born in 2000, from the year 2018, anyone turning 18 would be able unable to buy tobacco thereafter. The idea here is that current smokers born before 2000 should be the last generation of smokers. However, libertarian objections that adults should be free to take informed risks, as with smoking, may render such a plan politically unacceptable.

However, a possibly less objectionable variation on this idea is that from a given year, the legal age for smoking would be raised each year by one year. As very few smokers commence experimenting with smoking after 23 years[19], the expectation is that the incremental, progressive rise in the legal smoking commencement age would effectively see very few people take up smoking when the minimum legal age reached around 23 years. Some would object that those aged 18 and over are adults who can vote, be conscripted for wars and so on, and increasing the minimum age for smoking beyond 18 is therefore unreasonable. However, precedents exist for varying age limit restrictions (eg: legal drinking age of 21 in parts of USA; legal refusal of car hire to young and very old drivers; age-related insurance premium differences).

What might tobacco licensing achieve?

There are likely to be six advantages in introducing a tobacco user's license.

1. **Underlining that tobacco is no ordinary commodity** The requirement for a license would send an powerful, symbolic message to all smokers and potential smokers that tobacco was no ordinary commodity, akin to grocery items, confectionary or any product on unrestricted sale. It would mark

tobacco as a product uniquely deserving of such regulation and thereby invite reflection among smokers on why this exceptional policy had been introduced. This may diminish self-exempting views that smoking is just another, unexceptional risk in “life’s jungle.”[20]

2. **Stimulating reduced smoking** As discussed above, smokers would pre-commit to one of three maximum daily levels, and some may use this as a pretext to limit their own access by obtaining a lower maximum than they currently smoked. Cutting down before quitting is a common approach to eventual cessation [21].
3. **Discouraging increased smoking** The pre-set daily limit would preclude smokers easily smoking more than planned unless they borrowed cigarettes from other licensed smokers. As these would be valued by all smokers, such borrowing would be marginal. In this way, the limit would act as a barrier to unplanned “binge” smoking that occurs now, particularly when alcohol is involved [22].
4. **Stimulating cessation** There is some evidence that financial reward can stimulate cessation[23]. The incentive to permanently surrender one’s license and obtain a cumulative refund of all license fees paid -- with interest -- may promote cessation, particularly at the commencement of middle age, after which the reimbursement offer would cease.
5. **A “final straw”** Some smokers intending to quit might use the introduction of the license as “final straw” to trigger cessation. They may not like the idea of having to pay up to \$200 a year, or the thought that they would henceforth be a “card carrying” smoker.
6. **A database of all smokers** With rapidly increasing access to the internet, most smokers would probably elect to transact their licensing on-line, thereby providing an email address. This could be used by governments as a way of cheaply and efficiently communicating new and potentially cessation-motivating information to all smokers, with tailored messages to different age groups. Every time a sale was transacted, data of exquisite specificity would be added to the national database. This would enable both immediate and longitudinal national, regional and local monitoring of tobacco sales in ways that could provide invaluable information about smoker responsiveness to tobacco control initiatives as well as industry price discounting, and new brand launches. Such information would be of great assistance to policy and program planners wanting to maximise cessation.

Potential objections to the scheme

1. We should regulate the industry, not smokers

Some may argue that a regulatory strategy focused on smokers rather than on the industry is inappropriate, and that regulation should be directed “upstream” at the industry and its products. However, this is a false dichotomy because user licensing is not being proposed as an alternative to industry or product regulation but as complementary to these. A core argument for the licensing of tobacco retailers has always been that removal of the license (and so the right to sell) could be used as a strong deterrent to selling to minors. This has always been a very poorly rated

tobacco control strategy because it relies on the direct observation of sales to minors by regulatory agents, and this is often difficult and very time-consuming. License cancellations and prosecutions are therefore very rare and as a result a very weak disincentive to selling to minors. The instant swipecard license verification ensures that retailers *only* sell to licensed adult smokers. Also, many platforms of industry and product regulation directly affect smokers (price, packaging, pack warnings, duty free bans, ingredient regulation) so the criticism that an explicitly user-focused form of regulation is somehow problematic seems misplaced.

2. The problem of relapse. Most smokers experience relapse when trying to quit. Would not this create problems for those surrendering their license, as surrender would be irrevocable? License holders wanting to quit would be of course under no obligation to purchase their pre-committed allowance. So when deciding to quit, they would simply stop buying their allocation while still being licensed to do so. Moreover, application for license surrender would incorporate a mandatory six month “cooling off” period where smokers would change their mind and cancel their revocation application if they relapsed. Some smokers relapse far beyond six months but it may be that ready access to unlimited supplies of cigarettes is an important contributory factor here, and that inability to purchase legally would reduce later relapse. Those who did relapse after license expiry could be encouraged to use nicotine replacement therapy.

3. Cost of administration The costs of the scheme would include administrative staff costs to process license applications, renewals and license surrender refunds; publicity costs to inform smokers about the scheme; and retail swipecard terminals. The cost of the scheme would be drawn from the licensing fees, with retailers paying all costs associated with the swipecard terminals. Lost cards would incur a replacement charge.

The accumulated fees would be in theory all (eventually) refundable to smokers wishing to surrender their licenses, so how could the administration costs be drawn from those fees which would all be needed to meet surrender liabilities? Not all smokers would surrender their license by the final age limit specified for surrender and refund (40 years). This would leave a large pool of funds that could be used to administer the scheme.

4. Some impoverished smokers could not afford a license As smoking prevalence diminishes, an increasing proportion of smokers are of low socio-economic status, on low incomes and unemployment or disability benefits. Some in this group may find it hard to pay for the license. This argument has often been used by the tobacco industry to oppose tobacco tax rises. But in advancing this argument, advocates for keeping tobacco tax low perversely seek to “help” poor smokers by keeping tobacco affordable, which encourages use. Poor smokers, as a group, are known to be more responsive to price than those on higher incomes [24], in terms of both quitting and reducing use, so the additional license cost may add to this effect.

5. Dysfunctional smokers Some young smokers with profound mental health or intellectual disabilities would be unable to pass the licensing test. Such people would be likely to be under care or on a disability pension. Special provision could be made for another adult, carer or institutional representative to obtain a license on their behalf, after consideration of their circumstances.

6. Would a licensing scheme increase illicit trade? Obtaining a license would not be onerous nor very expensive (relative to the cost of smoking itself), so there would be few reasons why most current smokers would not obtain one. A license would enable easy access to tobacco purchasing, whereas those without a license would need to take trouble to find illicit sources of supply. Some argue that the illicit drug trade flourishes in spite of such drugs needing to be sourced illegally from criminals. The implication here is that many smokers are similarly willing to transact with criminals. However, this analogy is badly flawed because while illicit drugs can only be sourced illegally, tobacco would still be readily obtainable openly and legally. It is therefore difficult to foresee reasons why significant proportions of smokers would elect to have to source their tobacco “underground”, dealing with criminals simply because of an easily obtained licensing requirement.

The main explanations for high availability demand for illicit tobacco are the cheaper price at which illicit tobacco sells, the ease of cross border traffic in some nations, and the general level of corruption in which much illicit trade can flourish[25]. None of these factors would in any way be influenced by a user licensing system.

7. Further stigmatization of smokers? Every current smoker’s experience has been that tobacco products have always been sold alongside other unrestricted commodities. This will have powerfully conditioned the view that cigarettes are “ordinary” commodities and that a proposal like this is self-evidently draconian. Some smokers may strongly resent the requirement that they would henceforth need to be licensed to purchase a commodity they had previously purchased openly. They may feel that they are being treated like registered addicts, and that the license epitomizes their stigmatization as smokers[26,27]. Some light smokers who have deliberately regulated their smoking may feel especially resentful.

Such understandable reactions reflect many decades of smoking being considered “normal”. Open sale of tobacco is consonant with the lack of understanding of tobacco’s harmfulness when cigarettes became a mass distributed and advertised commodity at the start of the twentieth century. However, today’s smokers have all experienced a range of profound changes in the way that smoking and cigarettes are socially perceived and regulated. Having to go outside to smoke in now virtually any circumstance, having disturbing graphic warnings on packs and regularly being exposed to public awareness campaigns resting on negative sub-texts about the undesirability of smoking have all coalesced to drive smoking lower and to make most smokers wish they had not started and make quit attempts. It would be almost unimaginable for a smoker today to express the hope that their own children would grow up to smoke as well.

The requirement to have a prescription (a temporary license) to legally obtain pharmaceuticals is never decried as stigmatizing or insulting. Those responsible for planning the introduction of smokers' licenses could amplify this analogy.

8. Licensing is unprecedented and would “sanction” smoking Many nations register methadone users and some allow registered heroin dependent people access to heroin (Switzerland, Netherlands). In California, Canada and the Netherlands licenses are issued for the medicinal use of cannabis. The Northern Territory government in Australia has introduced a photo-ID system integrated with limits on the purchasing of bulk, cheap wine and large single purchase amounts of alcohol [28]. In Australia, the OTC purchase of cold relief medicines containing pseudoephedrine involves one's identification and address being recorded in a national database, as a means to limit supply to reduce diversion into illicit methamphetamine manufacture [29]. In all of these examples, different forms and levels of drug user licensing have been introduced as a means of both allowing limited access to different drugs while controlling wider use. Tobacco, which harms far more people than all those drugs combined, currently has no form of user regulation.

9. A slippery slope? Opponents of the idea would be quick to suggest that Orwellian social engineers would soon be calling for licenses to drink alcohol and to eat junk food or engage in any “risky” activity. This argument rests on poor public understanding of the magnitude of the risks of smoking relative to other cumulative everyday risks to health. Other than religious-based restrictions on alcohol sales in some Islamic nations, no other product is subject to the restrictions routinely applied to tobacco marketing and packaging in many nations today. In Australia, the first restrictions on tobacco advertising commenced in 1976 – 36 years ago. Since then, similar restrictions have not been implemented for any other consumer good. Any slope would appear to be decidedly unslippery.

Conclusion

The current suite of comprehensive tobacco control policies, embodied in the Framework Convention on Tobacco Control [6], were developed during decades when sometimes large majorities of populations smoked, (particularly males). Today, nations which have taken tobacco control seriously have smoking prevalence near or below 20% and are setting medium term prevalence targets of 10%. Discussions about “endgame” strategy are becoming more common in tobacco control circles[30] and have begun to be articulated by governments and the public: New Zealand has announced a goal of being smokefree by 2025 [31]. In England, 45% of the population and one third of smokers support a total ban on the sale of tobacco products [32].

A smoker's license may today seem a radical step toward ending the epidemic of tobacco cause disease, but it is far less radical than prohibiting the sale of tobacco which is not a strategy that has yet been supported by any international expert report or political forum. The New Zealand government in setting its 2025

smokefree goal, did not say it would actually prohibit the sale of tobacco. A smoker's license allows smokers the choice to continue smoking within a regulatory framework that promises new disincentives to smoke and a financial incentive to quit.

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