

interventions might find the same. A Dutch teenage psychiatric patient with learning difficulties was kept in restraints for five weeks because suitable care could not be arranged, igniting a much needed debate on services for those with learning difficulties.⁶ Some of the failures may result from lack of training among doctors in managing patients with learning disabilities, but there may also be discrimination.

Most doctors also encounter addicted patients, but many general practitioners are unwilling to accept on to their lists people addicted to illegal drugs.⁷ These patients are likely to create many more difficulties than the average patient, but they also have many more medical problems. If a separate system of care has to be created for them it seems highly likely that it will fall to lower standards than the general system. This is exactly the point made 20 years ago by the Royal College of Psychiatrists in arguing against a separate prison medical service.⁸ At long last that advice is being heeded by the authorities in England,⁹ but for years prisoners, particularly the large proportion with mental health problems, have suffered from poor health care. Indeed, many prisoners end up in prison primarily because of the failure of mental health services. And when prisoners are referred to the hospital service they may find themselves shackled to the bed, even in some cases while giving birth.¹⁰

There are other marginalised groups who have high rates of health problems and poor services. These include homeless people, refugees, and travellers.² With all marginalised groups the poorer standard of care seems to stem from a combination of ignorance, fear, and prejudice plus a feeling that they should adapt to the services rather than the other way around. These same factors also seem to be at work in the case of very large groups—particularly elderly and mentally ill people—who are not marginal in numbers but who are marginalised in the services they receive. The “debate of the age” has focused attention on medicine’s failures with elderly people,¹¹ while many psychiatric hospitals run at over 100% capacity, and carers of the mentally ill struggle with wholly inadequate support.

Much attention is now being paid to Britain’s poor results in patients with cancer and heart disease, the major killers. Politicians are feeling the heat over the poor performance, and the Secretary of State for Health

is planning to make them priorities, sidelining the usual political concern with waiting lists. The problem in a severely constrained health service is that services to marginalised groups may become still worse. The current fashion for politics by focus group means that the problems of the majority, “comfortable Britain,” are given priority because the focus groups include few if any people from marginalised groups. The main interest that the majority have in marginalised people is keeping them out of their back yards.

So how to respond? Thankfully some people, often inspired by religious faith, are willing to devote themselves to caring for marginalised people. There are others, perhaps marginal themselves in some way, who cannot find places in the more popular parts of medicine and who drift reluctantly into the care of marginalised groups. Unfortunately those who care for marginalised groups themselves become marginalised.

Improving care for marginalised groups will thus need much more than exhortation from the pulpit or a journal—because most people are unwilling to take on the extra difficulties of caring for these people when, far from bringing professional or monetary reward, it brings the reverse. Real change requires—as always—professional and political leadership, unceasing commitment from the top, a clear vision of what is needed, resources, and a strategic approach. Medicine may somehow need to rediscover its religious underpinning while operating in an increasingly secular world. Otherwise, it’s hard to see that anything will be different in 10 years time.

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Absinthe: what’s your poison?

Though absinthe is intriguing, it is alcohol in general we should worry about

Absinthe, the emerald green liqueur associated with excess, is back in business. Having been banned in many countries in the early 20th century, its newly fashionable image, combined with global purchasing opportunities through the internet, has brought its revival. Since 1998 several varieties of absinthe have again been available in Britain—from bars, stores, and mail order. But is absinthe a special problem or simply part of a general concern about excessive alcohol consumption?

Originally formulated in Switzerland, absinthe became most popular in 19th century France. Between

1875 and 1913 French consumption of the liquor increased 15-fold.¹ It became an icon of “la vie de bohème,” and in fin-de-siècle Paris l’heure verte (the green [cocktail] hour) was a daily event. Although never as popular in Britain, the fashion of mixed drinks with a “spot” or “kick” of absinthe was reported in London as late as 1930.²

Many creative artists had their lives touched by absinthe (Toulouse-Lautrec, Oscar Wilde, Picasso).³ The illness of Vincent van Gogh was certainly exacerbated by excessive drinking of absinthe,⁴ and one of his six major crises was precipitated by drinking.³ Van

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Gogh probably had acute intermittent porphyria—a working hypothesis⁵ compatible with the documented porphyrogenicity of the terpenoids in absinthe as well as ethanol.⁶ His case illustrates the importance of lifestyle, underlying illness, and the individual response.

Toulouse-Lautrec mixed his absinthe with brandy, but the traditional method was to take about 30 ml of the bitter liqueur in a special glass and to add about five volumes of cold water, trickled over a sugar cube on a slotted spoon. As the alcohol concentration drops, the terpenoids come out of solution to form a yellow opalescence. This louche effect is retained in modern absinthe substitutes (pastic, such as Pernod and Ricard), which are rich in anise but contain no thujone. The alcohol concentration of diluted absinthe was thus not greater than that of other spirit based drinks.

Pointing the finger at thujone

Absinthe was classically manufactured from dried wormwood (*Artemisia absinthium*), anise, and fennel, which were steeped overnight in 85% (by volume) ethanol. The next day water was added, the concoction boiled, and the distillate (alcohol plus steam distilled terpenoids) collected. The process was completed by a further extraction of dried Roman wormwood (*A. pontica*), hyssop, and lemon balm and then filtration to yield a clear, green liqueur of 74% alcohol. The plant products in absinthe varied among manufacturers, the only universal components being alcohol and wormwood essence.

Convulsions resembling epilepsy were observed in humans and induced in animals with toxic doses of absinthe.⁷ The essential oils were first implicated, then specifically wormwood, and finally one chemical, thujone. Quantitatively speaking this is justified, though thujyl alcohol (wormwood), as well as pinocamphone (hyssop) and fenchone (fennel), can precipitate convulsions if used in large enough amounts.³ The thujone content of old absinthe was about 0.26 g/l (260 ppm)⁸ and 350 ppm when the thujyl alcohol from the wormwoods is included.³ Currently available versions of absinthe boast of thujone inclusion—in one case at 8–9 ppm (still within the European Commission upper limit of 10 ppm⁹).

The acute toxic effects of thujone include epileptiform convulsions.⁴ Cases of poisoning with wormwood still occur, mostly out of misplaced loyalty to folk remedies or sheer ignorance.¹⁰ Thujone is a porphyrogenic terpenoid: it increases 5-aminolevulinic acid synthase activity and induces porphyrin production in chicken embryonic liver cells.⁶ The livers of 19th century absinthe drinkers could easily have experienced concentrations of thujone of 20–200 µmol/l,⁶ which might have presented a problem for drinkers born with a compromised heme pathway.

From the late 1850s onwards absinthe aroused medical interest and became the subject of animal experiments with either the liqueur or oil of wormwood.⁷ A distinct condition—absinthism—stood alongside the emerging descriptions of alcoholism.¹² Absinthism was associated with gastrointestinal problems, acute auditory and visual hallucinations, epilepsy, brain damage, and increased risk of psychiatric illness

and suicide.¹² French scientific warnings eventually reached the popular presses but were countered by denials from a government interested in taxes and an industry enjoying profits. Meanwhile, consumers from all walks of life strove to convince themselves that the risks were at least commensurate with the pleasures of absinthe's appearance, fragrance, taste, amusing ritual, and mistaken reputation as an aphrodisiac.

Between 1905 and 1913 Belgium, Switzerland, the United States, and Italy banned absinthe. The French government made absinthe less available after 1915.¹ It was never formally banned in Spain, Portugal, the Czech Republic, or the United Kingdom, but the overall effect of substantial international action in the first two decades of this century was to achieve something close to global prohibition.

Wider harms from alcohol

As with other early descriptions of alcohol related conditions such as "rum fits," there is a grave danger of demonising a particular drink and thereby missing the wider importance of alcohol related harm. Although alcoholic liver disease (maladie de foie) was initially emphasised, the damaging effects of ethanol on all tissues in the body have been increasingly recognised over the past 50 years,¹³ and organ damage by ethanol is now established as a relatively long term affair. A poor diet exacerbates the effects of ethanol in certain tissues, especially the nervous system, but the view in the 1940s that such damage was due exclusively to associated malnutrition, rather than to ethanol and its metabolites, is incorrect.

As our knowledge of multiple organ damage, neurotoxicity, and diverse psychiatric sequelae of excessive alcohol use has increased, the possibility emerges that much of the syndrome of absinthism was actually acute alcohol intoxication, withdrawal, dependence, and other neuropsychiatric complications—major health and social problems, but not unique to absinthe. On the other hand, the differences between ethanol and ethanol plus thujone in the time course for onset of symptoms in experimental animals have always been challenging. As yet we know little about the characteristics or consumption patterns of the new absinthe drinkers, and the long term effects of thujone and other terpenoids remain unclear. Until data from properly conducted studies are available, one can only resort to limp warnings of the potential risks from the low levels of thujone in contemporary absinthe-like products. So next time someone offers you a drink and says "What's your poison?" think carefully before you answer.

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Putting on the style

Journal house style is for the benefit of readers; now everyone can access it

Imagine that your paper has been accepted by the *BMJ*. After the work of writing and revision, you are looking forward to seeing it in print and receiving the acclaim of colleagues. The proofs arrive. You settle down to read your hard-wrought prose—and revel in how well it reads. Then you notice the “? to author” inserted here and there. To answer some of these queries, you turn back to your original—and realise how much has been changed. You wonder what’s been done to your paper. Was this really necessary?

Like every paper published in the *BMJ*, yours will have undergone scrutiny by a technical editor. These invisible professionals are the most exacting readers of the paper. Their scrutiny and revision adds value by making your paper clear, concise, and accurate. Their mission is to remove the obstacles that would hinder a reader’s easy grasp of the message and details of the paper, while not distorting what the author meant to say. The readers—doctors of all specialties, or of none; native English speakers and non-native English speakers; members of the public—have reason to be grateful for this attention to detail.

Behind the work of the technical editors lies a powerful tool called house style. Evolved over many decades, house style has seeped into every fibre of technical editors’ being during their long months of training. This training hones their critical skills, sharpens their suspicions, and develops an awareness of nuance. In the interests of consistency throughout the journal, technical editors learn to forgo personal preferences for abbreviations, American spelling, and exclamation marks.

Some of the principles of house style are standards of good writing; some can be robustly defended—such as our eschewing of most abbreviations in a journal that is read by an enormous variety of readers; and others are admittedly arbitrary. But even the arbitrary ones can be justified on the grounds that we need to make a decision and stick to it: our readers probably wouldn’t thank us for changes in spellings, capitalisation, and units of measurement between one article and the next. Aiming to promote clarity of thought and expression, technical editors embrace the use of first person pronouns, the active voice of verbs, and short sentences; at the same

time they are ruthless with noun clusters, hanging participles, tautologies, and the many misuses of commas. And they allow very, very few hyphens.

The author’s organisation of ideas is one element of style; another is to follow the rules of grammar (such as they are) and use words correctly: “the dressing of thoughts,” as Dickens said. The style imposed by journal editors includes technical accuracy—in the layout of tables, for example, or use of drug names. Technical editing also encompasses what in the days of hot metal typesetting was called “marking up the text” (for type size, headings, etc) but in the electronic era is called “coding.” Further, it involves mundane processes like checking that percentages and numbers tally (so often they don’t), figures are labelled correctly, and competing interests forms have been signed. An important component of house style is the many details for which alternatives exist: beta-carotene or β carotene? phase 2 trials or phase II trials? adrenaline or epinephrine? There is much to remember; fortunately, it’s all written down.

Our house style is codified in the *BMJ* style book, which originated on a typewriter back in the mists of time and can now be found on the world wide web (www.bmj.com/advice/35.html). This alphabetical listing, amounting to some 233 pages, is a working document and is revised and added to as the need arises—at the rate of about a dozen decisions a week. Most of these decisions are about technical details; the essentials of *BMJ* style (www.bmj.com/advice/10.html) are less likely to change. Reaching a consensus involves determining a rationale and deciding which of the possibilities is the best and clearest. This often involves searching in other style books and reference sources that deal with spelling, place names, SI units, abbreviations, punctuation, or English usage (www.bmj.com/advice/bref.html).

“Good prose,” said George Orwell, “is like a window pane.” Technical editing reveals the view—and house style keeps the window clean.

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