

Medicine Through Time: Medicine in the Renaissance Period, c.1500 – c.1700

The Big Picture
The renaissance was a period of scientific discovery and great advances in knowledge about anatomy and how the body works.
<ul style="list-style-type: none">The Church had less influence over education and fewer people believed God and sin were responsible for disease.Individuals like Vesalius, Paracelsus, Sydenham and Harvey were prepared to challenge old ideas – by the end of the 1600s most physicians no longer believed in the Theory of the Four Humours. It was accepted by doctors that disease came from outside the body.Institutions like the Royal Society encouraged scientific thinking and experimentation and the spread of new ideas was speeded up by the printing press.
BUT ...there was very little progress in treatment of the sick as the true cause of disease was still not known. Miasma was still the most commonly believed cause of disease and many people still believed in the Four Humours and bleeding.
Key individuals
Vesalius – professor of surgery at Padua University. Performed his own dissections. Corrected 300+ mistakes of Galen's. Revolutionised the teaching of medicine; encouraged medical students to do their own anatomy and research. After him anatomy became a cornerstone of medical teaching. Inspired others such as Harvey.
Paracelsus – physician and alchemist he rejected the Theory of the Four Humours. Said disease came from outside the body. Used chemicals to treat illness eg; mercury to treat syphilis.
William Harvey – discovered that <u>blood circulates</u> around the body, not continuously made and used up ('brew & burn') as Galen said. Harvey's work showed that because there was only a fixed amount of blood in the body the Theory of 4 Humours and treatments like <u>bleeding must be wrong.</u>
Thomas Sydenham – <u>The 'English Hippocrates'</u> - insisted that doctors should observe patients carefully not rely on books. He said - disease came from outside the body; each disease had a separate cause; disease could be categorised into groups. This meant did not come from within the body as the Theory of 4 Humours said and every disease had its own cure
Robert Hooke – English Scientist, head of experiments at the <u>Royal Society</u> . Used an early microscope to draw pictures of plant cells and fleas in the published in The Micrographia
van Leeuwenhoek – observed ' <u>animalcules</u> ' under the microscope – first record of bacteria BUT THERE ROLE IN CAUSING DISEASE WAS NOT KNOWN AT THIS TIME.
Key Terms
Humanism – new attitude in learning that said God was not responsible for everything and encouraged people to investigate the natural world.
Dissection – cutting open the human body to study its anatomy (structure).
Physiology – how the body works. Eg; circulation.
The Reformation – when new protestant churches replaced the Catholic Church in some parts of Europe. This led to the declining influence of the Church in many areas.
What's new – progress/change
Dissolution of the Monasteries – 1536 , England's monasteries by Henry VIII. All of England's 1,100 hospitals except one, <u>St. Bartholomew's</u> in London, were closed.
Alchemy – an early form of chemistry. Alchemists tried to find ways of turning lead in to gold and substances that would prolong life (the philosopher's stone)
Iatrochemistry – the use of chemicals to treat illness eg; <u>antimony</u> and <u>mercury</u> were used to sweat disease out of the body
New medicines – the discovery of the New World and explorations led to new herbs being used in and as medicines; sarsaparilla, ipecac, cinchona (quinine), coffee, tobacco
Syphilis – STD first appeared in Europe in early 1500s, believed to have come from the New World. Believed to be caused by <u>bathing</u> – <u>London's stews</u> are closed

Transference – belief that disease could be transferred from a patient to an object or animal. Eg; warts were rubbed with onions
Thermometers and Barometers – used to investigate the connection between the atmosphere and disease.
Colour treatment – matching the colour of remedies to the illness eg; red food and wine for smallpox
What's old – continuity with the middle ages (*see you knowledge organiser for medieval medicine)
*Regimen sanitatis *Theory of the Four Humours *bleeding and purging *sin *herbal remedies *amulets and charms *miasma *pomanders
The printing press
Invented in late middle ages, 1440, it revolutionised the sharing of new ideas. Books could be mass produced and so were cheaper. There were fewer errors and accurate diagrams could be reproduced. Printing presses were not owned by the Church so they had less influence over what people could read. Before this books had been copied by hand by monks in monasteries.
Key books and dates
The Six Tables, 1538 – <u>Vesalius</u> – Six large anatomical drawings that first challenge Galen's anatomy. On the Fabric of the Human Body, 1543 – <u>Vesalius</u> – detailed drawing and text of human anatomy, allows medical students to see that Galen's anatomy is incorrect.
On the Motion the Heart and Blood, 1628 – <u>William Harvey</u> – explained circulation; how blood is pumped around the body by the heart.
Medical Observations, 1676 – Thomas Sydenham
The Royal Society
First met in 1660 – received its royal charter from Charles II in 1662. Royal approval gave the society more credibility. Its aim was to <u>promote knowledge of the natural world through observation and experiment</u> (we now call this science) it met weekly to watch experiments and discuss scientific topics. They kept a library and published the journal Philosophical Transactions to record and share news of experiments and discoveries.
Care
Doctors – only the rich could afford to see a doctor. Had to be trained at university and needed a licence.
Apothecaries – sold remedies prescribed by doctors, also sold charms and amulets.
Surgeons – some professional surgeons trained at university but could only be afforded by the rich. Surgery was a last resort due to the problems of pain, blood loss and infection.
Barber surgeon – performed small operations and pulled teeth many still bled patients as traditional treatments continued to be popular.
Quacks – people who claimed to be doctors, sold cure all medicines – quack medicines at fairs and markets.
Women – most people could not afford a doctor and still lived in the countryside so could not get to an apothecary or barber surgeon, they still relied on women in their family or community for treatment and care.
Pest house – a place where those with infectious disease could be isolated from the rest of a community and receive care.
The Great Plague 1665 – continuity and change
Continuity with the Black Death middle ages
<ul style="list-style-type: none">Strong religious belief – days of fasting and prayer were organised by King Charles IISupernatural ideas – people wore amulets to ward off plagueMiasma – tar was burned in the streets. Plague doctors masks held herbs and dried flowers to purify the air. People carried pomanders.
Change
<ul style="list-style-type: none">Local authorities were better able to enforce laws – licences were needed to leave or entre towns. Theatres and race meetings were banned. Quarantine (28 days) was enforced.

