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Young people's access to tobacco, alcohol and other drugs

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Summary

- Young people in the UK can easily obtain cigarettes and alcoholic drinks from a range of social and illicit commercial sources before they reach the legal minimum purchase age; many also report having access to illicit drugs

- Prices of alcoholic drinks and most illicit drugs, but not cigarettes, have been falling in real terms

- Increasing the price of tobacco and alcohol is likely to reduce young people's demand for them

- Enforcing or raising minimum purchase ages can reduce under-age sales of tobacco and alcohol, and has also been shown to reduce young peope's hazardous use of alcohol

- Unenforced voluntary agreements with retailers, and intervening in illicit distribution systems, have not been shown to influence young people's use of tobacco, alcohol or other drugs.

Introduction

Young people's use of tobacco, alcohol and other drugs causes concern. Early use of psychoactive substances can be harmful to health in the short term — for example, through injuries sustained or inflicted while intoxicated — and can lead to long-lasting patterns of consumption which increase the risk of many chronic diseases and social problems.[1][2] Recent concern in the UK has focused on issues such as continued high levels of smoking by young women; binge drinking and associated anti-social behaviour by young people in general; and higher levels of adolescent cannabis use than in most European countries.[w1]

One potential approach to reducing the use of psychoactive substances in young people is to control their availability, but public policy in this area has tended to address tobacco, alcohol or illicit drugs in isolation and is not necessarily based on evidence about what works.[3] In this article, we review the research evidence on availability and answer two key questions. First, how easy is it for young people in the UK to obtain tobacco, alcohol and other drugs? Second, do measures to control availability affect young people's patterns of use? We concentrate on measures affecting price, tax, importation, licensing, sales practices, illicit markets, and enforcement in all of these areas; we do not address production, prohibition, rationing, marketing, or controls on possession or use (see bmj.com for rationale).

Sources of evidence

This article is based on:

- Evidence about availability synthesised from nine population surveys of people aged under 25 in various parts of the UK
- Evidence synthesised from 30 reviews (including seven systematic reviews) of the effects of measures to control availability on patterns of use (specifically hazardous use by young people, where available) and health outcomes. Where review-level evidence was insufficient, we included relevant primary research and data from official reports.

A list of the surveys included and the 21 databases and websites searched is available on bmj.com.

Tobacco

Availability

Tobacco is widely and legally available for sale in Britain from age 16. Cigarette prices are high by international standards and have risen in real terms as a result of tax policy, although cheaper tobacco may be imported for personal use.[4][w2][w3]

Under-age smokers can easily acquire cigarettes. Most regular smokers aged 12-15 buy cigarettes from shops, although they are increasingly likely to be refused service. Younger smokers, in particular, also buy cigarettes from relatives. School pupils exchange cigarettes with their peers, sometimes for money. Regular smokers are also given cigarettes by friends and relatives; for occasional smokers, this is by far the most common source.[5][6][7][w4][w5][w6][w7][w8]

Effects of controls on availability

Price

Demand for tobacco is price-sensitive. A 10% increase in price is associated with an estimated 4% reduction in demand in higher-income countries. Young people are at least as sensitive (perhaps two to three times more sensitive) to price as older adults. A recent systematic review of cross-sectional studies from the United States (US) found strong evidence for an association between cigarette prices and both the number of 13- to 24-year old smokers and the quantity each consumes.[8][9][w9][w10][w11][w12][w13][w14][w15]

Sales

Young people living in areas of the US with more stringent under-age sales policies are less likely to smoke. Enforcing the minimum legal purchase age can reduce illegal cigarette sales, but the evidence from controlled intervention studies that this affects actual smoking behaviour is weaker, presumably because under-age smokers can acquire cigarettes from other sources. Unenforced voluntary agreements and educational interventions with retailers are less effective in reducing sales.[9][10][w16][w17][w18]

Smuggling

Smuggled cigarettes account for an estimated one-fifth of current UK market share. Increased customs enforcement may reduce this share, but there is little evidence that this affects overall consumption. Some have argued that lower tobacco taxes would reduce the incentive for smuggling, but when several Canadian provinces cut taxes, the downward trend in teenage smoking prevalence was reversed.[11][w19][w20][w21]

Alcohol

Availability

Alcohol is widely and legally available for sale. The real price of alcohol in the UK has halved since the 1960s; consumption by adults has risen in parallel with increasing affordability and increasing density and opening hours of sales outlets. Large quantities of cheaper alcohol may also be imported for “personal” use.[12][w2][w3][w22]

Young people’s early drinking is often done at home with their parents. Later, they may drink with friends at parties or outdoors before gravitating towards pubs and clubs from age 14-15 onwards. Around 80% of 15-year-olds in the UK perceive alcoholic drinks to be very or fairly easy to obtain.[6][13][w23][w24]

Under-18s may not legally buy alcohol in most circumstances. Up to half of 12- to 15-year-olds who have consumed alcohol never buy it. Younger drinkers are most likely to acquire alcohol from friends or relatives, but by age 15 a substantial minority buy from pubs, off-licences or shops; this is easier for girls. By the age of 16-17, most drinkers usually buy alcohol themselves.[6][7][w6][w7][w24]

Effects of controls on availability

Price

Demand for alcohol is also price-sensitive. In the UK, a 10% increase in price is estimated to reduce demand for beer by about 5% (for drinking on the premises) or about 10% (in off-licences), for wine by about 8%, and for spirits by about 13%. Some, but not all, reviews have concluded that young people may be more sensitive to price than older adults.[12][14][15][16][w22][w25][w26][w27][w28]

The price of alcohol is also inversely associated with harmful outcomes, including drink-driving and fatal road crashes among young people (mostly in US studies) and the prevalence of problem drinkers and mortality from liver cirrhosis in the general population. There is little evidence to date about the specific influence of price on binge drinking.[15][w25][w26][w27][w28]

Licensing

Several controlled and uncontrolled studies in Nordic countries with state alcohol monopolies have shown that major relaxations in controls on beer strength or sales outlets were followed by increases in alcohol consumption (and, in one study, drunkenness and alcohol-related hospital admissions), or conversely that consumption fell after controls were re-introduced. US studies have also shown an association between outlet density, alcohol consumption, and fatal road crashes.[15][17][w25][w26][w28]

The effects of marginal changes in availability when alcohol is already widely available are much less clear; specifically, the overall evidence that changes in licensing hours affect overall consumption is mixed, and very limited for young people.[14][15][17][w25]

Sales

Two systematic reviews of controlled before-and-after studies have concluded that raising the minimum purchase age reduces consumption and alcohol-related road crashes among young people. As with tobacco sales, enforcement substantially increases the effectiveness of the law.[14][15][16][18][19][w26][w29]

Most evidence comes from US studies of varying the minimum purchase age within the range 18 to 21, but a recent Danish study has also shown a decrease in consumption and drunkenness following the introduction of a minimum purchase age of 15 for beer where previously there had been none. Intensive staff training coupled with rigorous enforcement can reduce under-age sales and intoxication among customers. Unenforced voluntary codes of practice have not been shown to be effective.[15][17][w25][w30]

Other drugs

Availability

Ease of access

Around one-third of 13-year-olds and two-thirds of 15-year-olds perceive illicit drugs — particularly cannabis — to be very or fairly easy to obtain; these proportions are higher than in many other European countries. Street prices of most illicit drugs in the UK are falling in real terms.[6][13][20][21][w31][w32][w33][w34][w35][w36][w37]

Between 10 and 20% of 10- to 12-year-olds, rising to about two-thirds of 15-year-olds, say they have been offered illicit drugs (boys slightly more than girls); by age 15, at least 10% claim to have been offered heroin, cocaine or crack cocaine.[6][22][w38]

Means of access

Friends or relatives usually give or share drugs for initial experimental use, whereas regular users usually buy their drugs. Two-thirds of 15-year-olds say they know where they can easily buy cannabis; a quarter say it can easily be bought at school.[6][13][w7][w39]

Drugs are sold in both open and closed markets, meaning those in which dealers will, or will not, sell to buyers they do not know personally. Semi-open markets in pubs and clubs and informal dealing among friends are also important. Deals in closed markets are typically made using mobile phones, to which most teenagers have access. The vast majority also have access to the internet. Drugs are increasingly available online, although it is not yet clear what effect this is having on patterns of use.[23][w36][w40][w41][w42][w43][w44][w45][w46][w47]

Effects of controls on availability

Various cross-sectional studies have found an association between drug prices and demand for, or harm resulting from, drugs — including young people's demand for cannabis, the probability of arrestees testing positive for cocaine, and heroin- and cocaine- related attendances at accident and emergency departments.[24][w48][w49][w50] Short-term fluctuations in availability are a normal feature of some drug markets, particularly for heroin, but recent reviews (including one systematic review) of enforcement activities at various levels have found little or no evidence of any effect on street prices, let alone drug use.[23][25][w34][w36][w37][w51] Other, limited, primary research evidence available in this area is summarised in the box.

Conclusions

Young people in the UK report little difficulty in obtaining cigarettes and alcoholic drinks from early secondary school age upwards through a range of social and illicit commercial sources (table). They also report widespread availability of illicit drugs, particularly cannabis. Younger and more experimental users of all substances tend to be given them by friends and relatives; as they become older and more frequent users, they increasingly buy their own supplies.

The balance of available evidence supports the view that there are particular control measures that are likely to reduce hazardous substance use among young people. It is not clear to what extent state intervention can influence the street prices of illicit drugs, but the retail prices of tobacco and alcohol are largely determined by tax policy, and are likely to affect young people's demand for these products.
There is also good evidence that restricting the sale of tobacco and alcohol by enforcing or raising the minimum purchase age can reduce sales. However, the evidence that this affects consumption or hazardous use is stronger for alcohol than for tobacco, and depends on widespread compliance by retailers. Young people's use of alcohol may also be influenced by policies on where and when alcohol is permitted to be sold, but evidence for this is weaker.

State control of commercial markets is clearly only part of the picture. For all types of substance, younger and more experimental users mostly obtain their supplies from social (non-commercial) sources, which suggests that controls on price and under-age sales might be expected to have a greater effect on patterns of consumption once a habit is established than on deterring experimental use. If controls on under-age sales were strengthened, social markets might expand to meet the demand, but it is also possible that higher taxation and more rigorous controls on retailers would reduce the supply of cigarettes and alcohol to those social markets.

We clearly have more to learn about the role of availability as one of the many factors that may influence the development of hazardous substance use. Globalisation and technological development may be contributing to increased availability through personal travel, licit and illicit international trade and the internet; surveillance of these trends is important in order to develop appropriate public health responses. More generally, research on the effects of policy interventions in this area is difficult because control measures may be multifaceted, are rarely amenable to randomisation, and often require imaginative quasi-experimental designs for their evaluation. However, our review does highlight some inconsistencies between current policy and the available scientific evidence. For example, the UK government has kept cigarette prices high, but has rejected the use of price controls to influence demand for alcohol. At the same time, there is little evidence that voluntary agreements with legitimate retailers, or intervening in illicit distribution systems — both of which feature prominently in current UK policy — have had any effect on young people's patterns of use of tobacco, alcohol or any other drug.[12][w22] Draft legislation in Scotland to outlaw the irresponsible discounting of alcoholic drinks represents an alternative approach;[w52] the effects of such changes in policy should continue to be evaluated. Further research is also needed to improve our understanding of social markets for licit substances, illicit drug markets, and the effects of intervening in these markets on young people's patterns of consumption and their health consequences.

Studies of the effects of intervening in drug markets

- Australia: The heroin "drought" of 2000-01 (which may or may not have been due to enforcement activities) was associated with an increase in price, and with decreases in injecting and heroin-related ambulance calls and overdoses. However, some users substituted other drugs, notably cocaine.[w51][w53][w54][w55][w56]

- Canada: A recent 100 kg heroin seizure had no discernible effect on drug use among established injecting users.[w57]

- The Netherlands: Cannabis is legally available for sale from age 18. The evidence about the effects of this *de facto* legalisation is mixed. A recent study found no difference between experienced cannabis users in Amsterdam and San Francisco in terms of average age of onset or pattern of use, but users in Amsterdam were much less likely to have used other illicit drugs.[w47][w58][w59]

- Northern Ireland: It has been suggested that the scaling down of police and army activity in Northern Ireland in the late 1990s favoured the development of the illicit drug trade. This is somewhat supported by new evidence that drug use among young people increased after the ceasefires, contrary to trends in other parts of the UK.[w35][w60]

- United Kingdom: It is now illegal to sell solvents and cigarette lighter refills to under-18s. The introduction of these two pieces of legislation in 1985 and 1999 respectively may have led to short-term reductions in deaths attributable to certain types of product, but the effects of these control measures on overall volatile substance abuse is not clear.[w61][w62]

Additional educational resources

- Guide to community preventive services. Systematic reviews and evidence-based recommendations on the effectiveness of interventions, organised by topic. See particularly *motor vehicle* (drink driving) and *tobacco*. www.thecommunityguide.org

- Interventions for preventing tobacco sales to minors. Cochrane review of effectiveness. www.cochrane.org/cochrane/revabstr/AB001497.htm

- Calling time: the nation's drinking as a major health issue. Report by the UK Academy of Medical Sciences that argues for measures to reduce overall population consumption of alcohol. www.acmedsci.ac.uk/p_callingtime.pdf

- European Monitoring Centre for Drugs and Drug Addiction. Annual reports of the state of the drugs problem in the European Union. www.emcdda.eu.int

- Home Office research on drug use and drug markets. List of online research publications. www.homeoffice.gov.uk/rds/drugs1.html#publications

Table. Current availability of tobacco, alcohol and illicit drugs to young people in the UK

	Tobacco	Alcohol	Illicit drugs
Legal to buy and sell	From age 16	From age 18	No
Controls on distribution of sales outlets	No	Must be licensed	Illegal
Legitimate commercial sources	Wide range of shops including newsagents, supermarkets, petrol stations and mobile shops Vending machines Cross-border shopping	Off-licences and other licensed shops Bars, pubs, clubs and restaurants Cross-border shopping	None
Examples of average UK prices[w2][w63]	Cigarettes, 20 king size: £4.37 (€6.29; $8.13)	Lager, pint (568 ml): £2.34 (€3.37; $4.35)	Cannabis, eighth of an ounce (3.5 g): £10 (€14, $19) Ecstasy, tablet: £4 (€6, $7) Heroin, gram: £35 (€50, $65) Cocaine powder, gram: £50 (€72, $93)
Recent trends in real prices	Rising	Falling	Falling
Other sources	Social exchange Smuggled cigarettes	Social exchange Smuggled alcohol	Social exchange Dealers operating in open, semi-open or closed markets Internet distribution?
Availability reported at age 15[6][13][w39]	Around three-quarters of 15-year-old smokers identify a newsagent as a usual source of their cigarettes Almost all report having purchased from a shop at some time	Around four-fifths perceive alcohol to be fairly or very easy to obtain Although friends and relatives are the most common source, a substantial minority report purchasing from pubs, off-licences or shops	Two-thirds have been offered illicit drugs Two-thirds know where they can easily buy cannabis, most commonly the house of a dealer About a quarter say cannabis can easily be bought at school
Average weekly expenditure reported by regular users at age 15[w39]	£9 (€13; $17)	£9 (€13; $17)	£11 (€16, $20)

$ refers to US dollars

Contributors

This article is based on work done as part of an inquiry by the prevention working group of the Home Office Advisory Council on the Misuse of Drugs. LG and SH had the original idea for the review and outlined its scope. DO designed and executed the literature search, reviewed the evidence, and wrote the paper. LG and SH reviewed drafts and approved the final manuscript. DO is the guarantor for the paper.

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Sources of evidence

Survey evidence about availability was synthesised from the following main sources: the Smoking, Drinking and Drug Use Among Young People surveys in both England and Scotland; the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS); the British and Northern Ireland Crime Surveys; the European School Survey Project on Alcohol and Other Drugs (ESPAD); the Eurobarometer survey; the Edinburgh Study of Youth Transitions and Crime (ESYTC); and the Pre-teen Drug Misuse Study in Glasgow and Newcastle. These sources are referenced at appropriate points in the text.

Review-level evidence about the effects of interventions was identified by searching the following databases and websites using various combinations of terms for tobacco, alcohol, drugs and availability: Alcohol Studies Database, Applied Social Sciences Index and Abstracts (ASSIA), Campbell Collaboration Reviews of Interventions and Policy Evaluations (C2-RIPE), Cochrane Database of Systematic Reviews (CDSR), Database of Abstracts of Reviews of Effectiveness (DARE), Department of Health, Excerpta Medica Database (EMBASE), European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), ESRC Evidence Network, Alcohol and Alcohol Problems Science Database (ETOH), Health Development Agency, Health Education Board for Scotland (HEBS) Library, Home Office, Medline, National Electronic Library for Health (NeLH), NHS Centre for Reviews and Dissemination, PsycInfo, Science and Social Science Citation Indices, Scottish Executive, US Task Force on Community Preventive Services. A list of all the search terms used is available from the first author on request. This search was augmented with other more specific searches where necessary.

The term *availability* is open to interpretation. This review was intended to address those aspects of availability which are amenable to control measures applied by the state to the supply chain and are feasible in the current UK policy context. We therefore considered only those factors operating after substances are cultivated or manufactured and up to the point at which young people acquire them. These factors include price, tax, importation, licensing, sales practices, illicit markets, and enforcement in all of these areas.

We did not consider production subsidies, crop substitution, prohibition or rationing because we assumed for the purposes of this review that tobacco and alcohol would remain licit substances, widely produced and available for sale in a regulated global market for the foreseeable future.

We considered the question of whether people choose to use substances which have been made available to them to be a separate issue. We therefore did not consider controls on marketing, or controls on the possession or use of substances.

We did not review the evidence about non-health outcomes such as crime and disorder.

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