

# Rolling tobacco is at least as dangerous as cigarettes

Poorer smokers may favour “roll your own” and many falsely believe that use of loose tobacco is less dangerous than factory made cigarettes, writes **Richard Edwards**. Specific interventions may be needed to encourage such smokers to quit

**T**he Wise-Up to Roll-Ups campaign in the south west of England has brought to the fore a facet of tobacco smoking that receives far less attention than it should.<sup>1</sup> The campaign publicised that some aspects of use of roll your own (RYO) tobacco merit particular concern.

The most common reason (over 80% in most studies) given for smoking RYO cigarettes is that they are cheaper.<sup>2–3</sup> Indeed, even when the price per weight of tobacco is similar for RYO and factory made cigarettes, smokers of RYO cigarettes can potentially keep smoking and maintain sufficient nicotine intake by rolling thinner cigarettes. This may help smokers to continue to smoke despite rising tobacco taxes, undermining this key tobacco control intervention.

A perception that could encourage the use of loose tobacco and discourage quitting is that RYO cigarettes might be considered to be more “natural” and less of a health hazard than pre-rolled cigarettes. For example, in Canada, the United States, Australia, the United Kingdom, and New Zealand, between 21% and 40% of RYO smokers have reported that a reason they smoked RYO cigarettes was because they thought that they were healthier than manufactured cigarettes.<sup>2–4</sup> However, this perception is false. Epidemiological evidence shows that RYO cigarettes are at least as hazardous as any other type of cigarette,<sup>5</sup> and animal research suggests increased addictiveness.<sup>6</sup>

Any notion that loose tobacco is more “natural” is severely undermined by evidence that the concentration of additives is higher in loose tobacco, at about 18% of dry weight, compared with 0.5% for factory made cigarettes (for British American Tobacco products), as calculated using legally mandated data from tobacco companies operating in New Zealand.<sup>7</sup>

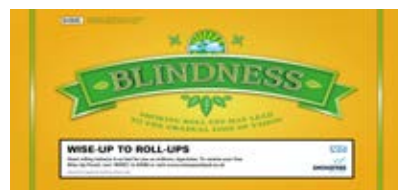
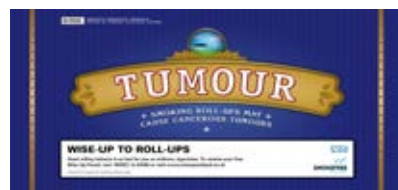
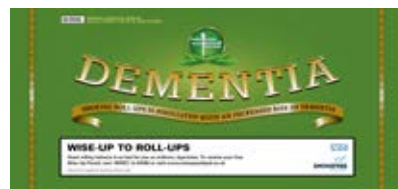
Some of these additives, including sweeteners such as honey, sugar, dextrose, and sorbitol, often at much higher concentrations than in factory made cigarettes, potentially make the product more acceptable to children. The high concentration of other additives would probably surprise RYO cigarette smokers. For example, RYO tobacco in New Zealand is up to 7.5% propylene glycol by dry weight. Among the 139 individual additives listed for loose tobacco are the less than wholesome sounding trans-benzaldehyde, ethyl butyrate, and phenylcarbinol.

Smoking RYO cigarettes that are made from loose tobacco is common in many jurisdictions though prevalence varies widely. For example, in the International Tobacco Control (ITC) Project four-country study, the prevalence of predominant use of RYO cigarettes among smokers in 2008 was 31% in the UK, 15% in Australia, 9% in Canada, and 6% in the US.<sup>2</sup> It was 38% in the New Zealand ITC cohort.<sup>4</sup> Prevalence has been increasing greatly in some jurisdictions. For example, in the UK, predominant use of RYO cigarettes among smokers older than 16 increased from 2% to 23% among women and from 18% to 39% among men between 1990 and 2010.<sup>8</sup>

Use of loose tobacco is not restricted to developed countries. For example, the proportion of smokers smoking RYO cigarettes exclusively or in combination with manufactured cigarettes was 29% in South Africa,<sup>9</sup> 58% in Thailand, and 17% in Malaysia.<sup>10</sup> The high prevalence of use of RYO cigarettes among youth,<sup>11–12</sup> further suggests that they may have a specific role in facilitating initiation of smoking.

Evidence shows that use of RYO cigarettes contributes to high rates of smoking observed among disadvantaged groups in many countries. For example, use of RYO cigarettes is reportedly higher among black South Africans,<sup>9</sup> Maori in New Zealand,<sup>4</sup> and smokers of lower socioeconomic status in Australia, the UK, the US, and Canada.<sup>2–4,8</sup> In New Zealand RYO cigarette smokers are also more likely than conventional cigarette smokers to have been diagnosed as having mental health, drug use, and alcohol related disorders, and to have hazardous drinking patterns.<sup>4</sup>

There is mixed evidence about whether reducing prevalence among RYO cigarette smokers is more difficult than for other smokers. In the ITC Project studies, RYO cigarette smokers smoked more heavily than smokers of factory



**Campaign materials: roll your own rebranded**

made cigarettes in New Zealand, Canada, and Australia—but not in the US, Thailand, Malaysia, or the UK.<sup>2–4,8</sup> RYO cigarette smokers were less confident in their ability to quit in South Africa,<sup>9</sup> and were mostly less likely to be planning or thinking about quitting in the ITC four-country study.<sup>2</sup> Data from Malaysia and Thailand were mixed when comparing RYO and factory made cigarette smokers on amount smoked, self rated addiction level, and their beliefs about intention and ability to quit.<sup>8,13</sup>

So what is to be done? Tobacco control interventions need to be formulated with an awareness of the extent of use of RYO cigarettes, and where this is substantial, specific interventions targeting use of RYO cigarettes may be justified. For example, tobacco tax regimes can seek to correct price differentials by introducing greater increases in excise for loose tobacco, as occurred in New Zealand in 2010.

Another measure might be tailored mass media campaigns to correct misperceptions that RYO cigarettes are less hazardous to health or more natural. This correction could also be achieved through health warnings on packs of RYO tobacco and a requirement to list all the additives in loose tobacco in packet inserts (albeit a very long list). All such interventions should be evaluated to assess impact and enable ongoing refinement.

A more radical move would be to ban the sale of loose tobacco, though legislative priorities to achieve smoke free goals should probably be to implement more critical measures such as a programme of substantial continuous annual tax rises or reductions in tobacco supply.

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I thank Nick Wilson and George Thomson, associate professors from the Department of Public Health, University of Otago, Wellington, who provided helpful comments and suggestions on this article.

Competing interests: None declared.

Provenance and peer review: Not commissioned; not externally peer reviewed.

References are in the version on bmj.com.

Cite this as: *BMJ* 2014;348:f7616

FROM THE FRONTLINE **Des Spence**

## Scotland be brave

Scotland is haggis, kilts, cabers, strawberry blonde hair, castles, shortbread, Nessie, grouse shooting, hills, and lochs. However, Scotland is also premature death, alcohol, drugs, benefit dependency, ginger nuts, knives, and deep fried Mars bars. This year we will vote on independence from the United Kingdom. For what it's worth, here's my opinion.

I consider all nationalism negatively; it's divisive, no matter how it may be dressed up. I fear that behind the nationalists' campaign lurks anti-English sentiment, a smouldering resentment of legitimate and illegitimate grievances. Although I am of direct Scottish descent and moved to Scotland as a child, I was born in Essex and have a Home Counties accent. I have experienced much anti-English sentiment and casual verbal slights. So, I resolved long ago not to change my accent, and I make no apologies for being an Anglo-Scot.

The national stereotypes of the English are warm beer, classic sports cars, roast beef, cricket, church spires,



**We need a world with fewer walls, not more. We all have much to lose from independence and no idea what we would gain**

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Pimm's, Panama hats, Wimbledon, and tea. But what about multiculturalism, indie rock, football violence, skinheads, tattoos, Dr Martens boots, and lager louts? England is not one place or one people, but many. And we "Weegies" in Glasgow have more in common with England's Geordies, Mancunians, Cockneys, Scousers, and Brummies than with many other Scots. Edinburgh has more in common with the Home Counties, and the north of Scotland has more in common with rural Yorkshire, Cumbria, and Cornwall.

The Scots are core to the British identity: classless, hard, direct, aggressive, certain, and with a strong sense of social cohesion; a foil to the class ridden, fey, polite, individualist, soft southerners. Crude stereotypes aside, then, England needs Scotland. Scotland in turn needs Wales and Northern Ireland—but most of all it needs England, as a check on our own national excesses.

And, pragmatically, what will become of the NHS? Though it is already devolved, health professionals currently

move freely, with working conditions and pensions preserved across the border. Historically we have had the mutually beneficial movement of doctors, but concern is already being expressed about the reluctance of doctors working in England to apply for jobs in Scotland. And what will happen to the royal colleges and the BMA?

Scottish national and cultural identity is undimmed because of, and despite, 300 years of union, and Scotland can gain more political autonomy without breaking that union. Travel afar and look back on Britain, and you value what we have. We need a world with fewer walls, not more. We all have much to lose from independence and no idea what we would gain. This vote will be visceral, with logic playing little part, but my heart says we're better together.

Des Spence is a general practitioner, Glasgow  
Competing interests: I have read and understood the BMJ Group policy on declaration of interests and have no relevant interests to declare.  
Provenance and peer review: Commissioned; not externally peer reviewed.

Cite this as: *BMJ* 2014;348:g1475

## BMJ BLOG OF THE WEEK **Kate Granger**

### Why compassionate care is so important

Having terminal cancer is rubbish. There is no way of getting around that fact. I've just spent nearly a week in hospital feeling exceptionally unwell and at times wondering whether I was going to recover from this episode of febrile neutropaenia. But I did and lived to see another day. Cancer has completely changed my life, but it's not all bad, and the powerful voice I seem to have developed as a result is being heard far and wide and is something that astonishes me.

I have four key values as both a clinician and as a patient. These are proper effective communication, "little things" such as holding someone's hand or sitting down at their level, "no decision about me without me," and "see me, not just my disease." These values make me who I am and I believe are vital

to consider when providing true compassionate care.

Sharing my illness was almost an accident, but has now become a daily part of my life. I am absolutely determined that in my remaining time my experiences as a patient will make a difference to improving care for other patients in the NHS. My #hellomynameis campaign, which encourages healthcare professionals to introduce themselves to each and every patient they meet has gone viral since I started it less than six months ago, and is really helping to bring about true cultural change in many organisations.

Therefore I was absolutely overwhelmed when I heard my work was to be recognised by NHS England in conjunction with NHS Employers, in the creation

of the Kate Granger Awards for Compassionate Care. These annual awards will recognise an outstanding individual and team working within the NHS who put my values right at the heart of their work.

When I first became a doctor I was very concerned about correct diagnoses and treatments. If you'd asked me what the most important quality of a doctor was I would have said competence. When I became a patient I soon realised how important compassionate attributes in the people looking after me were and how much I valued those. I am yet to meet a compassionate doctor who isn't also competent. The gentle arm rub by the doctor on Saturday night when I was at my most frightened and vulnerable was maybe one of



**I am yet to meet a compassionate doctor who isn't also competent.**

the most important aspects of care I received that weekend.

Kate Granger is a final year elderly medicine specialist registrar in Leeds. Kate is also a terminally ill cancer patient with a rare sarcoma. She regularly tweets and blogs about her experiences on the other side as a patient (@GrangerKate)

Read this blog in full and other blogs at [bmj.com/blogs](http://bmj.com/blogs).