Patterns of Change in Medicine

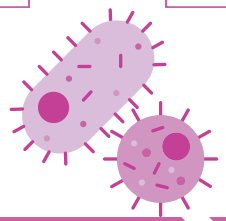
3.11 EXPLORE the contribution of technological developments and innovation to historical change
3.14 ILLUSTRATE patterns of change across different time periods in a chosen theme relating to life and society (such as, Crime and punishment; Food and drink; Work and leisure; Fashion and appearance or Health and medicine).

This chapter will explore the ways in which medical practices and technologies have changed over time and their impact on health and society.

Chapter 32

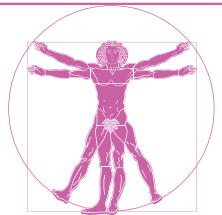
Patterns of Change in Medicine

3.11 EXPLORE the contribution of technological developments and innovation to historical change
3.14 ILLUSTRATE patterns of change across different time periods in a chosen theme relating to life and society (such as, Crime and punishment; Food and drink; Work and leisure; Fashion and appearance or Health and medicine).



1500s

Renaissance doctors study **anatomy**



1670s

Antonie van Leeuwenhoek invents the **single-lens microscope**

1796

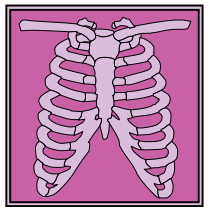
Edward Jenner invents the **first vaccine** for **smallpox**

1870s

Robert Koch identifies the bacteria that causes **cholera** and **tuberculosis**.

1910s

Marie Curie develops the portable X-Ray to treat soldiers on the battlefields of WWI.

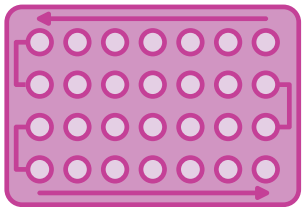


1920s

Alexander Fleming discovers **penicillin**.

1960s

Gregory Goodwin Pincus and **John Rock** invent the **contraceptive pill**.



Patterns of Change: Medicine

Headings	Notes
INTRODUCTION	• The study of the body and of how to keep people healthy and treat them when they are sick or injured has been a constant concern for humanity. At various points in our history, we have made great strides forward in understanding sickness and disease, finding ways to treat them and making health care more widely available.
HEALTH AND MEDICINE IN ANCIENT GREECE AND ROME	• Throughout history, humans have often attributed unexplained phenomena to **divine beings**. • This tendency was common across most cultures until the modern era. • In **Ancient Greece**, illness was viewed as a punishment from the gods. • Patients believed their best chance of recovery was to make offerings at temples, especially those dedicated to **Apollo** (the god of healing) or his son **Asclepius**. • **Hippocrates of Kos** (c. 460-370 BC), known as the **'Father of Medicine,'** was the first to write extensively about diseases, illnesses, and their symptoms. • For the next two thousand years, **his works** became foundational to medical practice. • He pioneered the use of symptoms to diagnose illnesses. • Hippocrates believed sickness resulted from an imbalance among the **four humours**: **blood, black bile, yellow bile, and phlegm**.
GALEN OF PERGAMON	• The work of Hippocrates was built upon by other physicians, especially **Galen of Pergamon** (AD 129 – 216). • Galen practiced during the height of the **Ancient Roman Empire's** power. • Galen believed that to properly treat the body, knowledge of **anatomy** (the study of the structure of the human body) was essential. • Due to a ban on human dissection, Galen experimented on and dissected animals he thought had similar bodies to humans. • This led Galen to reach several false conclusions about how human organs worked. • These misconceptions resulted in doctors treating people incorrectly for over a thousand years. • There is evidence that **Roman doctors** performed brain surgeries that would not be attempted again for nearly two thousand years.

Keywords	Summary
Divine Beings Ancient Greece Apollo Asclepius Hippocrates of Kos Father of Medicine Four Humours Blood Black Bile Yellow Bile Phlegm	

Patterns of Change: Medicine

Headings	Notes
PUBLIC HEALTH CARE	• Access to **health care** was largely limited to those who could afford to pay the physicians' fees. • **Physicians** apprenticed with experienced doctors before setting up on their own. • People who could not afford a **doctor** would go to **healers**, who sold herbal mixtures. • Most of these remedies did little to treat the underlying problem, though some provided pain relief. • **Temples to Asclepius** operated as early medical centres where people could go to the **priests** for medical advice and treatment.
HEALTH AND MEDICINE IN THE MIDDLE AGES	• Medieval medicine was based on the theories of the Ancient Greeks, particularly surrounding the **four humours** (**blood**, **black bile**, **yellow bile** and **phlegm**) where it was thought that most sicknesses were due to an imbalance between the humours. • Treatments for imbalances included: • **Bleeding**: cutting the patient so that they bled • **Cupping**: placing heated metal cups on the skin to draw fluids to the surface • **Leeching**: using leeches to draw blood or other fluids out of the body • **Amputation**: cutting off a limb • Common diseases during the Middle Ages included **typhoid**, **leprosy**, **smallpox**, **dysentery** and **influenza**. People often died of minor ailments and infections. • **Poor diets** meant people were less able to fight illness while a **lack of hygiene** meant that most wounds became infected easily. • Women faced the added danger of **childbirth**, with many dying due to blood loss or infection. • Herbal medicines were common treatments. • Monasteries often looked after the sick, functioning as the first hospitals in many countries.
THE BLACK DEATH (BUBONIC PLAGUE)	• The Black Death (bubonic plague) killed at least **one-third of Europe's population** between 1347 and 1350. • The plague was carried by **fleas on rats** that arrived via ships from the Black Sea area.

Keywords	Summary
Physicians Four Humours Bleeding Cupping Leeching Amputation Disease Childbirth – Child Morality The Black Plague Bubonic Plague	

Patterns of Change: Medicine

Headings	Notes
THE BLACK DEATH (BUBONIC PLAGUE)	• Symptoms included **oozing swellings** all over the body, **discoloured skin** and the **lungs** filling with **phlegm**. • It was **extremely contagious**, spreading via sneezing or spitting, or by touching dead bodies, which were often left in the streets to be collected. Those infected had a 70-80% chance of dying within a week. • Many believed the disease was caused by God's anger at human sin. Others blamed groups of 'outsiders' such as **Jews** or **Moors**.
THE IMPACT OF THE BLACK DEATH	• The death of so many people in such a short space of time changed Europe forever. • The feudal system, especially serfdom, went into decline because many serfs left their manors to replace people in the towns. This meant that the peasants who remained on the manors could demand better treatment because there was now fewer of them left to do the work. • Doctors had failed to find a cure for the bubonic plague and began to question their practices. This led to significant changes in medicine during the Renaissance.
MEDICINE DURING THE RENASSAINCE	• In the 1500s, doctors such as **Andreas Vesalius** began to investigate **anatomy** (the study of the human body). Vesalius wrote ***On the Structure of the Human Body***. This book was full of accurate information and very detailed sketches of human anatomy. Thanks to the **Printing Press** it was printed and widely read, allowing surgeons to operate more effectively on their patients. • Doctors also **dissected bodies** to learn about the human bones, muscles, veins and organs. **William Harvey** discovered that the heart pumped blood around the body. • The combination of these advances resulted in improvements to the methods used during surgeries.
TWENTIETH-CENTURY MEDICINE	• **Life expectancy** increased dramatically in the twentieth century, as did the quality of life. This was due to medical discoveries and inventions that were able to control or cure many diseases and conditions.

Keywords	Summary
Phelgm	
Swellings	
Jews	
Moors	
Andreas Vesalius	
Anatmony	
Printing Press	
William Harvey	
Life Expectancy	

Patterns of Change: Medicine

Headings	Notes
MEDICAL DISCOVERIES	• **1910 – Histamine (Antihistamines were discovered in 1937)**: a substance produced by the body when it suffers an immune reaction. Antihistamine drugs are now used to treat symptoms of mild allergies such as runny noses and watery eyes. • **1912 – The Discovery of Vitamins**: micronutrients essential for good health. Doctors identified what levels of each vitamin are needed to avoid deficiency diseases such as **scurvy** (vitamin C) or **rickets** (vitamin D). • **1921 – Insulin**: a hormone that breaks down sugar in the bloodstream. People with Type 1 diabetes cannot produce insulin naturally and must inject it instead. • **1928 – Penicillin**: the first antibiotics, discovered by **Alexander Fleming** on bread mould. Penicillin is still used to treat many kinds of bacterial infection. • **1953 – DNA** (**Deoxyribonucleic Acid**): a double-helix molecule present in the nucleus of cells. It contains the genetic information that allows all forms of life to function, grow and reproduce.
MEDICAL INVENTIONS	• **1798 – Vaccination**: a vaccine is a type of medicine that trains the body's immune system so that it is ready to fight a disease it has not encountered before. **Smallpox**, which devasted the peoples of the Americas, has now been **eradicated worldwide** due to a vaccine first developed by **Edward Jenner** in the early nineteenth century. Vaccines protect people against many types of serious diseases such as **polio**, **mumps** and **Covid-19**. • **1853 – Endoscope**: a thin fibre-optic cable with a tiny camera on one end which allows doctors to view inside the body to investigate symptoms or to guide surgery. • **1914 – Portable X-Ray Machine**: **Marie Curie** improved the x-ray discovered by the German engineer **Wilhelm Conrad Röntgen** in 1895, creating a portable x-ray machine that was first used in World War I to treat wounded soldiers on the frontline. • **1956 – Ultrasound**: High-frequency soundwaves are used to 'see' inside the body. Ultrasound is used to scan internal organs and tissues. Since the 1970s, they have also been used to monitor pregnancies harmlessly.

Keywords		Summary
Histamine	**Vitamins**	
Scurvy	**Rickets**	
Insulin	**Penicillin**	
Alexander Fleming		
DNA		
Vaccinations		
Smallpox: Edward Jenner		
X-Ray		
Marie Curie		
Ultrasound		

Patterns of Change: Medicine

Headings	Notes
MEDICAL INVENTIONS	• **1960 – Hormonal Contraception**: the contraceptive pill for women was invented in the 1960s and rapidly transformed society by giving women control over their fertility. Women began to graduate from universities and advance their careers at much higher rates once pregnancies could be planned. • **1967 – CT Scan**: a special x-ray machine that takes multiple images to produce a 3D picture of the inside of the body. It is often used after accidents, or to check for blood clots or unusual growths. • **1977 – MRI** (**magnetic resonance imaging**): strong magnetic fields and radio waves are used to create detailed images of the organs and tissues. MRI scanning can detect areas of disease. • **1978 – In vitro fertilisation** (**IVF**): a technique used to help achieve a pregnancy when the natural method has been unsuccessful. Fertilisation takes place in a laboratory and the embryo is transferred to a woman's uterus after several days.
SURGICAL ADVANCES	• **Blood types**: the four blood types (A, B, O and AB) were discovered before World War I. This made blood transfusions possible and blood donation schemes were set up. • **Skin grafts and plastic surgery**: both were known in earlier times but became very advanced in the twentieth century due to their usefulness in treating war injuries. After World War I, skin grafts (healthy skin taken from elsewhere on the patient) were used to help reconstruct faces that had suffered burns or shrapnel damage. During World War II, plastic surgery was likewise used to help repair faces. • **Transplant surgery**: the first successful kidney transplant took place in 1954 while the first successful heart transplant took place in 1967. • **Laser surgery and keyhole surgery**: these are less invasive surgical methods, which lower the risk of infection and greatly reduce recovery time.

Keywords	Summary
Hormonal Contraception **MRI** **CT Scans** **In vitro fertilisation** **Blood Types** **Skin Grafts** **Plastic Surgery** **Transplant Surgery** **Laser Surgery** **Keyhole Surgery**	

Patterns of Change: Medicine

Keywords	Definition
Amputation	• Cutting off a limb.
Anaesthetics	• Drugs that makes a person unable to feel pain.
Antibiotic	• A substance used to fight bacterial infection in the body.
Antiseptics	• Make clean or free of germs.
Beveridge Report	• British Government report during World War II that led to the establishment of the welfare state.
Bleeding	• Cutting the patient so that they bleed.
Bloodletting	• Taking blood from a sick person to cure or heal them.
Child mortality	• The death of children over one month and under the age of five.
Contraceptive Pill	Contains hormones that temporarily prevent pregnancy (when taken correctly and regularly), allowing women to control their fertility.
Cupping	• Placing heated metal cups on the skin to draw fluids to the surface.
Four humours	• Four major fluids in the body - blood, yellow bile, black bile, phlegm - which Ancient Greeks and Romans believed to cause disease if they were not in balance.
Germ theory	• The discovery that germs spread disease.
Inoculation	• Giving a weak form of a disease to a person by injection to protect against that disease (vaccination)
Leeching	Worms used for bloodletting.
Organ transplantation	• The replacement of failing organs with the healthy ones.
Pandemic	• Worldwide spread of a new disease.
Pattern of change	• How changes occur in a particular area of history over a period of time.
Penicillin	• The first antibiotic, used to treat many kinds of bacterial infection.
Pharmaceutical drugs	• Manufactured medications developed through experimentation.
Public health	The overall health of the population, as protected and improved by the actions of government.
Vaccination	• Giving a person a vaccine to prevent them from developing a disease (inoculation)
Vaccines	• Medicines designed to prompt the immune system to develop the necessary antibodies to fight off a particular disease by exposing it to a non-dangerous version of the disease.
Welfare States	• Programmes where governments sought to greatly expand access to education, health care and other social services, often making these free of charge.

Patterns of Change in Medicine

Chapter 32

3.11 EXPLORE the contribution of technological developments and innovation to historical change

3.14 ILLUSTRATE patterns of change across different time periods in a chosen theme relating to life and society (such as, Crime and punishment; Food and drink; Work and leisure; Fashion and appearance or Health and medicine).

Term	Definition
Amputation	Cutting off a limb.
Anaesthetics	Drugs that makes a person unable to feel pain.
Antibiotic	A substance used to fight bacterial infection in the body.
Antiseptics	Make clean or free of germs.
Beveridge Report	British Government report during World War II that led to the establishment of the welfare state.
Bleeding	Cutting the patient so that they bleed.
Bloodletting	Taking blood from a sick person to cure or heal them.
Child mortality	The death of children over one month and under the age of five.
Contraceptive Pill	Contains hormones that temporarily prevent pregnancy (when taken correctly and regularly), allowing women to control their fertility.
Cupping	Placing heated metal cups on the skin to draw fluids to the surface.
Four humours	Four major fluids in the body - blood, yellow bile, black bile, phlegm - which Ancient Greeks and Romans believed to cause disease if they were not in balance.
Germ theory	The discovery that germs spread disease.
Inoculation	Giving a weak form of a disease to a person by injection to protect against that disease (vaccination)
Leeching	Worms used for bloodletting.
Organ transplatation	The replacement of failing organs with the healthy ones.
Pandemic	Worldwide spread of a new disease.
Pattern of change	How changes occur in a particular area of history over a period of time.
Penicillin	The first antibiotic, used to treat many kinds of bacterial infection.
Pharmaceutical drugs	Manufactured medications developed through experimentation.
Public health	The overall health of the population, as protected and imprved by the actions of government.
Vaccination	Giving a person a vaccine to prevent them from developing a disease (inoculation)
Vaccines	Medicines designed to prompt the immune system to develop the necessary antibodies to fight off a particular disease by exposing it to a non-dangerous version of the disease.
Welfare States	Programmes where governments sought to greatly expand access to education, health care and other social services, often making these free of charge.

Summary

Patterns of Changes in Medicine and Health over time have been significant and have impacted societies in different ways. During the Middle Ages, medicine and healthcare were mostly based on superstitions and religious beliefs. Medical knowledge was limited, and people relied on traditional healers and remedies. The Renaissance marked a significant shift in medicine and health, as scholars began to rediscover ancient texts and develop new ideas about the human body and disease. This led to the development of new medical treatments and procedures, such as vaccination and anatomical dissection. The Industrial Revolution brought about further changes in medicine and health. Advances in technology and science allowed for greater understanding of diseases and the human body, leading to the development of new drugs and medical procedures. The growth of cities and industries also brought new public health challenges, such as overcrowding and pollution, which had to be addressed through new public health measures. Today, modern medicine and healthcare have made significant advancements, and people have access to a wide range of medical treatments and procedures. New technologies, such as genetic engineering and artificial intelligence, are revolutionizing medicine and transforming the way healthcare is delivered. However, challenges such as healthcare inequality and antibiotic resistance continue to be significant issues.

Ancient and Medieval Ages

During **the Middle Ages** health and medicine were heavily influenced by the teachings of the ancient Greek physician Hippocrates and the Roman physician Galen. The dominant medical theory was based on the idea of the four humours: blood, phlegm, yellow bile, and black bile. The balance of these humours was believed to determine a person's health. Treatment often involved bloodletting and purging, which were thought to rebalance the humours. The Church also played a significant role in healthcare, with religious orders providing care to the sick and wounded. Herbal remedies were also commonly used, and some monasteries became centres of medical knowledge and research. Medical practices during the Middle Ages were often brutal and ineffective. Surgery was rare and dangerous, and anesthesia did not exist. Physicians often relied on superstition and quackery to treat their patients. For example, it was believed that a person could be cured of a fever by being surrounded by roses, or that wearing a necklace made of herbs could ward off the plague. Despite these shortcomings, the Middle Ages laid the foundation for the development of modern medicine, with the emergence of the first medical schools and the introduction of medical texts that would be studied for centuries to come.

The Renaissance

The Renaissance marked a significant shift in health and medicine. Advances in anatomy and physiology led to a better understanding of the human body and how it functions. The work of Andreas Vesalius, a Flemish anatomist, and William Harvey, an English physician, challenged the traditional medical teachings of the Middle Ages. Harvey's discovery of the circulation of blood, for example, revolutionized medical knowledge and practice. The Renaissance also saw a renewed interest in Greek and Roman medical texts, leading to the rediscovery of ancient medical knowledge. This led to the development of new treatments, such as the use of cinchona bark to treat malaria, which contained quinine, a substance that was later synthesized into modern antimalarial drugs. The Renaissance also saw the emergence of the first medical journals and the establishment of medical societies. The development of printing technology made it easier to disseminate medical knowledge, and the first medical textbooks were published. The practice of dissection, previously banned, was now accepted as a necessary part of medical education. Anatomical knowledge and surgical techniques improved significantly. The Renaissance also saw the introduction of the first public hospitals, which provided medical care to the poor and sick.

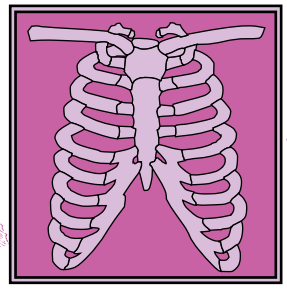
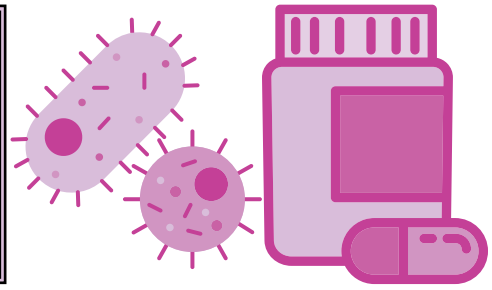
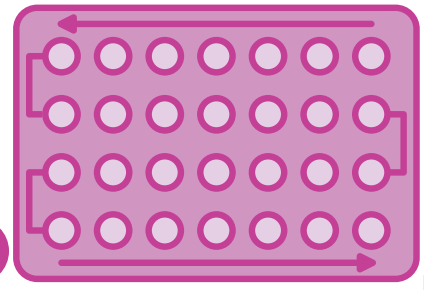
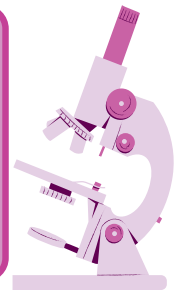
The Industrial Revolution

The Industrial Revolution brought significant changes to health and medicine. With the growth of cities and factories, public health became a major concern. The spread of infectious diseases, such as cholera and tuberculosis, was rampant due to poor sanitation and overcrowding. Public health measures were introduced to improve sanitation, such as the building of sewers and the provision of clean drinking water. The Industrial Revolution also led to advances in medical technology, such as the invention of the stethoscope and the development of anaesthesia, which made surgery safer and more effective. The Industrial Revolution also saw the emergence of the first medical schools that were separate from universities, as well as the establishment of medical licensing and regulation. This helped to standardize medical education and practice, and ensure that only qualified individuals were practicing medicine. The discovery of germs and the development of antisetics also revolutionized medicine. Louis Pasteur's germ theory proposed that microorganisms were responsible for causing infectious diseases, which led to the development of vaccines and antiseptics. Joseph Lister, a British surgeon, developed antiseptic techniques to prevent infection during surgery, which greatly improved surgical outcomes. The Industrial Revolution also led to the growth of the pharmaceutical industry, as new drugs were developed to treat a variety of diseases. Aspirin, for example, was synthesized in 1897 and became a popular pain reliever. The first antibiotic, penicillin, was discovered by Alexander Fleming in 1928 and revolutionized the treatment of bacterial infections.

Modern Day

In the **modern day**, health and medicine have continued to evolve at a rapid pace. Advances in genetics and biotechnology have led to the development of personalized medicine, which tailors treatment to a patient's individual genetic makeup. Medical imaging technology, such as CT scans and MRI scans, have greatly improved diagnostic capabilities. Telemedicine, which allows for remote medical consultations and treatment, has also become increasingly popular. The 20th century saw significant improvements in public health, with the introduction of mass vaccination programs and the eradication of diseases such as smallpox. However, new challenges have arisen, such as the global obesity epidemic and the emergence of new infectious diseases, such as HIV/AIDS and COVID-19. The development of new treatments and vaccines for these diseases remains a major focus of modern medicine. The modern healthcare system is highly complex and involves a range of healthcare professionals, including physicians, nurses, pharmacists, and allied health professionals. Healthcare is often delivered through a combination of public and private providers, and health insurance is widely used to cover the cost of medical care. However, access to healthcare remains a major issue in many parts of the world, and efforts to improve access and reduce healthcare disparities continue to be a major focus of the global health community.



Doodle Revision Page or Sketch Notes

Include heading(s), short notes, keywords, timelines, images (maps, drawings, diagrams) as needed

Patterns of Change in Medicine

...AT A GLANCE

HEALTH AND MEDICINE IN ANCIENT TIMES

- **Hippocrates of Kos (460-370 BC)**: Known as the "Father of Medicine," Hippocrates introduced the idea that diseases have natural causes rather than divine origins. He developed the **four humours theory**, which explained illness as an imbalance of blood, black bile, yellow bile, and phlegm.
- **Galen of Pergamon (AD 129-216)**: Built on Hippocrates' work and emphasised the importance of **anatomy**. However, due to restrictions on human dissection, Galen based his findings on animal dissections, leading to incorrect conclusions about human organs.
- **Healthcare Access**: Physicians served those who could afford to pay, while **healers** provided herbal treatments to the poor. Temples to **Asclepius**, the god of healing, served as early medical centres.

HEALTH AND MEDICINE IN THE MIDDLE AGES

- **Medieval Medicine**: Based on **Galen's humours theory**, common treatments included **bleeding**, **cupping**, and **amputation**. Hygiene was poor, leading to widespread disease like **typhoid**, **smallpox**, and **influenza**.
- **The Black Death (1347-1350)**: The **bubonic plague** killed one-third of Europe's population. Its spread was facilitated by fleas on rats, and the disease caused fever, swellings, and lung infections. The devastation of the plague caused Europeans to question traditional medical practices.
- **Women's Health**: Childbirth was dangerous, with a **2.5% maternal death rate** due to infection or complications. **Midwives** assisted in births, but doctors rarely attended due to lack of understanding of women's bodies.

HEALTH AND MEDICINE DURING THE RENAISSANCE

- **Andreas Vesalius (1514-1564)**: Through dissection of human corpses, Vesalius corrected many of Galen's mistakes. His book, *On the Structure of the Human Body*, advanced understanding of **anatomy** and improved surgical practices.
- **William Harvey (1578-1657)**: Disproved Galen's belief that the liver produced blood by showing that **blood circulates** through the body, pumped by the heart.

HEALTH AND MEDICINE IN INDUSTRIAL SOCIETY

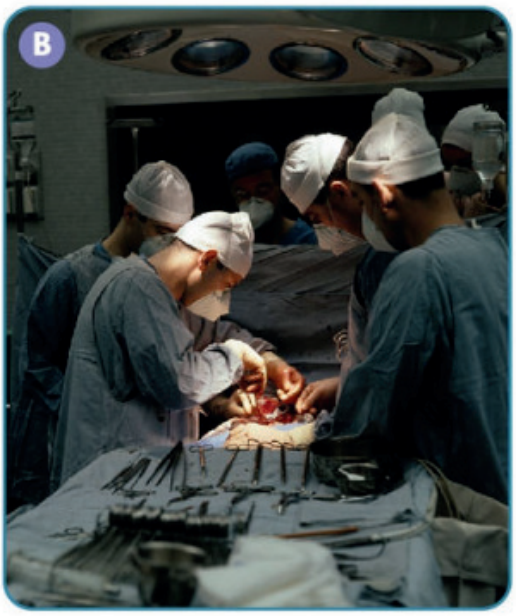
- **Germ Theory**: In the 1670s, **Antonie van Leeuwenhoek** discovered germs using a microscope. By the 1870s, **Louis Pasteur** and **Robert Koch** proved that germs cause disease, revolutionising the fight against illnesses like cholera and tuberculosis.
- **Vaccines**: **Edward Jenner** developed the first vaccine for **smallpox** in 1796 by exposing people to cowpox. This led to the development of vaccines for diseases like **polio**, **measles**, and **COVID-19**.
- **Women's Health**: Advances in surgery and hygiene significantly improved maternal survival rates. By the **1880s**, doctors began using **handwashing** and **sterilisation** during childbirth.

HEALTH AND MEDICINE IN THE 20TH CENTURY

- **Pharmaceuticals**: Key drug developments include:
  - **Aspirin (1897)**: First widely used painkiller.
  - **Antibiotics (1928)**: **Alexander Fleming** discovered **penicillin**, the first antibiotic, revolutionising the treatment of bacterial infections.
  - **Insulin (1921)**: Enabled the treatment of **diabetes**.
- **Surgical Advances**:
  - **Organ Transplants**: First successful **kidney transplant** (1954) and **heart transplant** (1967).
  - **X-rays** and **MRI**: Improved imaging of the body, allowing doctors to diagnose conditions more accurately.
  - **Plastic Surgery**: Advanced during the world wars, allowing reconstruction of facial injuries.
- **Women's Reproductive Health**:
  - **Contraceptive Pill (1960)**: Gave women control over pregnancy, leading to greater career opportunities.
  - **In Vitro Fertilisation (1978)**: Helped women conceive when natural methods failed.
- **Public Health**: The 20th century saw the rise of **welfare states**, providing free or affordable healthcare, education, and social services to all citizens.

Ch. 32 – Patterns of Change (Medicine)

The images below both depict surgery. Image A depicts a sixteenth-century battlefield operation, while image B is a photograph from the 1970s and shows an operation in theatre. Examine them and answer the questions that follow.



(a) Describe what is happening in image A.
(b) Describe what is happening in image B.
(c) Which of these sources would a historian find more reliable? Explain your answer.
(d) What do these images tell us about changes in medical practice over time? Identify three changes you can see.
(e) Based on your study of the history of medicine, what medical advance do you consider to be the most important? Give reasons for your answer.
(f) Based on your study of patterns of change, write an account of how medical knowledge has changed over time.
(g) Based on your study of the history of medicine, how has access to health care changed over time?

Question 10

"A historian ought to be exact, sincere and impartial, free from passion, unbiased by interest, fear, resentment or affection. And faithful to the truth, which is the mother of history, the preserver of great actions, the enemy of oblivion, the witness of the past, the director of the future."

B.R. Ambedkar
Indian politician (1891-1956)

(a) Read the statements which follow and indicate with a tick (✓) whether each one represents a fact or an opinion.

Statement	Fact	Opinion
B.R. Ambedkar served as an Indian politician.		
Politics in India is a complex topic to study.		
The history of India is interesting and varied.		
B.R. Ambedkar died in 1956.		
Sources of history should be cross-referenced for accuracy.		

(b) How did your investigation of one of the resources below help you to better understand the work of a historian?

Museum *Library* *Heritage centre* *Digital or other archive* *Exhibition*

(c) As part of your studies for Junior Cycle history, you looked at patterns of change over time. In the box below, identify an aspect of life and society in which you have studied patterns of change.

Aspect:

Explain three changes that you have learned about in your chosen aspect of life and society.