For alcohol alternatives, the science is not the hardest part

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We need innovative thinking about what to do about ethanol and its problems, and Professor Nutt’s proposals are a good start.

Nutt discusses three ‘alcohol alternatives’: de-alcoholized or non-alcohol beverages; reducing the concentration of alcohol, or favouring low-strength alcohol, for instance in taxing regimes; and various psychoactive alternatives to alcohol, including partial agonists that would modify various neurological properties of alcohol.

De-alcoholized beer and wine is already available in reasonably palatable forms. There will always be a niche market for it, but it seems unlikely to replace much drinking of alcoholic beverages. Many popular non-alcohol beverages (e.g. cola drinks) started out as temperance drinks, intended to replace alcoholic beverages. To some extent they may have. But today much of their use is as mixers in alcoholic drinks. As Klaus Mäkelä once remarked, ‘the trouble with alternatives to alcohol is that alcohol combines so well with so many of them’. Non-alcoholic drinks can fill such use-values of alcoholic beverages as quenching thirst, heating or cooling the drinker, or accompanying ‘food and friendship’ (Mäkelä, 1983). And it is a good idea to require their availability in alcohol outlets. But they do not provide the range of psychoactivity which most drinkers are seeking from alcohol.

There is also a long history of experiments with reducing the concentration of alcohol, or favouring low-strength alcohol with taxes and other means. It seems that for many drinkers some psychoactivity is important, but they may be slaked with less if the beverage is weaker. Reducing the concentration and limiting the size of drinks was part of the very successful effort to reduce alcoholic beverage consumption in the UK during, and for decades after, World War I (Shadwell, 1923). Nutt mentions one aspect of current Swedish practice, but there are also other noteworthy aspects. Beer below 2.8% is not taxed as alcohol at all, which means that it costs about half as much as the 3.5% beer which is the other alcoholic beverage available in the corner grocery store. As a result, the two forms have about equal sales. Evidence that alcohol strength matters can be drawn from the behaviour of English football fans in the Euro 2000 soccer championships. The mayor of Eindhoven in Holland ordered that only 2.5% beer would be sold ‘to minimize the risk of trouble during the tournament’, while the English fans encountered full-strength Belgian beer in Charleroi the next week. There was no trouble in Eindhoven, but large-scale riots in Charleroi (differences in the availability of marijuana and in police tactics may also have been factors; Room et al., 2002:188).

With the issue of a ‘safer alcohol’, we enter more difficult territory. There have certainly been experiments in this direction, as Nutt notes. Let me add a couple outside the frame of medications for alcoholics. Part of the presentation of marijuana in the youth culture of the 1960s was as a safer alternative to alcohol. And in many ways it is this (Hall et al., 1999), but that has never proved a winning argument for legalization. Another experiment was the substitution of kava, a beverage with mild psychoactive effects used peaceably and collectively in the South Pacific, instead of alcohol among indigenous Australian people in the Northern Territory. There was considerable substitution, and levels of violence and other trouble in the communities did appear to decrease. However, findings of adverse physical health effects led to prohibitions on kava’s import and sale — although it can be doubted if these effects were as serious as those from alcohol (Room et al., 2002:185). As with cola drinks, it also turned out that neither marijuana nor kava necessarily substituted for alcohol — the drugs could be combined.

Turning to partial agonists of alcohol, where the problems would be ‘engineered out of [the] molecule’, in Nutt’s words, I can well imagine being interested myself in an additive so that my memory is not impaired when I drink. I can also imagine that this might be misused. Just apply the murder mystery test: can you imagine a plot-line where the additive is used for nefarious purposes? A pharmaceutical which makes alcohol safer is likely to have to pass this kind of test. Beyond that, I suspect there will be resistance arising from the fact that the social territory of drinking and of alcoholism is very heavily moralized (Room et al., 2001). My theory of why propylthiouracil has not become better established as a medication for reducing the harm to an alcoholic’s liver is the fear that it will allow the alcoholic to continue drinking (Room, 2004).

I doubt that my interest in an additive to improve my memory when I drink would stretch to having to get a prescription for it. Yet it is hard to imagine getting to the point where the additive is
sold over the counter or added to the alcoholic beverage. Current regulatory mentality and practice can accept a psychoactive substitute when it is defined as a medication, to be used under medical supervision and preferably for a limited time. But it is extremely difficult to get a less harmful substitute on the market under conditions competitive with the harmful form. We can see this even with nicotine, where the health harm from nicotine itself – unlike ethanol – is relatively minor (Ferrence et al., 2000). In many places, it has been a long and continuing struggle to get palatable alternative nicotine formulations on the market to compete with cigarettes on an equal basis. The European Union forbids the sale of snus, a relatively safe Swedish sucking-tobacco product (Gilljam and Galanti, 2003), other than in Sweden. A recent European Court decision offered as a reason for continuing this ban that snus was not in the same situation as other more harmful tobacco products, since it would be ‘new to the markets of the Member States’ (European Court, 2004: §71). In other words, novelty is a proper reason to keep a safer substitute off the market. Given this kind of reasoning, marketing a safer alternative to alcohol is a challenge which seems unlikely that a pharma company would take on.

We still need innovative thinking of the kind Professor Nutt offers us. But if the thinking is to have any practical pay-off, we also need some innovative thinking and action about the impossible situation we have got ourselves into concerning psychoactive substances. On the one hand, we have the international drug control system and regional and national systems making innovation in the arena of psychoactive substances very difficult, and channelling any innovation into an expensive and inconvenient system of control – the prescription medication system – designed with the specific aim of keeping the consumer from making his or her own choices about any new highs. Even outside the medication system, the example of snus and the European Union shows how resistant to a safer psychoactive substitute our current legal systems have become, if there is anything novel about it. On the other hand, products like cigarettes or alcoholic beverages which are extremely harmful, but which have long been in customary use in western cultures, can operate relatively freely in the market – without any international control in the case of alcohol, and with only the new but weak Framework Convention on Tobacco Control in the case of cigarettes. National or local controls on these products, indeed, are often disallowed by trade agreements and court decisions in favour of a free market. This policy conundrum has to be solved, I believe, before there is any point in investing in research on ‘safer alcohol’.

References

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