

2016-02-22 Focus

AIR POLLUTION:

We are increasingly aware of the harmful effects of things we put in our mouth – junk food, too much sugar, too much salt, alcohol etc – but far too many remain blissfully unaware of the harm caused by what we breathe.

This week sees the publication of a report from the Royal Colleges (the RCP and the RCPCH) which examines the impact of exposure to air pollution across the course of a lifetime – and bear in mind that the damage is not just to our lungs.

The report is called 'Every breath we take' (but there's no truth in the rumour that a follow up report on the benefits of exercise will be called 'Every move you make.'). The Royal Colleges' report "starkly sets out the dangerous impact air pollution is currently having on our nation's health. Each year in the UK, around 40,000 deaths are attributable to exposure to outdoor air pollution which plays a role in many of the major health challenges of our day. It has been linked to cancer, asthma, stroke and heart disease, diabetes, obesity, and changes linked to dementia. The health problems resulting from exposure to air pollution have a high cost to people who suffer from illness and premature death, to our health services and to business. In the UK, these costs add up to more than £20 billion every year.

The report also highlights the often overlooked section of our environment – that of indoor space. Factors such as, kitchen products, faulty boilers, open fires, fly sprays and air fresheners, all of which can cause poor air quality in our homes, workspaces and schools." So our beloved wood burners – which we install because the warm glow they give extends to our hearts in that we feel we are communing with nature and adopting the natural alternative to fossil fuels – turn out to be part of the problem. This news has been greeted with the shock you felt on hearing that a gravitational wave detected recently proved Einstein's 100 year old theory!

As a result the report offers a number of major reform proposals setting out what must be done if we are to tackle the problem of air pollution. The Colleges tell us that these include:

Put the onus on polluters. Polluters must be required to take responsibility for harming our health. Political leaders at a local, national and EU level must introduce tougher regulations, including reliable emissions testing for cars.

Local authorities need to act to protect public health when air pollution levels are high. When these limits are exceeded, local authorities must have the power to close or divert roads to reduce the volume of traffic, especially near schools.

Monitor air pollution effectively. Air pollution monitoring by central and local government must track exposure to harmful pollutants in major urban areas and near schools. These results should then be communicated proactively to the public in a clear way that everyone can understand.

Quantify the relationship between indoor air pollution and health. We must strengthen our understanding of the key risk factors and effects of poor air quality in our homes, schools and workplaces. A coordinated effort is required to develop and apply any necessary policy changes.

Define the economic impact of air pollution. Air pollution damages not only our physical health, but also our economic wellbeing. We need further research into the economic benefits of well-designed policies to tackle it.

Lead by example within the NHS. The health service must no longer be a major polluter; it must lead by example and set the benchmark for clean air and safe workplaces.

The report also emphasises how the public can do their part to reduce pollutant exposure. Noting the impact collective action can have on the future levels of air pollution in our communities.

Suggestions include: "Trying alternatives to car travel or preferably taking the active option: bus, train, walking and cycling, aiming for energy efficiency in our homes, keeping gas appliances and solid fuel burners in good repair, and learning more about air quality and staying informed."

As part of this work the RCP has created '6 steps to breathing better air' for the general public:

Be aware of the air quality where you live

Replace old gas appliances in your home

Ensure you have an energy efficient home

Alter how you travel. Take the active travel option: bus, train, walking and cycling

Talk to your MP

Harness technology to stay informed and monitor air pollution effectively

Coal burning has diminished in recent years but traffic on the roads has increased – and, in particular, the number of diesel vehicles on the roads has increased dramatically. We have concentrated on reducing carbon emissions but have ignored particulates and the oxides of nitrogen. We're told that 50% of pollution is now down to diesel fumes as opposed to some 14% in 1995. This has detrimental effects on young and old alike – during the school run fumes from the car in front are being vented into your car and breathed in by the kids you are ferrying.

Drastic remedies have been suggested – it's even been suggested, as mentioned above, that we close busy roads when they pass close by schools. (I'm not sure quite how they are proposing to deal with the problems resulting from the diverted traffic, though.) What is easier to implement is that pollution avoidance should be 'built into planning strategy' – that won't go down well with Essex County Council which resists the suggestion that health considerations should ever be allowed to get in the way.

What may well change our opinions are the new developments in sensor technology which now enable us to monitor personal exposure to air pollutants directly. We may well become more aware of 'indoor pollution' and start throwing away our air fresheners. Most important of all, according to the Royal Colleges is that we should resist the temptation to keep our homes hermetically sealed and should instead throw open a few windows two or three times a day for a few minutes in order to let in a bit of fresh air!

MORE NHS WOES:

Nick Trigg reports for the BEEB that: “Nearly every hospital in England is now in deficit as financial problems in the NHS threaten to spiral out of control. Of the 138 hospital trusts, just seven are still in surplus according to the 2015-16 third quarter accounts, which cover April to December. The figures also showed a total NHS trust overspend of £2.26bn once ambulance, mental health and community services were taken into account. Experts said performance was deteriorating at an ‘alarming rate’”.

Add to this that general practice is falling to pieces, mental health has received damning criticism, and the junior hospital docs are rebelling. The NHS is not in a good place at present.

TOOTH BRUSHING AND YOUR HEART:

If you don’t brush your teeth twice a day, you’re more likely to develop heart disease according to a Scottish Health Survey published online in the BMJ.

They looked at over 11,000 adults – and once the data were adjusted for established cardio risk factors such as social class, obesity, smoking and family history of heart disease, the researchers found that participants who reported less frequent tooth brushing had a 70% extra risk of heart disease compared to individuals who brushed their teeth twice a day, although the overall risk remained quite low. Participants who had poor oral hygiene also tested positive for inflammatory markers such as the C-reactive protein and fibrinogen.

I always thought that the link was simple – people who don’t look after their teeth are unlikely to look after their general health (including ensuring the wellbeing of their heart). It seems though that there’s more to it than that – and inflammation seems to be the common factor – when this occurs in the mouth/gums – as in the case of periodontal (gum) disease it can indirectly play an important role in the clogging up of arteries.

MATERNITY BUDGET:

The Cumberlege report says that maternity care is neither as personal/friendly nor as safe as it should be. Sarah Boseley writes in The Guardian under the headline: “National maternity review calls for £3,000 ‘birth budgets’ – recommends women choose where to give birth, and be cared for by same small team throughout pregnancy.”

She says this is “a blueprint for safer maternity care that offers all women the choice to give birth where they want, with the support of the same midwife throughout pregnancy, labour and the early weeks of motherhood.”

You won’t be given the money ... what do you mean: “Oh, spoilsports!” It’s to be used on your maternity care – so you will be allowed to choose how it should be spent within reason. (Bear in mind that it’s a myth that you must eat sufficient chocolate for two during pregnancy – so, no matter how well you word your application, it’s unlikely to be approved.) You will be given the choice of giving birth in a midwife-run unit, a hospital or at home.

Continuity of care is a good plan – in an NHS which is increasingly fragmented, going back to the ‘good old days’ is not such a bad idea. Additionally it doesn’t harm to remind any of us, clinicians and patients alike, just how much these services cost (and bear in mind that £3,000 is just the basic cost for an uncomplicated pregnancy.)

Dr John