

Changes in health and medicine

Medicine has changed beyond recognition since medieval times. Back then, the church heavily influenced treatment. People tried to pray themselves better and confess the sins they believed caused illness.

Doctors followed Hippocrates' theory of the four humours, aiming to keep your blood, phlegm, yellow bile and black bile in alignment.

Healers sometimes also used leeches to suck out so-called 'bad blood'. Living conditions were pretty dank too. Houses were crowded together, with no sanitation, no clean water and no waste disposal.

So when the Black Death arrived in 1348, it spread quickly and seriously reduced the population.

People had weird ideas about what caused it: everything from Jews poisoning the water to earthquakes in China.

Things got a little better during the 16th and 17th centuries.

In the 1540s a guy called Andreas Vesalius started carrying out human dissections and published a book on human anatomy.

Around the same time a man called Ambroise Paré published a book on surgical techniques that influenced surgeons across Europe.

And a generation later a Physician called William Harvey published a book about the heart's pump action and blood circulation.

These theories laid the foundation for future progress. But in practice, knowledge of medicine was poor, and public health was still very shoddy.

Not least because the industrial revolution of the 18th and 19th centuries thrust masses of people into crowded, dirty cities, where illnesses spread like wildfire. Tuberculosis accounted for 1 in 7 deaths.

In the 1790s, a doctor called Edward Jenner developed the first ever vaccine. It was against smallpox, and by 1852 it had become compulsory. Today smallpox is eradicated thanks to his work.

In the 1840s, following cholera and typhoid epidemics in London, a man called Edwin Chadwick studied the way disease spread in industrial towns. His work eventually led to better sanitation.

Bitesize

Other crucial advances of the time included Louis Pasteur establishing the link between germs and disease, Joseph Lister's insistence on sterilising the operating theatre with antiseptic, and James Simpson's development of the first anaesthetic in 1847, chloroform, which received the ultimate endorsement when Queen Vic herself used it to take away the pain of childbirth.

Modern medicine really started to kick off in the 20th century.

With the pre-First World War discovery that radiation kills cancer cells, Marie Curie put the wheels of modern cancer treatment in motion.

While Alexander Fleming's sort-of-kind-of accidental discovery of penicillin, coupled with Florey and Chain's mass production of it, changed the course of medical treatment forever.

By 1937 penicillin was widely available, which proved crucial in treating the victims of the Second World War.

Then, of course, there was the National Health Service, founded in 1948, which provided free healthcare to every citizen, regardless of wealth.

Developments in technology also enabled organ transplants, with the first kidney transplant taking place in 1952, and the first heart transplant in 1967, while new scanning techniques like X-ray, ultrasound, and MRI, meant we could see inside the body for the first time.

Today, developments like the discovery of DNA and genetic engineering mean we're able to tackle genetic diseases once thought incurable.

Over the years, religion, technology, industrialisation and science have shaped medicine into 21st century healthcare.

Which beats leeches, any day.