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Helping smokers to quit

New report proposes a radical change for the NHS

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On 26 June 2018, 56 years after their landmark report calling for public health action on smoking, the Royal College of Physicians (RCP) published a new report calling for a change in how smoking cessation services are handled.[1]This report details the health consequences and societal costs of smoking. It documents the evidence that patients who continue to smoke compromise the effectiveness of many medical and surgical treatment interventions. Clearly, all public health professionals have a critical interest in doing whatever is possible to reduce cigarette smoking, and this has fuelled many jurisdictions to take action to promote a smoke free society.

Different approaches

The UK focused on testing the hypothesis, championed by Michael Russell, that the best way to reduce lung cancer mortality quickly was to provide treatment services to as many smokers as possible.[2] By 2010-11, the NHS was providing smoking cessation treatment to more than 800 000 smokers.[1] On a per population basis, this dissemination of treatment was many times larger than that provided in the US over the same period.[3]

A completely different approach was used in California (which has a population of around 40 million). California ran a comprehensive statewide tobacco control programme to empower non-smokers to take action to protect themselves against secondhand smoke—a "social norm approach" to achieving a smoke free society.[4] Australia focused instead on publicising the health consequences of smoking in hard hitting antismoking advertising campaigns, banned tobacco advertising, and implemented repeated and substantial increases in tobacco excise taxes.[5] From the data in the new RCP report, it seems that both Australia and California have had more success than the UK in lowering smoking prevalence rates.[5,6] Contrary to Russell's hypothesis, California's large reduction in smoking initiation resulted in a much faster reduction in lung cancer than was achieved in the rest of the US.[4,7]

Different perspectives

Russell's hypothesis has a lot of face validity, and the question is why the provision of smoking cessation treatments has not had a larger impact on smoking prevalence. One reason could be a failure to disseminate the treatments that were most effective in clinical trials. In the Eagles trial[8], in addition to receiving a pharmaceutical aid, participants completed up to 15 face-to-face visits and 11 telephone counselling calls during the 24 week trial. In the US, large scale, nationally representative surveys indicate that pharmaceutical aids disseminated without additional counselling support were not effective in increase smoking cessation.[9]

Indeed, the RCP report notes that smokers have voted with their feet and moved away from approved pharmaceuticals as their cessation aid of choice. E-cigarettes are now the most popular cessation aid in both the UK and the US.[10] The UK and the US have different views of this development. In the UK, a Cochrane review concluded that e-cigarettes are an effective cessation aid. [11] and somewhat controversially, UK health policy now promotes vaping as an alternative to smoking.[12]Reviewing the same data, the report from the US National Academies of Science, Engineering, and Medicine concluded that "there is limited evidence that e-cigarettes may be effective aids to promote smoking cessation."[13]

The RCP report notes that, to date, the recommendation for treating smokers in NHS settings is for healthcare professionals to encourage smokers to quit and, if they are ready, offer a cessation aid to help them do so. This has been labelled an "opt-in" treatment model. The RCP now proposes switching to an "opt-out" model (the case with chronic diseases), in which the default position is to provide evidence based quitting options as soon as a smoker is identified, regardless of the smoker's readiness or motivation to quit.

But smoking is a risk factor for chronic disease, not a disease in itself. Far from the doubling of cessation hoped for by the RCP, the results may be closer to those reported from a recent pragmatic randomised trial using an opt-out approach. The authors enrolled in a smoking cessation trial over 6000 workers who had self identified as smokers for their worksite wellness programme. The workers were given multiple chances to opt out of the trial. Only 2% did so, but of the rest just 20% actually logged on to the trial website at any time during the study.[14]

Only 12% of participants who were offered free e-cigarettes even requested them, and only 6% of those offered free pharmaceutical cessation aids requested one. Sustained abstinence rates through six months were less than 1% in the usual care group, the free e-cigarettes group, and the free cessation aid group.

With the current state of the evidence, perhaps the NHS should conduct a similar pragmatic randomised trial before considering whether to implement this major treatment change.

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1 Royal College of Physicians. Hiding in plain sight: treating tobacco dependency in the NHS. 2018. www.rcplondon.ac.uk/projects/outputs/hiding-plain-sight-treating-tobacco-dependency-nhs.

2 Russell MA. Cigarette dependence: II. Doctor's role in management. *BMJ* 1971;2:393-5.

3 Pierce JP, Cummins SE, White MM, Humphrey A, Messer K. Quitlines and nicotine replacement therapy for smoking cessation: do we need to change policy? *Annu Rev Public Health* 2012;33:341-56.

4 Pierce JP, Messer K, White MM, Kealey S, Cowling DW. Forty years of faster decline in cigarette smoking in California explains current lower lung cancer rates. *Cancer Epidemiol Biomarkers Prev* 2010;19:2801-10.

5 Australian Government Department of Health. *Smoking prevalence rates*. www.health.gov.au/internet/publications/publishing.nsf/Content/tobacco-control-toc~smoking-rates.

6 California Department of Public Health. California Tobacco Facts and Figures. 2016. www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document%20Library/ResearchandEvaluation/FactsandFigures/2016FactsFiguresWeb.pdf.

7 Pierce JP, Shi Y, Hendrickson EM, et al. Tobacco control in California compared with the rest of the USA: trends in adult per capita cigarette consumption. *Tob Control* 2017; Nov 27. doi:10.1136/tobaccocontrol-2017-053895.

8 Anthenelli RM, Benowitz NL, West R, et al. Neuropsychiatric safety and efficacy of varenicline, bupropion, and nicotine patch in smokers with and without psychiatric disorders (EAGLES): a double-blind, randomised, placebo-controlled clinical trial. *Lancet* 2016;387:2507-20.

9 Leas EC, Pierce JP, Benmarhnia T, et al. Effectiveness of pharmaceutical smoking cessation aids in a nationally representative cohort of American smokers. *J Natl Cancer Inst* 2018;110:581-7.

10 Caraballo RS, Shafer PR, Patel D, Davis KC, McAfee TA . Quit methods used by US adult cigarette smokers, 2014-2016. Prev Chronic Dis2017;14:E32. doi:10.5888/pcd14.160600 pmid:28409740

11 Hartmann-Boyce J, McRobbie H, Bullen C, Begh R, Stead LF, Hajek P. Electronic cigarettes for smoking cessation. *Cochrane Database Syst Rev* 2016;9:CD010216.

12 Aveyard P, Arnott D, Johnson KC. Should we recommend e-cigarettes to help smokers quit?BMJ2018;361:k1759. doi:10.1136/bmj.k1759 pmid:29695405

13 National Academies of Sciences, Engineering, and Medicine. *Public health consequences of e-cigarettes*. The National Academies Press. 2018. www.nap.edu/read/24952/chapter/1.

14 Halpern SD, Harhay MO, Saulsgiver K, Brophy C, Troxel AB, Volpp KG. A pragmatic trial of e-cigarettes, incentives, and drugs for smoking cessation. *New Engl J Med* 2018;378:2302-10.