

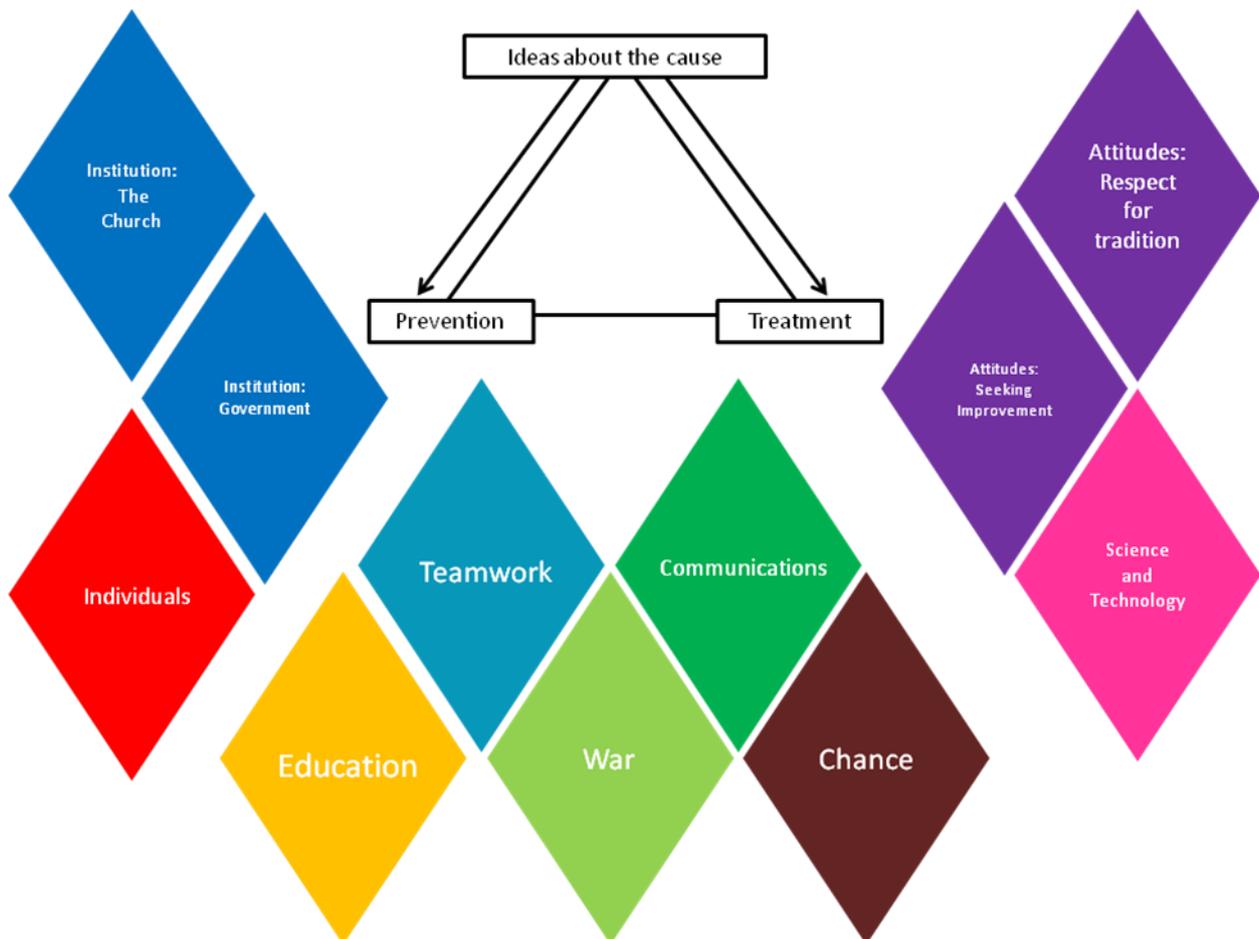
GCSE History Knowledge Booklet

The Renaissance c1500-c1700

The History of Medicine is about some of the most important questions in the whole of history. Today we live far longer than our ancestors did. We are healthier and have more chance of surviving major illness. **So why has medicine- and our health - changed so much over the centuries? This paper is about why there were changes and continuities throughout the ages.**

This booklet will help you to focus on the period of the Medical Renaissance in England and the changes and continuities, progress and stagnation in medical thinking and practice.

Examples of Factors that causes change and continuity.



History of medicine Contents

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Key Topic 2: c1500-c1700: The Medical Renaissance in England

Renaissance means 'rebirth' or 'revival of learning'. People at this time focused on ideas of Greek and Romans again and wanted to learn. (Attitudes-Helping). They looked carefully of ideas of Galen as they were worried that in the Middle Ages people may have translated them wrong. New editions of Galen's books were published.



People in the Renaissance loved enquiry and began challenging old ideas. Doctors began to realise Galen had made mistakes. (Attitudes-Helping). However, not everyone agreed with these new ideas and continued to believe the old ones. (Attitudes-Hindering)

Key Topic 2.1 Ideas about the causes of disease and illness in the Medical Renaissance

Continuity - What ideas about the cause of disease stayed the same?

- Most people continued to believe that Gods caused illness (Religion-Hindering)
- Most people continued to believe in theory of 4 humours.
- Some began to link the fact that dirty places led to more deaths. They believed illness was caused by bad or dirty air - called miasma. (Attitudes-Helping)

Change - What ideas about the cause of disease changed?

- The scientific revolution meant that scientists had changing attitudes and now challenged old ideas. They used experiments to prove findings
- The Royal Society was founded in 1660. They sponsored scientists to research and print findings about physics, botany, astronomy and medicine.

The Royal society helped to spread new ideas.



- The printing press was invented in the 1450s, by 1500 they were all over Europe and spread new ideas.

- **Thomas Sydenham** was a doctor who championed the idea of observation. He

believed that each disease was different and it was important to identify the exact disease so that the correct remedy could be chosen to cure it.

- Sydenham wrote a book called *Observationes Medicae*. This became the standard medical textbook for the next two centuries and include detailed descriptions of how to diagnose many illnesses such as scarlet fever.
- **Paracelsus** was a doctor who was willing to speak out at a time when could have been killed for it. He said that the Theory of Four humours wrong and illnesses caused by chemicals and should be treated with chemicals. He still believed religion had an impact and said God had sent secret messages about how world works. However most people though he was mad and universities did not teach his ideas. (Individual Genius - Helping)/Attitudes-Hindering)

Science
and
Technology

Individuals

Knowledge Check 2.1 Causes of disease in the Medical Renaissance

1. What does the word 'Renaissance' mean?
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2. What did doctors realise about the work of Galen during the Renaissance?
 -
3. Give two ideas about the cause of disease that stayed the same during the Renaissance?
 -
 -
4. How did doctors during the scientific revolution challenge old ideas?
 -
5. When was the Royal Society founded?
 -
6. How did it help to progress medicine?
 -
7. What ideas was the doctor Thomas Sydenham fan of?
 -
8. What was Sydenham's book called?
 -
9. What idea did Paracelsus challenge?
 -
10. Why was the printing press useful in the develop of medicine?
 -

Key Topic 2.2 Approaches to prevention and treatment in the Medical Renaissance.

Continuity - what ideas about the prevention and treatment of disease stayed the same?

- Continued to focus on good diet and exercise to cure disease.
- Bleeding and purging to balance humours.



- God and King would cure disease - Between 1660 and 1682 over 92,000 people visited the King's court believing that if Charles II touched them they would be cured of Scrofula (a skin disease)



- Still prayed and wore charms. Many wore Abracadabra charms during Great Plague. (Religion-Hindering)
- Herbal remedies with many written down e.g. Culpeper's The Complete Herbal was a famous book. New ingredients used as European travels to America and Asia. Rhubarb from Asia used to purge bowels and make people vomit. Opium imported from Turkey and used as an anaesthetic. Tobacco used for a range of problems. (Trade and Communication-Helping)



Change- what ideas about treatment changed?

- Many medieval hospitals were part of monasteries so they closed when Henry VIII closed the monasteries in the 1530s.
- Some free hospitals were set up and these were staffed by physicians rather than monks.
- Some hospitals were taken over by town councils and looked after the elderly poor.
- Inoculation began to be used to prevent against certain diseases - such as smallpox

Who were the healers during the Medical Renaissance in England?

Continuity with Medieval times

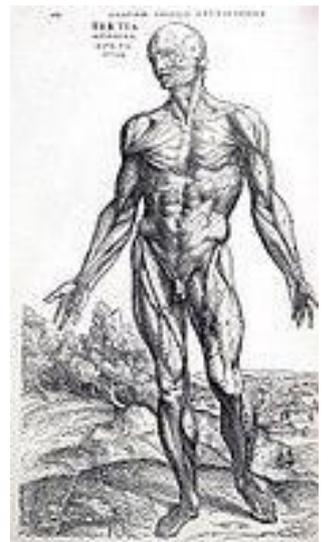
Attitudes:
Respect
for
tradition

- There were still University trained physicians who accepted the ideas of Hippocrates, Galen and Arab doctors. Some were still reluctant to accept Galen could have been wrong. (Attitudes- Hindering)
- 'Quack doctors' still made their living through going around towns selling treatments.
- People still visited apothecaries but the apothecary sold and mixed medicines prescribed by physicians.
- Women worked as midwives BUT Women less important from 1620 as Peter Chamberlain invented forceps - these were used to free baby from womb during a difficult birth. After this male physicians said only men should use forceps as only they had been to university to gain anatomical knowledge.

Changes from Medieval time

Individuals

- Doctors studied the work of Vesalius on anatomy and Harvey on physiology alongside the books of Galen and Hippocrates. This was because their training emphasised the importance of taking a scientific approach.
- Vesalius trained at Louvain, Paris and Padua universities, and ransacked cemeteries for bones and for bodies to dissect.



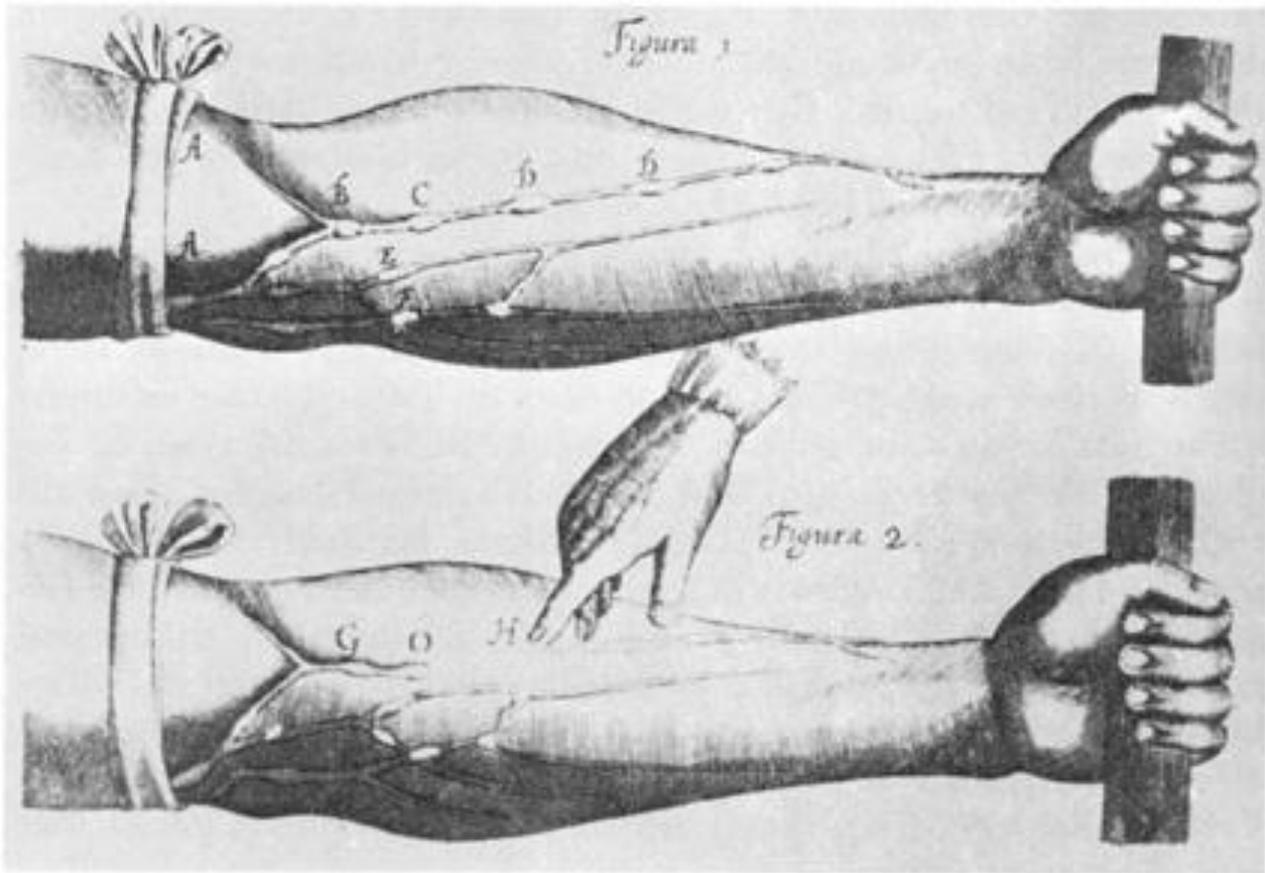
- **Vesalius** realised that Galen was wrong, when he discovered that the great man was mistaken about there being two bones in the jaw, and about how muscles were attached to the bone.
- **Vesalius** said that medical students should perform dissections for themselves, stating that: "...our true book of the human body is man himself."
- **Vesalius** published 'Fabric of the Human Body' (with high-quality annotated illustrations) Surgeons trained by watching other surgeons and given licenses to do so but still looked down on as not university trained.



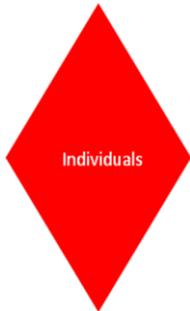
Knowledge Check 2.2 Approaches to prevention and treatment in the Medical Renaissance.

1. Give three treatments that stayed between the Middle Ages and the Renaissance.
 -
 -
 -
2. Name a famous herbal remedy book from the Renaissance
 -
3. What happened to many medieval hospitals during the 1530s?
 -
4. Why some of the new free hospitals better for sick people than the old religious hospitals?
 -
5. Did everyone accept that Galen had made mistakes?
 -
6. Which technological development did Peter Chamberlain invent in the 1620s?
 -
7. Why did Peter Chamberlains invention development women in medicine?
 -
8. How did Vesalius find out about the Human body?
 -
9. Which famous doctor did Vesalius criticise?
 -
10. what did Vesalius encourage medical students to do?
 -

Key Topic 2.3a William Harvey and the Discovery of the Circulation of Blood



William Harvey (1578-1657)



- Studied medicine at Cambridge and Padua in Italy. Worked as a doctor in London. Became doctor to King Charles I.
- Published his book 'An Anatomical Account of the Motion of the Heart and Blood' in 1628 which described how blood circulates around the body. (Individual Genius/Communication-Helping)
- Challenged Galen's idea that blood manufactured in liver to replace burned up blood and that blood passed from one side of the heart to the other through invisible holes.
- Harvey proved the heart acts a pump, pumping blood around the body by:

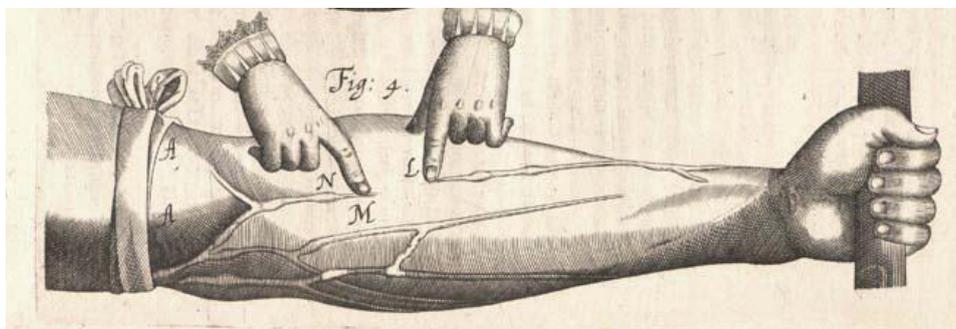
1. dissecting live cold-blooded animals whose hearts beat slowly so he could see the movement of each muscle in the heart
2. dissecting human bodies to build up knowledge of the heart
3. proved the body was a one-way system by trying to pump liquid past valves and failing to do so
4. calculating that the amount of blood going into arteries each hour was three times a man's weight which showed it was being pumped around. (Individual Genius-Helping)



- Helped by mechanical water pumps in London which may have given Harvey the idea that the heart is pumping blood. (Technology-Helping)
- Focused on careful dissection, observation and experiment. Spent hours repeating experiments and going over details. Change of

attitudes in Renaissance. (Individual Genius/Attitudes-Helping)

- Big impact on future as laid groundwork for future investigations, improved a vital area and showed the importance of carrying out dissection and challenging Galen.
- Harvey's ideas were only gradually accepted. Many thought he was mad and ignored his theory as he challenged Galen (Attitudes-Hindering)
- Also, was still a lot more to discover about the blood (e.g. blood groups) and his discovery did not make anyone better.



Knowledge Check 2.3a William Harvey and the Discovery of the Circulation of Blood

1. What did William Harvey describe in his book published in 1628?

-

2. Which famous doctor did Harvey challenge?

-

3. What was the idea that Harvey challenged?

-

4. Give two ways that Harvey proved that the heart acts as a pump?

-
-

5. Which technological development in London inspired Harvey?

-

6. Were Harvey's ideas accepted straight away or gradually?

-

7. Why did some people ignore his theory?

-

8. Did his discovery actually help make anyone get better in this period?

Key Topic 2.3b Dealing with the Great Plague in London, 1665.

Attitudes:
Respect
for
tradition

Causes of the plague

- Plague had not disappeared after the Black Death in 1348. In 1665 Plague returned to London and killed 75,000 people.
- Explanations for the Plague had not changed since the Black Death and people still believed that God, an imbalance of humours, bad air (miasma) or the movement of the planets could be to blame.



Woodcut, 1630, depicting Londoners fleeing from the plague in a cart

Treating the Victims

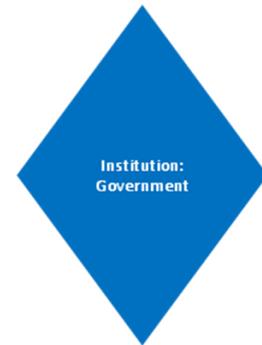
- Treatments were very similar to those used against the Black Death. People prayed for the sick, wore religious charms, purged themselves by cutting open buboes. Some people used herbal medicines too.

How to avoid catching the plague

- These were linked to ideas about causes. People held strong smelling bunches of herbs such as lavender or sage under their noses. These were also hung in doorways to stop bad smells entering the house. People stayed at home to avoid contact with others. Some people soaked coins in vinegar when they had to buy things to stop passing on plague

Preventing the spread of plague

- Bills of Mortality were published, to publicise the course of the disease and how many people were buried.
- 'Examiners' and 'searchers' were appointed, who established whether members of a household had contracted the plague. If so, they then **shut up the house** for a month, and its inhabitants had to stay indoors.
- Constables were appointed, who made sure no one left such houses.
- Bodies were **buried at night** in huge pits, and mourners were not allowed to attend.
- 'Pest houses' were set up, to quarantine sufferers.
- Householders were ordered to collect all waste, which was then removed by 'rakers'.
- Stray pigs, dogs, rabbits and cats were killed.



These measures unfortunately did not stop the spread of the plague, only ended when the weather turned **cold**.

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Key Topic 2.3b Dealing with the Great Plague in London, 1665.

1. How many people died in 1665?

-

2. Give three explanations of why people believed the Plague spread in 1665?

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-

3. Give two examples of how people treated the victims of plague

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-

4. Give two methods that people used to avoid catching the plague

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-

5. Give two ways in which the government tried to prevent the spread of the plague

-
-

6. Did these methods work?

-

7. Why did the plague end?

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