

Medicine topic 3b knowledge organiser: How did treatment and prevention improve during the Enlightenment? (1700-1900)

Lesson 5: How had surgery improved by 1900?

Key words for this lesson:

Aseptic Surgery: Keeping microbes out of a wound

Antiseptic Surgery: Killing off germs

Anaesthetic: Stops you feeling pain in surgery

Problems in hospitals by 1900: Pain – patients can die of clinical shock during surgery. 2.

Infection – people were unaware of microbes that cause infection. Surgeons would wear the same dirty apron for every surgical procedure they carried out, passing on infection between patients. 3. Bleeding – patients can die if they lose too much blood during surgery. How was the problem of pain overcome? In 1800, surgeons tried various ways to ease suffering of patients – e.g. getting them drunk, knocking them out and giving them opium. **Nitrous Oxide** or 'laughing gas' was discovered by Sir Humphry Davy. It was never really widely used as Davy's findings were published in a book that was not well known, the book was given an obscure name. **Ether** used by J.R. Liston during a leg amputation. However, it had very unpleasant side effects. **Chloroform** used by James Simpson and some friends at his home. They realised that it could be used as during surgery. However, it led to unexplained deaths. The dose given could not be measured or controlled. Eventually, infection was tackled by **aseptic** surgery with Joseph Lister's **Carbolic Spray**.



Lesson 6: Jenner and the Smallpox vaccination

Key words for this lesson:

Inoculation: Deliberately infecting with a disease to avoid catching it later.

Vaccination: giving a weaker dose of a disease to avoid catching later.

Cowpox: Milk maids got spots and a rash from milking cows

Smallpox: A deadly disease: fever, headache, backache, and you vomit. It spreads to your skin as a rash with pink spots.

Edward Jenner observed that milk maids who caught cow pox did not get small pox. He made a vaccination from cow pox, which he tried on a young boy called **James Phipps**. He did not catch smallpox.

Opposition to the Smallpox Vaccination Jenner could not scientifically explain how it worked. Inoculators were afraid of losing money. Many were worried about side effects; they worried about giving themselves a disease that from cows. Some members of the Church believed that vaccination was not natural.



Lesson 7: New approaches to preventing disease

Key words for this lesson:

Laissez faire: Do nothing/ leave it be. Governments didn't get involved.

Antibodies: Particles in the body that identify and remove germs.

Public Health Acts: Rules made by the government to improve conditions

Edwin Chadwick :In 1842 he was asked by the government to report on the living conditions and health of the poor. Chadwick concluded that poverty was caused by ill health which was caused by the terrible conditions in which people lived. He said that ratepayers can cut their taxes and save money in the long-term by looking after the poor and to spend money improving their health. In his "Report on the Sanitary Conditions of the Labouring Population" he said industrial towns should improve the conditions of the poor.

The 1848 Public Health Act: Set up a non compulsory board of health and gave money to improve the conditions.

The 1875 Public health Act organised drainage and refuse collection provided a pure water supply, appointed a Medical Officer of Health and provided parks to exercise and street lights.. The Great Stink prompted Parliament to sort out London's sewage and drainage system and to clean up the River Thames. Within a year **Sir Joseph Bazalgette** had begun to build an extensive system of sewers and drains.

Lesson 8: How did the government try and prevent cholera?

Key words for this lesson:

Cholera: A disease that dehydrated people so their organs didn't work

Epidemic: Outbreak of disease

Cesspit: Pit for storing waste

Cholera was nicknamed the 'blue death.' People died of diarrhea and sickness, which dehydrated patients.

John Snow proved cholera was in the drinking water by mapping out the deaths from cholera. By taking the handle off the **Broad Street pump**, people could not access the water so no longer died. This linked cholera and dirty water. A cess pit had leaked into the water supply.

