

Context

Church ruled everything and everyone, they encouraged the idea that God caused and cured disease – therefore no one tried to find cures or a better way. Galen's ideas were promoted by The Church. No dissections.

Continuity & Change, lots of new ideas, thinking and challenge (Galen). Church's power slowly reducing. Rediscovered ancient / Islamic books that the The Church had hidden saying how dissection was important. People were interested in how the body worked & direct observation.

No effective preventions yet, but science in this period would go a large way forward. Long term impact more so than short (Jenner). Jenner faced lots of opposition, but in the end his discovery was successful, especially after government support. Germ Theory led to antiseptics in surgery, government actions (P.Health Act 1875)

Scientific breakthroughs previously led to massive progress in 1900's. Much better understanding of causes of illness, open attitudes to search for more and better discoveries. Technology developments also had a massive impact on progress and diagnosis (testing, Xrays, Blood groups etc)

Ideas about cause of disease / illness

Supernatural – punishment from God
Evil spirits / witches living inside a person
Astrology – movement of planets and stars affect the earth and the people causing disease
Four Humours (Rational) - lifestyle
Miasma (Rational) – waste / dead

Four Humours still (more focused on Opposites).
Understanding of the body's physiology better through Vesalius & Harvey and dissections.
Sydenham – Practical observation and diagnosis not just theory
Printing Press spread new ideas as did Royal Society
Miasma
Transference

Germ Theory – Germs (bacteria / microbes) in the air make us sick, replaced 'Spontaneous Generation'. People didn't believe something so small could make us sick, each disease needed a different germ identified. Waterborne. Miasma still (but less common).
Robert Koch identified microbes for specific diseases leading to vaccinations for the worlds biggest killers.

Lifestyle (drink, drugs, food).
Genetics – hereditary diseases (DNA).
Progress in diagnosis – Blood tests, lab testing, scanners = more accurate and quicker, leading to better treatment
Germs / Microbes & Viruses entering our bodies leading to infections

Treatment

Pilgrimages, Prayer, flagellants, fasting and repentance
Exorcisms, chants, spells, lucky charms
Astrology - star signs affected treatments
Bleeding / Purging (laxatives)
Herbal - Apothecary, wise woman, home remedies (passed on)
Physician – for the rich, only advised
Barber Surgeon
Hospitals – Care NOT cure, many diseases not allowed in

New Herbs from the exploration of the New World
Hospitals were lost when Henry VIII destroyed the Monasteries
Replaced by charity hospitals run by physicians, still basic though
Bleeding / Purging
Apothecaries
Barber Surgeons (for the poor)
Quack Doctors (fake)
Kings Touch (Superstitious)
Home, wise woman, herbal
Charms, amulets & religion still

Hospitals & Nursing. Hospitals now became hygienic and well run thanks to Florence Nightingale.
Most hospitals around the country, offering better care and treatments, mostly still in London
Anaesthetics in surgery – Chloroform from James Simpson 1847 - initially led to more deaths in surgery due to infection. Lister developed antiseptics. Surgery was by 1900 much more respected and less deaths – Aseptic

Self monitoring Technology (blood pressure, sugars etc).
Better surgical technology – Robots, keyhole surgery, transplants, transfusions. Antibiotics for almost every infection. Antiviral drugs to stop viruses spreading or growing.
Magic Bullet 1: Salvarsan606
Magic Bullet 2: Prontosil.
Chemotherapy, Radiotherapy
NHS: Access to care for everyone

Prevention

Go to church, pay your tithes
Purify your home with sweet smelling agents (lavender, oranges, posies)
Regimen Sanitatis
Flagellants to prevent as well as treat
Clean the streets (King's orders – not really enforced)
Cemeteries built outside the towns
Shut the town down (Black Death)

Clean, sweet smells, clear streets
Great Plague:
Quarantine during epidemics (Great Plague)
Theatres / Markets closed
Avoiding touching each other
Mass graves
Cats and Dogs killed
No national government efforts

Inoculation – Putting a small amount in the body leading to getting it and if survived, would be immune – IF.
Vaccination – Putting a weakened version in to body, leading to immunity. Jenner's discovery but he couldn't explain it or make more vaccines until Pasteur & Koch
Government's smallpox campaign.
Mass burials after Cholera.
Public Health Act 1875

Vaccination campaigns - Diphtheria, Polio.
Lifestyle campaigns – alcohol, smoking, eating, sex etc
Clean Air Act
Smoking in public places banned
2006/7

Galen's 350 books used as the physician's text books.

Hippocrates Four Humours was the basis for medical thinking in the Middle Ages

Thomas Sydenham – The English Hippocrates: A well respected doctor in London. He placed great importance on observation and practical dealings with patients over reading books.

William Harvey - Discovered the Heart was a pump

Andreas Vesalius – Anatomist who mapped the whole body / skeleton and began challenging Galen

Robert Koch – Identified specific bacteria for specific and deadly diseases (TB, Cholera)

Louis Pasteur – discovered the Germ Theory

John Snow – Discovered Cholera was waterborne – with Pasteur led to improved public health

Florence Nightingale – Improved hospitals treatment and design

Jenner – Discovered Smallpox vaccine

Lister – Antiseptic (Carbolic Acid)

Simpson – Anaesthetics (Chloroform)

Fleming 1928 – Discovered penicillin, the ultimate antibiotic – didn't develop it.

1940s - Howard, Chain and Florey – picked up Fleming's work and developed Penicillin

Printing Press – Helped to spread the new ideas of the Renaissance period far and wide. (COMMUNICATION).

Communication was also helped by the Royal Society with scientists getting together sharing ideas. They also began questioning and challenging the old views determined to find scientific explanations for the causes of disease. Microscope also important.

Much better microscopes allowed key individuals and scientists to see microbes and germs and identify them leading to the creation of vaccines.

Pasteur's swan neck flask,

Koch's petri dish and agar jelly

Lots of experimentation leading to the many discoveries in this period

Machines and computers have improved diagnosis and treatment (surgery, prevention, monitoring etc) – Radiotherapy, Dialysis etc.

Antibiotics (Magic Bullets & Penicillin)

The Church – Very influential during this period, used to explain the causes of illness and therefore the treatments / preventions. Promoted Galen's ideas as he said God created the body 'perfect'

- The Church also played a large role in the CARE of the sick and training of physicians at University

Attitudes – Religious beliefs dominated all thinking especially medical. People just accepted the Church's teachings and ideas on treatment and preventions

Influence of The Church is still fairly strong, but decreasing as the period goes forward.

Government still not fully involved in life, they offered ideas to help prevent the spread of the Great Plague, also introduced the Royal Society with the king putting his name to it which added to its acceptance. Offered advice on keeping streets clean but nothing was enforced.

Influence of The Church is all but gone

Government more involved, they promoted Jenner's discovery of the Smallpox vaccination by instigating a vaccination campaign, banning inoculations and funding scientific research.

Government also abandoned its *Laissez Faire* Attitude following Pasteur and John Snow's discoveries leading to the Public Health Act of 1875 and other preventative measures that would continue into the 19th Century and beyond – Scientific evidence made this inevitable.

Government is heavily involved in this period with many vaccination campaigns (Polio, Diphtheria etc).

Healthy living campaigns & education

NHS – Paying for free healthcare at the point of use for EVERYBODY regardless of position in society

Passed laws to help prevention – Clean Air Act, No smoking in public places, cigarettes in ads banned etc.

Changing attitudes in the importance of The Church. People were more open to hear new ideas. Although many still followed The Church

The Enlightenment period encouraged questioning and new theories about medicine

Attitudes have transformed with a hunger and desire to improve technology and treatments. This is ensuing new discoveries are made daily

NB: War and communication are sub factors that contribute too