

Quit smoking with SMS

'This is it! - QUIT DAY, throw away your fags. Today is the start of being QUIT forever, you can do it!' This and other motivational text messages helped adults from the UK quit smoking in a recent trial. The texts also told recipients where to go for help, how to beat cravings, and what to do after a lapse. After six months of texting, including five a day for the first five weeks, one in 10 recipients managed to quit completely (10.7%). Controls did half as well (4.9%, relative risk of quitting for intervention group 2.20 (95% CI 1.80 - 2.68)). Controls received fewer texts, which were unrelated to smoking, such as 'Thanks for taking part! Without your input the study could not have gone ahead!' Researchers verified abstinence with salivary concentrations of cotinine, and also checked that the texts didn't cause any extra traffic accidents or thumb pain. Almost 600 adults took part. All wanted to quit, and most had tried before.

Two-thirds of the world's population now own a mobile phone, say the researchers, and scaling up an intervention like this could be relatively straightforward. A barrage of texts seems to work about as well as other behavioural approaches such as counselling. Cost-effectiveness analyses are under way.

A 10% quit rate is low, says the accompanying editorial, but every little helps. Researchers should persevere with an approach that has the potential to reach all sections of society



equally. Mobile phone ownership is largely independent of income and social class, unlike smoking.

Free C et al. *Lancet* 2011;378:49-55.

Water will do where soap is scarce

Hand washing with soap helps prevent childhood diarrhoea in rural areas of developing countries. But soap is expensive, hard to come by, and often kept some way from the communal water source. Hand washing with water alone is much more common in these communities, and may also protect children from diarrhoea, according to a study from rural Bangladesh. Young children in families where adults regularly washed both hands with water before preparing food had significantly less diarrhoea than children in families where adults did not regularly wash their hands before preparing food (odds ratio 0.67 (95% CI 0.51 - 0.89)).



Hand washing before preparing food or after a trip to the toilet looked more important than hand washing before feeding a child, before eating, or after cleaning a soiled child in these analyses. All were adjusted for characteristics that might confound the association between more washing and less diarrhoea, such as income and education. As expected, hand washing with soap, though unusual, was associated with the lowest risk of diarrhoea among children under 5 years old in these 347 households in 50 villages.

Local hygiene programmes continue to promote soap here and elsewhere, say the authors. They also promote an unrealistic schedule of hand washing that would leave low income parents with time for little else. A sharper focus on washing before preparing food and after going to the toilet might be a reasonable compromise, they write.

Luby SP et al. *PLoS Med* 2011, doi:10.1371/journal.pmed.1001052

Longer telomeres equal longer life

Chromosomes have nucleoprotein caps called telomeres that tend to shorten with age, a process that has been linked to increasing risk of cancer and death. Researchers recently confirmed the association in a cohort of 787 Italian adults, who had their telomeres measured in 1995 then again in 2005. Researchers tracked deaths and cancers in the cohort until 2010.

In fully adjusted analyses, adults with the shortest telomeres in 1995 were three times more likely to develop cancer (hazard ratio 3.02 (95% CI 1.84 - 4.97)) and eight times more likely to die from cancer (8.17 (2.86 - 23.29)) than those with the longest telomeres. Results were similar in analyses using an average of the two measurements, instead of baseline telomere length, and the link was independent of more than a dozen potential confounders including age, sex, social class, smoking, drinking, inflammatory markers and chronic infection.



Participants were at least middle-aged when recruited, and 137 developed cancer during 15 years of follow-up – enough to establish a general association, but not enough to

explore different cancer types, say the authors. Mortality analyses included just 62 deaths, so the confidence intervals around these results are very wide.

Hampton T. JAMA 2011;306:42-44.

Half the PCIs done for non-acute indications are inappropriate or uncertain

More than half a million US citizens have a percutaneous coronary intervention (PCI) each year. Most procedures done for acute indications such as heart attack are appropriate, say researchers, but around half of the PCIs done for non-acute indications may not be.

They matched data from an established PCI register to appropriateness criteria recently developed by six professional organisations. Among 500 154 PCIs, more than a quarter (28.9%, 144 737) were done for patients without an acute indication. Almost 12% (16 838) of these procedures were classified as inappropriate or unlikely to improve

a patient's health or prolong survival. A further 38% (54 988) were classified as uncertain. Most inappropriate procedures were done for patients with little or no angina, low-risk ischaemia on non-invasive testing, or low-risk coronary artery disease on angiography. Of these patients, 96% were treated inadequately with anti-anginal drugs.

More than 1 000 US hospitals contributed to the registry. The proportion of non-acute PCIs that were inappropriate varied from none to 55% among hospitals. Differences in patient volumes or source of funding (private or public) explained very little of the variance.

These results suggest that hospitals, professionals and their organisations need to find a way to target non-emergency PCI better, say the authors. Some hospitals need more help than others.

Chan PS et al. JAMA 2011;306:53-61.

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