Edexcel GCSE (9-1) History

Medicine in Britain, c.1250 – present

c1250-c1500: Medicine in Medieval England

1) Disease was thought to have supernatural causes like…

- A punishment from God for people's sins. They tried to cure disease by prayer and repentance.
- Evil supernatural beings, like demons or witches.
- Evil spirits living inside someone.

2) Church slowed down progress in medieval medicine.

- Church said that disease was a punishment from God. This prevented people from trying to find cures for disease; all you could do was pray and repent.
- They made sure scholars of medicine learned the works of Galen as his ideas fit the Christian belief that God created human bodies and made them to be perfect. Couldn't disagree with Church (religion) at the time.
- Church prevented dissection – so medical doctors couldn't discover ideas about human anatomy – had to learn Galen's false ideas.

3) Astrology used to diagnose disease.

- Idea that the movements of planets and stars effect the Earth and people, causing disease.
- Different star signs thought to affect different parts of the body.

4) Four Humours theory.

- Created by Hippocrates.
- Body made up of four fluids: blood, phlegm, yellow bile, black bile. They must be in balance for good health.
- Galen developed this – diseases could be treated using opposites.

5) Miasma theory.

- Bad air causes disease when someone breathes it in.
- Prompted people to do hygienic things, like cleaning the streets.

6) Hippocrates and Galen were influential.

- Their texts were considered important and truthful by the Roman Catholic Church.
- Their ideas were taught for centuries after their deaths.
- Hippocratic Oath = promise made by doctors today to obey rules of behaviour in their professional lives.

7) Prayer and Repentance were treatments.

- Sick people prayed to saints.
- Went on pilgrimages to holy shrines.
- Flagellants = people who whipped themselves in public for repentance.

8) Bloodletting and purging.

- Used to balance the four humours.
- Purging = getting rid of other fluids from the body by excreting.

9) Purifying the air.

- People carried posies or oranges around them to counter miasma.
- People purified or cleaned the air to prevent sickness.

10) Herbal remedies.

- Bought from an apothecary or made at home.
- Contained herbs, spices and minerals.

11) Physicians' experience.

- Male doctors who had trained at university for 7 years.
- Read ancient texts and books, but had little practical experience.
- Only rich afforded to see a physician.

12) Apothecaries and quacks.

- Prepared and sold remedies.
- Most common and most accessible form of treatment.
- Quacks = people without any medical knowledge who sold medical treatments that didn't work.

13) Barber surgeons.

- Barber-surgeons weren't doctors, so had little medical training.

14) Hospitals.

- Few hospitals in medieval Britain.
- The sick were treated at home by family.
- Hospitals were to care for the elderly, not to treat disease.

15) Black Death.

1348-1350.

- Bubonic plague = spread by bites of fleas from rats carried on ships. Causes headaches, a high temperature and swellings on the skin.
- Pneumonic plague = airborne, spread by coughs and sneezes. Attacked the lungs, making it hard to breathe and victims coughed up blood.

16) Black Death ideas at the time.

- Punishment from God.
- Four humour imbalances.
- Miasma.
- Astrology.

17) Local governments tried to prevent spread of disease.

- They built new cemeteries outside of the town, away from houses, as people thought you could catch the plague being close to the bodies of dead victims.
- Town of Gloucester tried to shut itself off from the outside world, as they thought the plague was spread by human contact.

c1500-c1700: The Medical Renaissance in England

18) Change (and some continuity) in the Renaissance.

- Emergence of science. People thought about how the human body worked based on direct observation and experimentation.
- New books found said that anatomy and dissections was very important. This encouraged people to examine the body themselves, and to draw their own conclusions about the causes of diseases.
- People began to question Galen, but still studied his writing and theories.
- Church no longer had much control over medical teaching.

19) Medical knowledge of doctors improved.

- Dissections became a key part of medical training.
- Physicians made important discoveries about disease and the human body.
- New weapons used in war, meaning doctors had to treat injuries they never saw before, forcing them to discover new treatments.
- Hospitals now were run by trained physicians to treat illness.

20) Vesalius.

1538, 1543.

- Performed dissections on executed criminals.
- 1538 – *Six Anatomical Pictures.*
- 1543 – *Fabric of the Human Body.*
- His findings encourages others to question Galen. Doctors realised there was more to discover about the body due to Vesalius' questioning attitude.
- Vesalius showed dissecting bodies was important to find out the structure of the human body. This increased the use of dissections in medical training.

21) Thomas Sydenham.

1676.

- Found it important to gain practical experience in treating patients. As a doctor, he made detailed observation of his patients and kept accurate records of their symptoms.
- Said diseases could be classified – the different types of diseases could be discovered using patients' symptoms.
- Showed scarlet fever was different to measles.
- 1676 – *Medical Observations*
- His work made diagnosis more important part of doctors' work.

22) William Harvey.

1628

- Discovered the circulation of the blood.
- His discoveries gave doctors a new map showing how the body worked. Without this map, blood transfusions or complex surgery wouldn't be possible.
- Proved Vesalius was right about how important dissection was.
- However, the theories took a long time to be used in doctors' treatments. Bloodletting was still used, and blood transfusions were rarely successful.

23) Printing Press.

1446.

- Making a single copy of a book by hand takes a long time. Books were therefore rare and precious.
- New ideas would have to be widely accepted before anyone would be bothered to copy them by hand.
- Printing allowed books to be copied much easier, spreading new ideas and questions, translated into many languages, leading to faster progress.
- Students in universities could have their own textbooks – could study in detail.

24) Royal Society.

Founded in 1660.

- Supported by King Charles II, giving it a high status.
- Spread new scientific theories, and got people to trust new technology.
- Motto was 'take no-one's word for it', encouraging people to question scientific ideas.

25) Some doctors still…

…followed old ideas, like bloodletting, purging, reading books instead of treating patients.

26) People still used other healers.

- Doctors were still expensive, so people still used apothecaries, barber-surgeons and quack doctors.

27) People sought care in the community and at home.

- Wise women (skilled in herbal remedies) still provided medical attention in the community.
- People would keep their own medical or recipe books, passed down in the family.

28) Hospitals were fairly basic.

- Renaissance hospitals were for the sick and the deserving poor – those who led hardworking, respectable lives. Those with incurable or infectious diseases weren't allowed in.

29) Great Plague.

1665.

- Killed 100,000 people in London (20% of London).
- Superstition still dominated treatment.
- Remedies made.
- Bloodletting used.
- Miasma was thought to be a cause, so people carried herbs or flowers.
- Live chicken strapped to swellings.

30) Preventing spread of the plague.

- Largely ineffective as they didn't know the cause of the disease…
- Councils tried to quarantine plague victims to prevent them passing the disease on. Victim's house was locked and a red cross was painted on the door.
- Areas were people crowded together like theatres were closed.
- People avoided contact with other people.
- Dead bodies of plague victims buried in mass graves away from houses.
- Cats and dogs killed; thought they carried the plague.

c1700-c1900: Medicine in 18th and 19th Century Britain

31) Edward Jenner.

- 1796 – Injected a small boy with cowpox. Jenner then infected him with smallpox, and he didn't catch smallpox. Cowpox was the vaccination.
- 1798 – Published his findings.
- Some people resisted vaccination, as they were worried about getting cowpox.
- Parliament gave Jenner £30,000 to open a vaccination clinic.
- Vaccine was successful – huge fall in number of smallpox cases.
- Jenner didn't know why his vaccine worked, meaning he couldn't develop any other vaccines.

32) Louis Pasteur.

- Proved there were germs in the air – showed that sterilised water in a closed flask stayed sterile, while sterilised water in an open flask bred germs.
- 1861 – Pasteur published his Germ Theory, arguing that microbes in the air caused decay.
- Discovered each germ for each disease had to be identified individually.
- The Germ Theory was met with scepticism.
- It soon gained popularity.
- It inspired Joseph Lister to develop antiseptics.
- It proved John Snow's findings about cholera.
- It linked disease to poor living conditions, putting pressure on the government to pass the 1875 Public health Act.

33) Robert Koch.

- Built on Pasteur's work by linking specific diseases to the particular microbe that causes them.
- Identified anthrax spores and the bacteria that cause septicaemia (1876), tuberculosis (1882) and cholera (1883).
- He used agar jelly to create solid cultures, allowing him to breed lots of bacteria.
- Then used dyes to stain the bacteria so they were more visible under the microscope.
- Then took a photo to record his findings.

34) What did Florence Nightingale do?

- 1853-1856.
- Crimean War broke out, and Nightingale went as a Nurse.
- She made sure all the wards were clean and hygienic, that water supplies were adequate and that patients were fed properly.
- Nightingale improved the death rate from 42% to 2% in 2 years.