Two stories from history for World Health Day 2018

The fight against cholera

In October 2017 the World Health Organisation (WHO) met in Paris to pledge to eradicate 90% of cholera deaths by 2030. The disease still kills around 100,000 people every year. It spreads through dirty water, but it is easy and cheap to treat. Cholera first reached Britain in 1831 and had a deadly impact in the new, dirty, overcrowded Victorian cities.

You may be familiar with the clever work of Dr John Snow in the 1848 cholera epidemic in London. By careful observation he tracked down the source of cholera in his neighbourhood to a water pump, contaminated by a nearby cesspit. By removing the handle from the pump he virtually wiped out cholera in his neighbourhood. Part of his investigation centred on the nearby brewery workers who rarely, if ever, caught cholera. It turned out that because they drank beer rather than water they were safe from cholera.

Snow's careful scientific observation was followed by the work of Pasteur and Koch, who developed Germ Theory, then made a specific vaccine to target cholera. As a result, cholera was virtually wiped out in Britain, although as the WHO pledge shows, cholera is still a killer in some parts of the world.

The end of smallpox

Smallpox was a killer disease until 1796, when an English country doctor, Edward Jenner, noticed that milk maids often caught cow pox from their cows, but then never, ever, caught smallpox. He developed a vaccination that used cowpox to prevent smallpox. He didn't know the science behind it, and it took years to prove it, but by 1853 the British government made vaccination compulsory and the disease was virtually wiped out in Britain. Following a concentrated WHO campaign the last case of smallpox in the whole world was reported in Somalia in 1977. In 1980 the WHO declared the disease totally eradicated: a triumph for scientific medicine.

And yet, ever since vaccination has been made compulsory, there have been protesters and anti-vaccination leagues, who oppose vaccinations for a variety of reasons. Scientists are worried that the rate of vaccinations in the UK is now too low to prevent epidemics of measles, whooping cough and other common but controlled childhood diseases. There is a big debate in many countries about whether parents should have the right to decide whether or not to have their children vaccinated. Should vaccination be compulsory to protect everyone? Or is it selfish to insist that your children are not vaccinated? The future control of many once-deadly diseases might depend on your answer to a question like this...

Find out more:

- Use GLP World Toilet Day resources to find out more about John Snow and investigate cholera in 19th-century London. http://clients.squareeye.net/uploads/glp/Toilets_in_world_history_-_Where_did_people__go__in_the_past.doc

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- Investigate dirt, disease and the campaign for public health using the British Library's Filth and Fever resource http://www.bl.uk/learning/histcitizen/21cc/publichealth/publichealthintro.html
- Use maps from the World Health Organisation to find out where cholera is a risk today http://gamapserver.who.int/mapLibrary/Files/Maps/Global_Cholera(WER)_2016.png, or use interactive maps available online to do the same http://gamapserver.who.int/gho/interactive_charts/cholera/atlas.html

  http://www.healthmap.org/en/

To think about:

- How important is science in medicine? How important is one person's 'hunch' in new discoveries?
- If John Snow discovered the cause of cholera in 1858, and Koch developed a vaccine, why do 100,000 people a year still die from cholera?
- Should vaccination be compulsory for everybody?
- Which of the two stories – cholera or smallpox – is the biggest success? Why?

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