

Key points:

- There is a range of published evidence which demonstrates that point of sale displays of tobacco are associated with youth smoking uptake and some evidence that displays elicit cravings and potentially relapse in ex-smokers
- There is encouraging preliminary evidence from countries that have longstanding display bans that they may contribute towards declining youth smoking prevalence
- Young people in Scotland self-report access to tobacco products through vending machines, and enforcement test purchase activity indicates underage sale is frequently possible; outright prohibition of tobacco vending machines is a more effective means of reducing access than locking restrictions
- A registration scheme and system of fixed penalty notices will facilitate more effective enforcement activity, and puts tobacco more in line with other age restricted products
- There is evidence that proxy purchase is used in Scotland by young people to circumvent age restrictions but no direct evidence on the effectiveness of criminalising the purchaser as a means to prevent this circumvention
- Making underage purchase illegal may be a deterrent to youth access, though the American studies that support this theory may not generalise to Scotland

Introduction

The Tobacco and Primary Medical Services (Scotland) Act 2010¹ introduces a range of legislative measures intended to reduce youth smoking by limiting the attractiveness and availability of tobacco products. These measures include:

- prohibiting the display of tobacco products in the retail environment
- banning the sale of tobacco products through vending machines
- creating a register for all tobacco retailers
- introducing tools, including fixed penalty notices and banning orders, so enforcement officers can more effectively uphold tobacco sales law
- making underage purchase and proxy-purchase of tobacco products an offence.

This briefing will summarise the evidence underpinning these measures.

Point of sale displays of tobacco products

Product displays are recognised as an important component of marketing strategy, particularly so because they typically come into effect at the time when the decision to purchase is made². Marketing in this sense is broader than conventional 'advertising'. It is about '*... understanding the needs and wants of existing or potential customers and then putting together combinations of the marketing mix (most commonly thought of as product, price, promotion, place, people and processes) that meet those needs and wants.*'³

Point of sale advertising encourages purchase of a product in five ways⁴: creating awareness; encouraging interest; providing information for product evaluation; facilitating trial; and fostering adoption of the target brand. Point of sale promotion is particularly important for tobacco, as most other overt forms of tobacco promotion have been prohibited through the *Tobacco Advertising and Promotion Act 2002*⁵.

The impact of tobacco marketing (in general) on youth smoking uptake has been extensively studied. A 2003 systematic review⁶ found a consistent association between exposure to tobacco advertising and promotion and smoking initiation, over nine longitudinal studies (a research method where the original participants are followed up over time which provides stronger evidence for causality than one-off, cross sectional surveys) involving several thousand participants. More recent studies published since the review^{7,8} provide evidence that consistently supports the theory that tobacco marketing influences youth smoking uptake.

The research base on the specific effects of point of sale marketing on youth uptake is less developed than that of overall tobacco marketing. This is a result of point of sale only becoming a focus for study in relatively recent years. However, the evidence published to date on point of sale marketing (summarised in a recent review⁹) is consistent with the evidence on other forms of tobacco marketing - exposure to tobacco marketing at the point of sale is associated with youth smoking and likely to increase uptake. A more recent longitudinal study¹⁰ published after the review confirmed that exposure to retail advertising is a risk factor in smoking initiation. In addition to an association between exposure to tobacco displays and youth smoking initiation, some studies have investigated the impact of point of sale marketing and cigarette packaging on adults^{11,12} finding some evidence that displays may act as cues to smoke amongst those trying to avoid smoking and those not explicitly intending to buy cigarettes.

In the legislative and media debate surrounding the enactment of point of sale display prohibition in Scotland¹³, attention was frequently focused on countries which had previously adopted similar legislation in attempts to demonstrate or refute the notion that display bans reduce youth smoking. However, very few jurisdictions have enacted display bans for a sufficient period of time to provide useful data in this regard. It is unlikely and implausible that not having tobacco products on display will result in immediate and substantial drops in youth smoking prevalence observable through routinely reported statistics, given the residual effects of brand exposure. It is more plausible that display bans will have an effect on prevalence gradually, most likely over the course of many years as a cohort that has never been exposed to tobacco marketing grows up.

The direct linking of display ban legislation and youth smoking prevalence outcomes is further complicated by the fact that legislative restrictions on display are often adopted at the same time as other tobacco control measures, making it difficult to detect relative contributions. A recent study of the tobacco display ban in Ireland¹⁴ recognises this difficulty and instead focussed on surrogate measures that are likely to be associated with future smoking in young people such as believing tobacco display bans make it easier for children not to smoke and believing that fewer peers smoke post-ban.

The study found recall of displays decreased significantly for both adults and children post-ban; that the proportion of young people believing more than one-fifth of people their age smoked decreased from 62% to 46%; and post-legislation 14% of adult smoker thought the law had made it easier to quit and 38% of teenagers thought the law would make it easier for children not to smoke. Contrary to what has been

reported by some groups who oppose display bans¹⁵, the study did not find a significant increase in the number of young people that were current regular smokers.

While unadjusted comparisons of youth smoking rates (particularly within a short time-frame) are unlikely to be particularly enlightening for the reasons above, data from jurisdictions that have enacted display bans the longest – Iceland was first in 2001 – demonstrate a trend of continual reduction. Icelandic smoking prevalence in 15-16 year olds, as measured by the EPAD survey¹⁶, has dropped from 18.6% in 2000 (pre-ban) to 11.1% in 2007 (post ban). In Canada, where display bans have been implemented over the course of several years in the country's various regions, there is preliminary evidence that, when examining the trajectories of youth smoking prevalence across the country, the introduction of display bans is associated with a statistically significant reduction in both youth prevalence and a significant rise in age of smoking initiation¹⁷. The significant reduction in youth smoking prevalence associated with Canadian display bans persists when rising tobacco price is controlled for.

To date there has been only one economic evaluation of the removal of point of sale displays of tobacco in the peer-reviewed literature. This study¹⁸ from Ireland used sales and audit data to assess any short-term change in tobacco sales in the period following a display ban. This research examined previously reported claims of a 40% fall in sales as a result of the legislation¹⁹, and a report which concluded tobacco display bans have an immediate and drastic negative impact on retailer viability²⁰. The Irish study convincingly demonstrated no change in tobacco sales over and above existing seasonal variation in the short-term following the display ban and did not support claims of substantial revenue losses and closure of retailers as a direct result of the removal of displays.

Vending machines

There are relatively few published studies on the mechanisms of youth access to, and the effect of restrictions on, tobacco vending machines. What is known in Scotland is mostly derived from national level survey data and the activity of trading standards officers whose responsibility it is to enforce sales law. From self-reported nationally representative surveys around 10% of 13 and 15 year old regular smokers report that they often obtain their cigarettes from vending machines²¹. In one report of local authority test purchasing activity carried out in Argyle and Bute, in 23 out of 24 occasions the underage test purchase volunteer was able to make a purchase²². In the premises where the sale was refused, it was only done so as the volunteer had to ask for the machine to be switched on. A report summarising the activity of council enforcement authorities in England shows slightly better performance, however the successful purchase rate with vending machines was still relatively high at 51%²³.

The sale of tobacco products through vending machines has traditionally been controlled through a non-binding agreement between the vending machine supplier and the premises manager. This agreement indicates that machines should not be placed in locations where they are easily accessible to children, and should be supervised by staff. There is no published data on the location of vending machines in the Scottish hospitality industry, however collated anecdotal reports indicate such machines may often be placed in hallways, entrances areas or corners, or otherwise out of direct line of sight of employees.

One solution to the issues of youth access to vending machines proposed by the vending machine industry is locking mechanisms designed in such a way as to prompt age verification before the purchaser is able to access the tobacco product.

This may be implemented in various ways, including through a remote locking mechanism that premises staff may activate, or through a token/keycard system.

There are few independent trials on the efficacy of these solutions to reduce youth access. Two older published studies^{24,25} from the USA provide some indication that locking mechanisms that involve an age verification step can reduce underage sales when compared to conventional self-service machines. However, study authors note that some level of underage sales continues despite the implementation of locking mechanisms, and that outright bans are likely to be more effective. Similar issues have been observed more recently in Japan where identity cards are the mechanisms used to verify age²⁶. In the debate surrounding the introduction of legislation to prohibit vending machines in Scotland, doubt was expressed whether, even if vending machines were to have locking mechanisms, it would be effective in the context of a busy bar or pub, where the member of staff may not be able to follow a transaction through completely²⁷. Regarding displacement – whether and how tobacco sales that would otherwise have been through vending machines may be shifted to other distribution outlets, again, little published data is available. One study²⁸ of patterns of purchase in a German city (where identity card verification is in place in a similar manner to Japan) found that, following the implementation of a locking mechanism based on bank card or European driving licence, adolescents' patterns of purchase shifted to obtain tobacco products through other means.

Registration scheme for tobacco retailers and tools for enforcement officers

Despite the fact that tobacco is a harmful product and is subject to restrictions on sale, no licence or registration has been required to sell it in Scotland up to the commencement of the registration scheme introduced by the Tobacco and Primary Medical Services Act. This is in contrast to other age-restricted products such as alcohol or fireworks.

In Scotland, national surveys of young people²⁹ show that around 42% of 13 year olds and 57% of 15 year olds report that they usually purchase their tobacco products from shops. The most recent test purchase data from enforcement activity carried out by local authorities across Scotland shows that around 16.7% of premises fail their initial test purchase and sell to the underage test purchase volunteer³⁰.

Despite the evidence indicating that underage sales must take place with some frequency across the country as a whole, to date this has resulted in very few prosecutions for breaches of tobacco sales law. In the five year period between 2003/4 and 2008/9, there were only 31 total prosecutions for the sale of tobacco products to underage customers³¹. Referral to the procurator fiscal and prosecution through the courts can be a lengthy and expensive process. The flexibility offered to enforcement officials by a system of fixed penalty notices and the fact that it is less bureaucratic than the current system was broadly welcomed by enforcement agencies³² during the parliamentary passage of the Tobacco Act. It affords enforcement officials greater discretion in issuing sanctions themselves for certain offences through fixed penalty notices, while permitting referral to the procurator fiscal if they believe a criminal prosecution is appropriate.

Making proxy purchase and underage purchase an offence

Proxy purchase (purchasing cigarettes on behalf of an underage individual) and making underage purchase an offence were not present in the legislation as introduced. These measures were introduced during parliamentary scrutiny as evidence received, particularly from retail bodies^{33, 34}, indicated that proxy purchase was a significant issue faced by retailers. A qualitative study³⁵ supports this perception. Parliamentarians also believed that criminalising underage purchase (as

well as underage sale) would better reflect the balance of responsibilities that should exist between the retailer and young person.

Survey data from Scotland indicates that 38% of 13 year old regular smokers and 34% of 15 year olds report that they buy cigarettes from other people (though the wording for the question dealing with this is somewhat ambiguous, and it is conceivable that not every response recorded in this category would be recognisable as a 'proxy purchase'). There are no published studies on the impact of making proxy purchase an offence. Regarding the practicalities of enforcement, a representative from the Association of Chief Police Officers in Scotland has said on record that '*...[i]t should be an offence to purchase tobacco on behalf of young people. We face challenges in enforcing the law on the major problem of the proxy purchasing of alcohol for young people, but we can counter the problems.*'³⁶

There are some published studies, mostly from the United States that examine the impact of possession-use-purchase laws that suggest criminalising possession and purchase can have an effect on smoking prevalence^{37,38,39}, though the practicalities and impact of such laws have been contested⁴⁰.

Overall, there is some evidence that proxy purchase is used in Scotland to circumvent tobacco age of sale restrictions. There is no published data examining directly the effectiveness of criminalising the proxy-purchaser as a deterrent to reduce access. There is some evidence that criminalising possession in underage individuals may deter purchase.

Conclusion

A range of legislative interventions intended to reduce the attractiveness and availability of tobacco products to young people were introduced in the Tobacco and Primary Medical Services (Scotland) Act 2010. The quality and strength of evidence behind each component of the Act varies by intervention type, and some (for example, criminalising proxy-purchase) have received little direct study. When considered as a whole however, there is good evidence that the Act will deliver on its policy aims of reducing attractiveness and availability of tobacco to children, and will contribute to reducing youth smoking prevalence once the measures are effectively implemented.

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