Health (Tobacco, Nicotine etc. and Care)(Scotland) Bill

DISPLAY Research Team

Summary of Evidence and Conclusions

We have empirical evidence collected as part of the Determining the Impact of Smoking Point of Sale Legislation Among Youth (DISPLAY) Study, which has direct relevance to the proposed bill. We found evidence of an association between the use of e-cigarettes among adolescents and awareness of point of sale e-cigarette marketing. Our findings suggest that: i) adolescents who recall seeing e-cigarettes in small shops and supermarkets are more likely to have tried an e-cigarette; and ii) adolescents who recall seeing e-cigarettes for sale in small shops are more likely to intend to try them in the next 6 months.

Our data also show that between 2013 and 2014 there was a sharp increase in displays of e-cigarettes in retail outlets which also sold tobacco. Furthermore, in nearly half of the retailers audited, e-cigarettes were placed adjacent to products that might appeal to young people, such as confectionery, soft drinks and toys. Since April 2013 (supermarkets) and 2015 (small shops), marketing of cigarettes at point of sale has been banned. E-cigarettes are, therefore, the only nicotine product advertised at this location. Furthermore, there are now specially designed gantries which conceal cigarettes at point of sale but advertise e-cigarettes. Similar gantries have been observed in some of our study retailers.

As e-cigarette point-of-sale displays are associated with their uptake among young people and intention to use in the future, we argue that e-cigarette marketing at point of sale should be prohibited to protect young people from experimenting. However, in considering e-cigarette advertising and marketing, the risk of uptake of e-cigarettes among children has to be weighed against the potential benefit of these products to the adult smoking population as smoking cessation aids. In view of this we suggest that a balanced approach would be to make provisions for the promotion of e-cigarettes to adult smokers through other channels that are less salient to young people.
The DISPLAY study

The evidence reported here was collected as part of the Determining the Impact of Smoking Point of Sale Legislation Among Youth (DISPLAY) Study. This is an ongoing 6-year programme of research that is being conducted in four purposively selected communities. The study aims to assess the impact of Scottish legislation banning point of sale tobacco advertising and marketing on young people’s smoking-related attitudes and behaviours. The research is funded by the National Institute for Health Research (Haw et al., 2014) and currently provides the most comprehensive and up to date dataset on point of sale displays and e-cigarette use in Scotland.

The DISPLAY study has four components:

1. Annual mapping study of tobacco retail outlets
2. Annual tobacco advertising and marketing audit and matched interviews with retailers
3. Annual cross-sectional school survey with embedded cohort of school pupils
4. Annual focus group interviews with purposive samples of school pupils

To capture data on the rapidly changing e-cigarette market, data on e-cigarette marketing were collected as part of the tobacco advertising and marketing audit and retailer interviews in 2013 and 2014. Questions about e-cigarette use and recall of e-cigarette displays were added to the 2014 wave of the school survey. Comments about e-cigarette use arose spontaneously in the annual focus groups interviews conducted in 2013 and the topic was explored in more depth in 2014 and 2015.

Findings from the tobacco advertising and marketing audit and retailer interviews

Observational audits of tobacco retailers (n=96) in four Scottish communities were conducted over two waves 12 months apart (in 2013 and 2014). It was found that by 2014 the majority of tobacco retailers (77%) sold e-cigarettes. The number of retailers with purpose designed e-cigarette displays increased from 21% to 49% in the same time period. Of those outlets that stocked e-cigarettes, nearly half (47%) positioned them immediately adjacent to at least one product of potential interest to children and young people, the most frequently observed being confectionery, collectable cards and mints and gums. Follow-up interviews conducted with a panel of small shop keepers in four matched communities (n=25) in 2013 and 2014 found that they reported a high level of interest in e-cigarettes among their customers, particularly among existing adult smokers. In addition, some retailers noted an interest in flavoured products and more sophisticated refill products among some young customers, a theme that showed some consistency with findings from the young people’s focus groups.
Findings from the school survey

The data reported here are from the school survey conducted in February 2014. This was after the implementation of the tobacco point of sale ban in large supermarkets but before implementation in small shops. Questionnaires were administered to pupils in Secondary 2 (mean age: 13.9 years) and Secondary 4 (mean age: 15.9 years) by teachers during class time under exam conditions.

The response rate to the survey was 86% and a total sample of 1404 pupils was achieved. Knowledge of e-cigarettes was high with 75% of respondents reporting having heard of e-cigarettes (70% S2, 81% S4). Of these, 17% (11% S2, 24% S4) had tried an e-cigarette, while 6% (4% S2, 10% S4) reported that they intended to use an e-cigarette in the next 6 months.

Awareness of e-cigarette displays was high with 42% of young people recalling seeing them in small shops and 34% recalling seeing them in supermarkets. Twenty-one percent also reported seeing adverts for e-cigarettes on the internet 'some of the time' and 6% 'most of the time'.

In our analysis, we investigated whether use of e-cigarettes was associated with recall of e-cigarette displays. Our findings indicate that (after controlling for other sources of e-cigarette advertisement and demographic factors) awareness of e-cigarette in supermarkets, small shops and on the internet is significantly associated with ever having tried an e-cigarette.

We also explored the relationship between e-cigarette marketing and intention to use e-cigarettes in the next 6 months. After taking into account previous smoking history, all other sources of e-cigarette advertisements and demographic factors we found that recall of e-cigarette displays in small shops and on the internet was also significantly associated with intention to use e-cigarettes.

Our results suggest that e-cigarette use by adolescents may be influenced by point of sale displays of e-cigarettes. Adolescents who recall seeing e-cigarettes in small shops and supermarkets are more likely to have tried an e-cigarette, and those who recall seeing e-cigarettes for sale in small shops are more likely to intend to try them in the next 6 months.

The effect of point of sale displays on e-cigarette experience is small compared to the effect of previous cigarette smoking. That is, the association between cigarette smoking and e-cigarette use is stronger. However in this sample, the strength of association between recall of e-cigarette point of sale displays and intention to try e-cigarettes is comparable to the strength of association of cigarette point of sale displays and intention to smoke cigarettes. There are many studies showing that exposure to tobacco point of sale displays influences susceptibility to smoking and/or smoking initiation (Mackintosh, Moodie, & Hastings, 2012; Paynter, Edwards, Schluter, & McDuff, 2009; Spanopoulos, Britton, McNeill, Ratschen, & Szatkowski, 2014) and these findings have been supported by studies illustrating the reversibility of these effects (e.g. Dunlop et al., 2014; reviewed by Robertson, McGee,
This comparison indicates that although the effect size is small interventions to influence these factors can have measurable effects at the population level.

Findings from focus groups

A total of 16 focus groups were carried out with S2 and S4 pupils in 2013, the same number in 2014 and 14 focus groups in 2015. Participants were recruited from schools in our four study communities. In 2013, participants in three focus groups spontaneously mentioned e-cigarettes. E-cigarette awareness, perceptions and use were then explored in more depth in 2014 and 2015. Participants in all the focus groups in 2014 and 2015 showed considerable awareness and knowledge about what they variously described as e-cigarettes, vapes/vape-sticks and shisha pens. However, there was some confusion about the differences between these types of e-cigarettes and what they contained, including nicotine. Several reported that family members were using them or had used them to quit or cut down. They were generally viewed as being very easy for young people to access either from family/friends or from shops, particularly compared to tobacco cigarettes.

Participants’ opinions about e-cigarettes were mixed. There were positive views about the different flavours available, that they were less risky than cigarettes and could save you money if you used them rather than cigarettes.

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Uh...they're...yeah they're good, I'd say they're better than cigarettes... because cigarettes have like loads of bad like...chemicals and stuff in them and vapours are like...you get ones without nicotine.
Vapours taste nicer as well.
Vapours have choice of flavours and stuff…
They taste like pineapple…
They look a bit silly.
(School C6; Group S2 Male, 2015)
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However, others thought that that they looked ridiculous and not ‘cool’.

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They look a bit stupid if you're like 12! [Laughter] 13 or 14 just walking about the street with a vaporiser, you look a bit of an idiot!
(School C6; Group S2 Male, 2015)
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In contrast, some participants were concerned about their appeal to young people and thought they were a trap to lure the unwary into smoking.

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People say the e-cigarettes are to get people off but they're not... the aim of them is to try and get younger people to start smoking because they see e-cigarettes
Aye, because they think the pens are pure cool!
(School C3; Group S2 Male, 2015)
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Both smokers and non-smokers reported that they had tried them and some were still using them. There were reports from two schools in 2014 and 2015 that e-cigarette and vapouriser experimentation could have a faddish nature among pupils, with peaks of use followed by periods when the majority stopped using the devices. Indeed in some instances participants reported attempting to sell them on to their peers. In one school, reports about the health impacts of these devices (e.g. their use can result in fluid on the lung) or their supposed contents (e.g. antifreeze) seemed to result in this more widespread use coming to an end.

There was quite a trend like just a few weeks ago for like e-cigarettes and vaporisers but recently not so much, just in the last couple of weeks people have stopped using them and just gone back to normal fags.

From about the end of November to about maybe...the end of February everybody had a vaporiser.

(School C7; Group S4 Male, 2014)

Participants in both 2014 and 2015 showed a general awareness of e-cigarette marketing and displays in shops. These included advertisements on the TV and internet, on the streets (e.g. bus shelters) and shop promotions (e.g. posters, display units, stands in shopping malls). Participants reported seeing e-cigarette in small local shops and newsagents, supermarkets and pharmacies, with some giving detailed descriptions of where and how they were displayed.

Every shop I see has got them and they’re like next to the till.

Uh huh, right on top.

But they’re obviously advertising a lot more.

(School C3; Group S4 Female, 2015)

My shop up mine’s, there’s like a stand, and its glass, and it’s got like a giant cigarette, and it’s a Sky…I think its Skylight or SkyCig or something, and then beside it it’s all like these like packets of e-fags.

(School C2; Group S4 Male, 2014)

Some participants recounted visiting ‘vape’ shops.

It has like counters and then there are two guys, there’s one that introduces the actual fags and one bit if you’ve never tried like the and then there’s the other one you have like any problems with it or you want to buy some then he’s the guy. And then we went to that guy and then like you could see tonnes of flavours and they’ve got like 200 flavours and if you bought one of the vape things they gave you four free sample ones. The normal size bottles.

(School C7; Group S2 Female, 2014)
However, there was also a questioning of why e-cigarettes were so clearly on display when tobacco cigarettes were put behind shutters.

I've seen them in a couple of shops.
They're like behind the counter as well.
But they're more on show... they're in like a see through case.
Yeah they're not behind anything.
(School C6; Group S2 Male, 2015)

Like see when you go into a shop right, and like Tesco or something and they've got the white things over the fags and they've got like them on show, why?
(School C3; Group S4 Female, 2014)

Conclusions

There is increasing concern about the rising prevalence of e-cigarette use among children and young people. In particular, that e-cigarette use is increasing among young never smokers (Dutra & Glantz, 2014). Although e-cigarettes are substantially less harmful than smoking, the long term health impact of e-cigarette use by never smokers and the long term consequences of dual use are uncertain (Callahan-Lyon, 2014).

Small shops are an important source of exposure to e-cigarette advertising and marketing because they are frequently visited by young people. They are, therefore, part of young people’s formative environment. Furthermore, display of e-cigarettes in local small shops may indicate normality and social acceptability to young people (Brown & Moodie, 2009).

Our study suggests that e-cigarette point-of-sale displays are associated with uptake among young people. Adopting the precautionary principle, we argue that e-cigarette point of sale advertising should be restricted to protect from young people exposure, thus reducing the likelihood of experimenting. However, the potential uptake among young people has to be weighed against the potential benefit of these products to the adult smoking population (Hajek, 2013) for supporting smoking cessation. In view of this, we recommend a balanced approach is taken and that consideration is given to making provision for the promotion of e-cigarettes to adult smokers (to support smoking cessation and smoking reduction) through other channels that are less salient to young people.

Main limitations of survey and focus group data

The data reported here were gathered from four purposively selected communities in Scotland. Therefore, there is a risk that the sample is not nationally representative. However, in the analysis of data from the school survey demographic factors such as sex, age and socioeconomic status were statistically controlled. The prevalence of smoking and e-cigarette use from our school surveys was also broadly in line with that found in the 2013
SALSUS survey which is nationally representative (Dodds, Wood, Bainbridge, Grant, & Robb, 2013).

Finally, the data from our school survey are cross-sectional so no firm conclusions can be drawn about causality. That is, we do not know whether young people plan to try e-cigarettes because they have noticed e-cigarette displays in shops or on the internet, or whether they notice e-cigarette displays because they are favourably disposed towards trying e-cigarettes. Even if e-cigarette experimentation makes them more likely to notice displays, seeing displays in the local environment are likely to reinforce that inclination and indicate to young people that e-cigarettes are readily available (Mackintosh et al., 2012). Furthermore, with regard to traditional cigarettes, longitudinal studies have shown that exposure to point of sale displays lead to changes in smoking susceptibility in young non-smokers (Bogdanovica, Szatkowski, McNeill, Spanopoulos, & Britton, 2015). Such longitudinal data for e-cigarettes will be available from the DISPLAY study (Haw et al., 2014) over the next three years.

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References