EXAM DETAILS

1 hr 45 minutes for Paper 2

Spend 50 minutes on Section A

Questions:
- 8 mark “usefulness of source”-
- 8 mark “explain the significance of”-
- 8 mark “compare...in what ways are they similar/different?”-
- 20 mark (including 4 marks for SPaG) “essay question using factors”-
Topic 1: Medicine Stands Still, 1000-1450

Being in ill in medieval times

- How long you lived and chances of surviving depended factors such as:
  - Wealth - rich were more likely to afford treatment by a doctor than the poor
  - Where you lived - towns were more deadly places to live than villages
  - Age - young were more at risk than adults

Medieval Killers

- Famine and war
- Bad harvests caused by extreme weather
- Caused malnourishment >> malnourished people more likely to catch diseases
- Dysentery, typhoid, smallpox and measles (estimated 10% of England's population in the early 14C died of these diseases)
- Childbirth
- 30% children died before the age of 7

The influence of Arab medicine

- Avicenna was one of the most celebrated philosophers and physicians in early Islamic Empire. 40 of his medical texts have survived with many that were printed in Europe at least 60x between 1516 and 1574
- Doctor Rhazes, who lived from AD860 to 932, wrote the first authentic description of the symptoms of smallpox
- Islamic hospitals were established in AD900s and became the sites of healing and medical education >> Baghdad, Damascus and Cairo which contained lecture rooms, pharmacies and libraries
- Many medical students, as well as mastering texts, received practical training in hospitals, observing patients
- Cleanliness was encouraged

Hippocrates and Galen

Hippocrates

- He was a doctor in ancient Greece.
- He developed the idea of clinical observation of the patient, rather than just of illness itself.
- His ideas also resulted in the Hippocratic Oath, which became a code of conduct for doctors.
- His ideas were written down in a collection of medical books.

Galen

- He was a Greek who was a doctor during the Roman Empire.
- He followed Hippocrates idea of observation
- He trained as a doctor to gladiators and was able to increase his knowledge of human anatomy while treating wounds.
- Because dissection of human bodies was banned, Galen dissected animals. (Obviously human anatomy is not the same as animals!)
- Many of his books survived the fall of the Roman Empire so his ideas lasted through the Middle Ages and into the Renaissance. His work formed the basis for doctors' training for the next 1400 years.

Theory of the Four Humours

- Hippocrates came up with the theory of 4 Humours; the body was made up of blood, phlegm, yellow bile and black bile
- Pain would occur in the body if one of the substances was either deficient or in excess >> a healthy body needed to keep the 4 Humours in balance
- Some humours are 'hot'>> create sweating illnesses
- Some are 'cold'>> create illnesses such as melancholia
- Different foods and seasons could affect the humours
- Galen believed in and developed the theory. This led to a continuity in medical knowledge and practice

Influence of Hippocrates and Galen
- Church leaders decided that Galen's work fitted with Christian ideas because throughout he referred to the 'Creator'
- Galen's ideas rapidly became widespread throughout Europe and became accepted as medical orthodoxy

**Medieval Medicine**

**What did medieval people think made them ill?**

**God:**
- Religion=very important in people’s lives
- If you led a sinful life, then illness was God's way of punishing them for their sins
- If society=sinful/moving away from the directions of the Pope>> cause an epidemic/ plague
- Belief in the **Doctrines of Signatures** (God had created illness and created the right herbs/plants with which to treat that illness), for example Lungwort was used to treat breathing problems. Some plants looked like the part of the body they were used to treat, such as Saxifrage, which breaks up rocks as it grows so was used to treat kidney stones

**Bad Smells:**
- Some people linked disease to bad air/ smells
- Mortality (death rate) was higher in towns and cities than in the countryside, this was because people lived closer together, alongside their animals and their filth

**Everyday Life:**
- Most people believed that illness and early death were inevitable
- Many children died before the age of 7
- Childbirth was very dangerous for women
- Warfare and famine were frequent
The Supernatural:
- Witchcraft was feared and many believed the world was full of demons trying to cause trouble and death
- Any sudden diseases or misfortunes were blamed on the supernatural, which was fuelled by the Church

The Four Humours:
- The widest-held belief was that people were ill because their 4 Humours were out of balance
- Every doctor agreed with Hippocrates and Galen

Who treated the sick?

Baber Surgeons:
- Those who had money would go to a barber surgeon, who would carry out minor operations, pull out teeth and cut hair
- Barber surgeons had to serve an apprenticeship before becoming qualified
- Mostly found in towns and cities, some made a living travelling around the countryside
- Many would have no formal learning, and were often illiterate.
- The red and white pole which is still used to identify a barber’s shop was originally intended to reflect the blood and napkins used to clean up during bloodletting. This treatment was one of the main tasks of the barber-surgeon

Apothecary:
- Ordinary people would almost certainly depend on the apothecary, who would sell medicines as well as herbs and spices from his shop in town.
- They prepared and sold medicines to physicians and directly to patients.
- They offered medical advice and other products.
- Many served an apprenticeship for seven years with an existing apothecary to learn his trade.
- He would sell ‘simples’, a medicine made up of one plant or herb only, or ‘compounds’, which were a combination of ingredients made up to deal with a specific illness or complaint. One such compound was red rose, ground fine with bamboo juice to treat smallpox.

Wise Woman:
- Many people visited the local wise woman.
- She would have wisdom and skills handed down by her family that were probably as effective as anyone else’s, she was reasonably priced and would usually know the patient already.
- Many of these women would also act as midwives.
- The ‘lady of the house’ would often be expected to provide medical care for the family. If she lived on an estate or farm, she would also be expected to care for the labourers and workers too.
- Their knowledge and skills were by no means restricted to women’s health.
- Their methods of diagnosis and treatment were based on the belief that all human life was linked to the rest of creation.
- Wise women also used many practical herbal remedies, drawing on plants and the rest of the natural environment

Physician:
- Medieval doctors accepted the ideas of the ancients without question, and held many superstitious beliefs. This meant that patients often got worse, rather than better, under their care.
Physicians had different tools for diagnosing sickness and putting it right: two are urine and the zodiac chart.

The physician would look carefully at the colour of urine and compare to a chart as shown below. He might smell it and in some cases taste it to help him decide what was wrong with the patient. The zodiac chart would tell the physician what parts of the body were linked to which astrological sign, and thus dictate what the physician might do to cure a patient. Eg some things would work for a Pisces but not an Aries.

The chart might also tell the physician the best time to carry out the treatment, and even when to pick the herbs in medicines—herbs picked at the wrong time of the moon's cycle might do more harm than good!

Surgeon:

- During medieval times Surgery and knowledge of the Anatomy was developed as dissection was allowed.
- Operations were carried out by 'surgeons'. Most of these men were unskilled and had other jobs such as butchers and barbers.
- It was a time of frequent warfare, and the constant fighting meant that surgeons' skills were much in demand. Perhaps as a result, surgery actually progressed in Medieval times.
- John Arderne is sometimes called the first English surgeon. He trained as a surgeon and practised in London and was famous for his astonishing success rate. He worked as a surgeon on the battlefield dealing with major wounds. He developed his own pain-killing ointment made from hemlock, opium and henbane. This helped him heal and stopped the need for CAUTERISING (burn the flesh to stop bleeding or prevent infection) deep wounds, which often killed patients. He developed speedy amputation skills. He wrote books explaining his methods 'The practice of surgery', 1350. He urged doctors to develop a good bedside manner and trust their judgement, not old texts. He charged the rich as much as he could but treated the poor for free.

Medical Progress

The Church's role in medical progress

Helping Progress:
- Regarded as central part of Christian duty to look after the poor and sick
- Church played a major role in setting up hospitals and over 160 were set up in the 12 and 13th C
- HOWEVER, some were very small, and refused to take in sick people or women
- The Church also set up university schools of medicine throughout Europe where physicians could be trained using the texts of Hippocrates and Galen
- It was often through these schools and in monasteries that old texts were hand-copied by monks and thus survived

Limiting Progress:
- The Church made it very difficult for scholars to dissect human bodies
- Most studies of dissection were based Galen's work, but his work was based on the dissection of animals >> the Church's insistence on using Galen's work limited progress in understanding the human body
- Scientist that insisted on scientific method faced problems, e.g. Roger Bacon, was arrested in 1227 for spreading anti-Church views after questioning the Church's stance on Galen

War
- War was common during the medieval period and led to advances in surgery and the treatment of wounds
• Cauterisation of wounds was developed on the battlefield—applying heat to wounds to stop bleeding
• Some surgeons used wine as an antiseptic to clean wounds
• Opium was used as a painkiller
• HOWEVER opium and hemlock were used to knock out patients, but were often too strong and killed patients!
• Army surgeons developed tools for amputations, like an arrow cup, designed to slide into a deep wound, surround an arrow-head and gently remove it from the body without causing any more damage
• Manuals helped spread knowledge featuring diagrams that army surgeons could expect

Science
• Robert Grosseteste, a teacher at the University of Oxford and then Bishop of Lincoln—leading advocate of scientific enquiry
• His work on optics led to the development of spectacles
• Roger Bacon began questioning the work of Galen and stressed the importance of scientific method and close observation

People were beginning to question the old texts and Church. YET most people still continued to believe the theory of the 4 Humours

Medieval Hospitals
• Not the same as a modern hospital
• Often they were, houses giving safe lodgings to travellers, the sick unable to work, and other vulnerable members of society—care homes
• Many were funded by the Church, or by the rich

Care within a hospital

Went to the chapel, given a bath and then went into clean sheets (had been boiled)

Very few hospitals employed physicians or surgeons. care was provided by nuns and elderly women—too old to tempt men into the ways of the flesh!

Main treatment was prayer and contemplation. for recovery.

Most sisters, or monks, attached to the hospital, would have plenty of knowledge of herbal remedies

Towns and Cities
• Unhealthy—people lived so close together
• Few regulations about building or waste disposal
• Clean water in short supply and water often drawn from contaminated rivers and streams
• Cesspits (pit to dispose sewage) were often located near wells and one contaminated the other
• Animal roaming the streets
• Shopkeepers would sell food that was going off
• As a result of the conditions, DISEASES SPREAD QUICKLY!
Dealing with the filth!

Monasteries:
- Knew of the dangers of dirt and filth
- Monasteries carefully extracted water for drinking, washing and cooking and used waste water to flush away the waste and clean the toilets
- Every monastery had a **physic garden** where plants used to treat patients were grown

Bath Houses:
- People would pay to have a bath in bath houses
- Archaeological evidence also shows that people used combs and tweezers, toothpicks and mouthwashes

It wasn’t all filth:
- It has been discovered that in the Middle Ages, Coventry council made a concerted effort to clean up the city
- In 1421, the Mayor’s Proclamation required every man to clean the front of his house every Saturday or pay a fine
- Waste collection services are recorded in 1420, where the council gave William Oteley the right to collect one penny from every resident and shop for his weekly street cleaning services

**The Black Death, 1348-49**
- Said to have originated from Asia
- Historians estimate that it killed 50-66% of people

**Causes of the Black Death:**

<table>
<thead>
<tr>
<th>Smells</th>
<th>Bad smells, from an overflowing privy or rotting food, corrupted the air</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Humours</td>
<td>The 4 Humours were out of balance in each victim</td>
</tr>
<tr>
<td>God</td>
<td>God was angry with people and their sinful lifestyles so sent down the plague as a form of punishment. People were new clothes and showing off their wealth &gt;&gt; this made God angry and so sent the plague to teach people to behave better</td>
</tr>
<tr>
<td>Jews (anti-Semitism)</td>
<td>Jews had poisoned the wells and springs</td>
</tr>
<tr>
<td>Astrology</td>
<td>The movement of the planets caused the plague</td>
</tr>
</tbody>
</table>

**Treating the Black Death**

To avoid infection:
- March through the streets praying to God: by order of the King
- Avoid eating too much
- Avoid taking a bath- the opening of the pores would allow the disease to enter
- Avoid having sex- too much excitement can weaken you and make you more likely to catch the plague
- Avoid ALL plague victims
- Clean all filthy streets: by order of the King
- Attend Church and pray for your soul
- Carry sweet smelling herbs and spices to keep away evil spirits
For those who are infected:
- Pop open the buboes to release the disease
- Attach a live chicken or pigeon to the buboes to drive away the disease
- Drink a mixture of vinegar and mercury
- Carry out flagellation (walking through the street, praying for forgiveness and whipping yourself)
- Bleeding - to release evil inside the body
Topic 2: The Beginnings of Change, 1450-1800

What was the Renaissance?
- The Renaissance, or 'rebirth', began in northern Europe in the mid-15thC
- It occurred at the same time as the Reformation, where religious ideas were challenged: Protestantism v Catholicism; Luther and Henry VIII v the Pope
- This led people to challenge ideas and beliefs in science and technology
- It was the beginning of the 'scientific method' >> people began questioning Galen's work
- New inventions: microscope and Caxton's printing press enabled the rapid spread of ideas

Andreas Vesalius (1514-64)
- He was a professor of surgery
- He challenged Galen's work on the human anatomy and developed a more accurate view of the inside of the human body, unlike Galen, who dissected animals rather than humans.

Ambroise Pare (1510-90)
- He was infamous for adopting new scientific ways of treating disease
- He was a surgeon in the French army
- He made up a mixture of egg, turpentine and oil of roses to dress raw wounds. This was much less painful and more effective in healing rather than using hot oil for cauterising wounds
- He also used ligatures (a cord used to tie something tightly to stop bleeding) to tie-off wounds after amputation which healed wounds faster
- Helped develop artificial limbs for wounded soldiers
- He published his experiences as an army surgeon in his book, Le Oeuvres, in 1575, which became famous across Europe

The impact of the Renaissance on Britain

The Renaissance and Galen
- Initially, the Renaissance led to the revival of all things ancient. Many of Galen's works were retranslated into Greek and Latin. Galen and his contemporaries were glorified.
- By 1525 his complete works had been published in Greek and translation into Latin soon followed. Galen was regarded as the pioneer of all medical knowledge, to be copied.
- However, the very essence of the Renaissance was questioning. The more artists and surgeons studied the anatomy, and the more humans they dissected, they more they began to notice the inconsistencies between Galen's work and what they discovered.
- The Reaction: The initial reaction was that Galen was right and the current anatomists were wrong. Soon the medical world seemed to be split in two, depending on how strongly they supported Galen.
- It also seemed to split between: Physicians- who mostly learned from texts and lectures, and therefore, largely supported Galen's ideas
Surgeons - who were exploring the human body on a daily basis and were learning by experience and experiment.

William Harvey and the circulation of the blood

- Harvey's most famous work, *On the Motion of the Heart*, was published in 1628. It challenged the work of Galen and the ancients and changed medicine forever.
- Harvey experimented on animals, and it was during this that he discovered blood was pumped around the body in a circular motion.
- His work on cold blooded amphibians, whose blood circulates much more slowly, allowed him to see blood pumping around the body.
- He also showed that the heart worked as a pump and blood flowed in a 'one-way system' around the human body.
- Galen believed that the liver was the centre of the body and produced new blood. Harvey's work on the circulation of blood proved that this was wrong and also challenged the idea of 'bleeding' as a cure. If Harvey was right then it was impossible for the body to have too much blood.
- The Reaction: Those who supported Galen, rejected Harvey's work. They argued that Harvey could not see capillaries and therefore could not prove their existence. It would be another 60 years before capillaries were observed in action. Many were very conservative and resistant to change. Harvey himself told a friend that he lost many patients after 1628 because of his 'crack-pot ideas'.

Thomas Sydenham - the 'English Hippocrates?'

- Hippocrates was regarded as the 'father of modern medicine'. He argued for the need to base any treatment on examining a person as whole and basing decisions on observation.
- Sydenham set up as a physician in 1663. He distrusted those who based their diagnoses and treatments on book learning. He firmly believed in close observation of the symptoms of a disease, and as little intervention as possible. He was a strong advocate of the 'scientific method' of treating ill-health. He believed diseases had different characteristics and thus each disease had a separate, unique treatment.
- Sydenham was interested in smallpox. Traditionally, physicians piled blankets on the patient and administered lots of hot drinks, trying to sweat the disease out of the body. Sydenham devised a 'cool therapy', prescribing lots of fluids, very moderate bleeding and keeping the patient cool. This treatment, echoing the Four Humours, seemed to work (evidence of continuity in medicine?).
- The Reaction: Some enlightened contemporaries hailed Sydenham and his treatments, but others viewed him as eccentric. Whoever heard of a doctor claiming it best not to treat a patient unnecessarily!

John Hunter

- Served as an army surgeon during the Seven Years War and became a famous surgeon and anatomist.
- He believed that the best way to heal deep wounds was to leave as much possible to nature! He was most famous as a teacher of anatomy, training may of the best surgeons of the time, such as Edward Jenner, and spent many hours dissecting bodies to learn about how they worked.
- The Reaction: a recent newspaper article accused him of being involved in 'Burking'.
‘Burking’ was the name given to the crime of murdering a person for the purpose of selling the corpse, often to surgeons and schools of anatomy. Hunter always seemed to have a fresh supply of bodies!

**Dealing with Disease**

**Surgery during the early modern period**

**Surgeons’ skills improved** - In the 1720s William Cheselden, in London, was renowned for his speed and skill. He was able to remove a stone from the bladder in less than a minute.

**Rigorous training?** In the eighteenth century more than half of all practising ‘doctors’ were men who had served an apprenticeship. Of the 10,220 persons listed in the Medical Directory, in 1856, with some sort of qualification, only 4% had a medical degree from an English university.

**Increasing regulation** - Many surgeons were members of the Royal College of Surgeons and you could only practise with a licence. No person could practise as a surgeon within seven miles of the City of London unless examined by the College. In 1811 surgeons had to attend at least one course on anatomy and one on surgery. In 1813 it was decreed that a surgeon had to have at least 1 year experience in a hospital.

**Anaesthetics** - There was still no reliable anaesthetics, but wine and opium were widely used, but with unpredictable results which could prove fatal!

**What medicines were used in early modern Britain?**

**Lady Johanna St John**
- Typical of the local lady of the manor’s role in healing
- She lived in Swindon and combined her role of running a household with compiling a recipe book of cures
- She grew many herbs in her garden

**Nicholas Culpeper**
- He published his Complete Herbal in 1653 and is still in print today
- He served as an apprentice to an apothecary in London and then set up his own shop
- He treated people for free, preferring to examine and talk to his patient in person, rather than examine their urine
- He tried to combine the use of herbs with the Doctrine of Signatures and astrology, so not all that modern

**Ingredients from around the world**
- Rhubarb was hailed as a wonder-drug when it was first introduced from Asia
- Tobacco was brought from North America by Walter Raleigh and it quickly became a herbal remedy
- Apparently smoking a pipe was a good way to keep the Plague at bay!

**Quackery**
- Quacks, after the Dutch word ‘quacksalver’ (someone who boasts loudly about his cures) sold medicines fully understanding that they didn’t do what they said—if they did, it was purely by accident!
- Quack medicine was sold both as a preventative and a cure
• It was often sold by itinerant salesmen (travelling) who would have moved before customers realised their product didn’t work!
• ‘Daffy’s Elixir’ - was a famous cure, invented by a Leicestershire clergyman in 1674. He claimed it cured ‘convulsions, fits, consumption, piles, worms etc.’ it made him and his family a fortune and continued to be sold in Britain until the 19thC. It was made up of brandy, aniseed, raisins, saffron, rhubarb and Spanish liquorice etc. Although it did no harm, recent medical research has discovered that it makes a perfect laxative!
• Both alcohol and opium were used in quack medicines, usually effective in dulling pain
• Success in quackery depended on the seller’s charm and charisma, good packaging, regional and national newspaper advertisements or who has previously used the product (‘Turlington’s Balsam of Life’ was used by the King in 1744 for treating kidney and bladder stones, despite proving useless and became very popular)

News ideas and treatments

The growth of hospitals
• Thomas Coram was the driving force behind the establishment of the Foundling Hospital
• It was opened in 1741 to provide care for abandoned children
• Most were babies born out of wedlock, whose mother weren’t in a position to care for them and continue working
• He spent over 10 years collecting funds to build the hospital
• There were many more applicants than places available, showing the desperate need for this kind of care
• Babies were chosen for a place by form of a lottery
• The hospital arranged for foster families to care for the babies until they were 5 years old
• Then they brought back to the hospital and educated until they were 15, many being trained for domestic and military service

Voluntary Hospitals
• There were other voluntary hospitals usually funded from inheritances or private subscriptions (filled the gap left by the abolition of monasteries)
• These places were different to medieval hospitals and offered not only a place to stay but medical treatment
• Many doctors etc. worked in these places
• Nurses were still untrained and usually unskilled

New Discoveries
• Robert Burton published a study of mental illness in 1621. He blamed the lack of exercise, idleness, excessive pleasure and too much studying for melancholy. He recommended fresh air, exercise, music and laughter as remedies
• In 1671, Jane Sharp published The Midwives Book, which combined medical knowledge with personal anecdotes. She argued that midwifery should be reserved for women, at a time when men were taking over the trade
• In 1753 James Lind came up with a cure for scurvy- a disease prevalent among sailors on long journeys deprived of fruit and veg. Scurvy killed more British sailors than war. They were made to drink lime juice every day to stop catching scurvy

Prevention of Disease

What is smallpox?
• Smallpox is a contagious disease caused by the variola virus
• Between 30-60% of those who caught smallpox died
Survivors carried its legacy for life: some were left blind; almost all disfigured with scars.

Smallpox had long been endemic (regularly found in the area) in Britain, and was a feared killer since the 17th Century.

Major epidemics (outbreak killing lots) killed 35,000 in 1797, and 42,000 between 1837 and 1840.

The disease was no respecter of rank: Queen Mary died of smallpox in 1694.

People thought it was created by miasma, or ‘bad air’.

It was declared eradicated in 1980 following a global vaccination campaign led by the World Health Organisation.

What is inoculation?

- A form of vaccination
- Inoculation dates from before the 18th century, being widely used in the Far East
- Inoculation involves a mild form of smallpox being introduced into a scratch made between finger and thumb
- The person being inoculated then developed a mild form of the disease, but became immune to the stronger version of smallpox
- Lady Mary Montagu came across inoculation in Istanbul and introduced it to England in 1721
- She had personally survived a smallpox outbreak that killed her brother and left her scarred
- When smallpox broke out in England she had her children inoculated and it worked
- However, this could still be dangerous as someone who is inoculated can spread the disease and can still kill

Who was Edward Jenner?

- Jenner was a country doctor in Gloucestershire who had studied in London
- According to local gossip milkmaids who caught cowpox never seemed to catch smallpox.
- Jenner concluded that having cowpox gave them immunity from smallpox.
- He experimented on the local people; he chose a 9 year-old boy, James Phipps, who had neither cowpox nor smallpox.
- He injected him with pus from the sore of a milkmaid with cowpox. James developed cowpox, after he recovered Jenner gave him a dose of smallpox. James was immune.
- Jenner had proved that an injection of cowpox stopped people catching smallpox.
- He knew it worked, but didn’t know how! He submitted a paper to the Royal Society in 1797 but was told he needed more proof.
- So, he continued carrying out more experiments, including on his own 11 month old son, all the time keeping detailed notes and records.
- Finally, in 1798 Jenner published An Inquiry into the Causes and Effects of the Variolae Vaccinae, or Cow-Pox.
- He continued to work on vaccination and in 1802 was awarded £10,000 by the Government for his work, and a further £20,000 in 1807 after the Royal College of Physicians confirmed how effective vaccination was.

The first famous Jenner!
What impact did vaccination have on smallpox?

<table>
<thead>
<tr>
<th>Positive Impact</th>
<th>Opposition to Vaccination</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 1871 the Government decreed parents could be fined for not having their children vaccinated, clearly smallpox was a massive threat!</td>
<td>Those who charged up to £20 a time to inoculate patients felt that their livelihoods were threatened and disliked change.</td>
</tr>
<tr>
<td>In the UK, death from smallpox fell from 420 million in the 1870s to 80 million in 1880.</td>
<td>Many people felt it was wrong to inject cowpox into humans.</td>
</tr>
<tr>
<td>In 1840, vaccination was made free to all infants and in 1853 it was made compulsory. This shows the fear of smallpox as a killer disease.</td>
<td>Some argued that smallpox was God’s punishment for living sinful lives and so we should not interfere, or limit the spread of the disease.</td>
</tr>
<tr>
<td></td>
<td>Others thought it should be up to the parents to decide whether their children should be treated or not.</td>
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<td></td>
<td>There was an anti-vaccine league set in 1866 to oppose compulsory vaccination.</td>
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<tr>
<td></td>
<td>Both, those for and against vaccination, felt it was not the Government’s job to interfere in such things.</td>
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**Child-bed Fever**

- Child-bed fever is the name given to an infection caused in the female reproductive tract following childbirth or miscarriage
- Alexander Gordon, a naval surgeon, discovered, during an outbreak of child-bed fever, the cause of the deaths.
- He noticed that women in outlying villages who were treated by the village wise woman or midwife rarely caught the fever, whereas those treated by doctors and midwives moving from patient to patient were much more likely to die.
- He proposed that medical practitioners wash their clothes frequently and wash their hands in chlorine water to try and limit the spread of disease
- Reaction: When he published his results in 1795 he was ridiculed by the medical profession and his ideas were implemented many years after
The Great Plague of 1665

Causes of the Plague
- Like the Black Death people could not pin point to one cause, but many causes
- People did, however, notice that there were more Plague victims in poorer and dirtier parts of London- began making the links between disease and dirt
- The King and Mayor of London introduced a series of measures to try and prevent the spread of the disease

Preventative measures
- All public entertainment to be stopped
- Animals to be kept out of the city
- All dogs and cats are to be caught and killed
- Rubbish to be cleared from the streets
- Fires to be lit in the streets, to drive away 'bad' air
- Houses containing plague victims to be sealed up for 40 days and the door painted with a red cross- this was known as quarantine
- Public prayers are to be said on Wednesdays and Fridays
- Weekly fasts to be held

Similarities and Differences between the Plague of 1665 with the Black Death of 1348-49

<table>
<thead>
<tr>
<th>Similarities between the GP and the BD</th>
<th>Differences between the GP and the BD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many attributed both to religion- God had sent the plague as a punishment for sin</td>
<td>During the Plague of 1665 more emphasis was placed on cleaning the streets</td>
</tr>
<tr>
<td>Emphasised religion as a way of treating and preventing the spread of the disease</td>
<td>More stress on the links between animals and disease</td>
</tr>
<tr>
<td>Links made between dirt and disease</td>
<td></td>
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</tbody>
</table>

A plague doctor wearing a protective outfit designed by Charles de Lorne in Italy in 1619
Q3- compare the similarities
  o You might be asked a question on comparing the outbreak of different plagues throughout the entire period
  o Remember not only do you have to provide detailed evidence and explanation but you need to compare the similarities arising from broader historical context!
Topic 3: A Revolution in Medicine, 1800-1900

The development of germ theory and its impact on the treatment of disease

A scientific revolution?
- The stethoscope was invented in Paris in 1816 for listening to breathing problems
- Also the invention of thermometers, more powerful microscopes and the first X-ray machine, invented in 1895
- Training improved
- What was key during this period was: CAREFUL OBSERVATION; CAREFUL EXPERIMENTATION; and the CAREFUL RECORDING OF RESULTS
- 3 people played a major role in experimental science

Louis Pasteur (1822-1895):
- Louis Pasteur was a French chemist
- He was the first person to establish a link between germ and disease
- This was known as germ theory- the idea that disease is spread by micro-organisms he called germs
- He argued that micro-organisms were responsible for disease, and only if you discover these organisms then a vaccine can be developed to target the disease
- His first work was on chicken cholera, this led to an effective vaccine against rabies in 1880
- He also invented the process of pasteurisation, to preserve liquids and stop them spoiling

Robert Koch (1843-1910):
- Was a German microbiologist
- He took the work of Pasteur further, and was able to link particular germs to particular diseases
- He invented a way to stain bacteria so it was easier to see under the microscope
- In 1882 he identified the bacteria which caused tuberculosis and in 1883 and 1884 those responsible for cholera (confirming the work of John Snow in Britain)
- He and his students began isolating the causes of many diseases, such as pneumonia and typhoid

Paul Ehrlich (1854-1915):
- He was a German physician and one of Koch's students
- He is best known for developing Salvarsan 606 in 1910, as the first effective treatment for syphilis (STD)
- It was called 606 because it was the 606th that was used to kill the germs causing syphilis
- Salvarsan became known as the first 'magic bullet'- drugs designed to target specific germs and having little/no effect on any other part of the human body

What impact did these new ideas have in Britain?

<table>
<thead>
<tr>
<th>Evidence of continuity in medicine</th>
<th>Evidence of change in medicine</th>
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<tbody>
<tr>
<td>Infant mortality remained high (the number of babies that died before their first birthday). In 1899 142 out of every</td>
<td>From the 1880s death rates from traditional 'killer' diseases began to fall, especially in cities</td>
</tr>
</tbody>
</table>
thousand babies born died before they were 1. Other areas like York it was higher (250 per thousand).  
- Reasons for this differ: many families couldn't afford doctors, so relied on home remedies; child neglect; bad housing and overcrowding; and the lack of fresh foods  
- Still belief in home remedies - honey

**Hospitals:**
- Many new hospitals were built
- By 1860 there was 36 specialist hospitals in London
- In 1870, the London Hospital Saturday Fund was set up to collect donations from workmen and then arranged admission 'tickets' for treatment when necessary

**Florence Nightingale**
A significant individual:
- During the Crimean War she cleaned up hospital wards and trained nurses to do the same
- As a result she cut the mortality rates from 40% to just 2%
- Returning to Britain after the War, she wrote *Notes on Nursing*, explaining her ideas on how nurses should be trained and how they should treat the sick
- She set up Britain's first nurse training school at St. Thomas' Hospital
- She raised £44,000 to fund it herself

Exaggerated significance?
- According to a recent book by Anne Summers, Nightingale’s importance during the Crimean War had been exaggerated and her reputation was the result of propagandist efforts by newspapers at the time
- Recent debate that Mary Seacole, rather than Nightingale, should be part of the History National Curriculum

**Everyday Medical treatments and Remedies**
- Machines were invented to make tablets, sugar-coated pills and gelatin capsules
- This allowed for accurate doses of medicine to be taken and the mass production of drugs
- Self-help books recommended that every household should have laudanum (90% alcohol, 10% opium and flavoured) to treat minor ailments. It was often given to children to calm them and send them to sleep
- Aspirin was developed in Germany in the 1890s and went on sale in Britain in 1899 as an everyday painkiller
- Boots the Chemist began in the 19thC, making medicines for the home market
- Problems with mass production:
  - There were no measures in place to control mass production of medicine- anyone could include anything they wanted
  - Arsenic and mercury in many medicines- both poisonous in large quantities
  - Cocaine and opium were addictive

There was a ready market for these treatments and people like Thomas Beecham (of Beecham's Powders fame) became very rich selling them
A Revolution in Surgery
Becoming a Surgeon

- Surgeons were often appointed because of who they knew rather than what they knew (Bransby Blake Cooper, a surgeon who took 1 hour to remove a stone from a patient’s bladder—usually a procedure that took 6 minutes—and the patient died)
- This led to the establishment of the General Medical Council in 1858 to regulate the profession

Elizabeth Garett Anderson

- Medical profession= male dominated
- Anderson was the one of the first female doctors in 1865
- She worked as a surgery nurse, a private education (no university in Britain would accept her on a medical course) and passing an examination from the Society of Apothecaries to get a license
- After she received the highest marks in her cohort, the Society of Apothecaries changed its rules to prevent other women from taking its examinations
- Unable to work in a hospital, Elizabeth set up her own practice, including an outpatients’ service for the poor
- This was the New Hospital for Women and Children in 1872, staffed entirely by women
- In 1870 she learned French to obtain a medical degree from Paris
- She helped set up the London School of Medicine for Women in 1874—the only teaching hospital in Britain to offer courses to women
- By 1911 there were only 495 women on the Medical Register in Britain

Sophia Jex-Blake

- In 1869 she applied to Edinburgh University to study medicine
- The university rejected her, saying that couldn’t make arrangements for just one female student, so she advertised the Scottish newspapers for more students and eventually the ‘Edinburgh Seven’ were allowed to start the course
- In 1870 the Surgeon’s Hall riot took place—male students rioted as women went to take their anatomy exams
- This was a turning point in attitudes—some place students escorted them to their lectures and exams
- The university staff was divided and refused to issue degrees to the women
- Jex-Blake went to Switzerland to obtain her medical degree in 1877
- She was one of only 3 doctors in Britain and opened her own surgery in 1878 in Edinburgh
- She was involved with Elizabeth Garett Anderson in opening the New Hospital for Women and Children in London
- Edinburgh University, having refused to issue a degree to Jex-Blake now proudly boasts of her on its alumni (graduate) page and has a plaque to her near the entrance of the Medical School

James Simpson—making operations endurable?

Anaesthetics before Simpson:

- Sir Humphrey Davy, who invented the Miner’s Safety Lamp in 1815, was the first to use nitrous oxide, or laughing gas
- Quickly the gas was used as an anaesthetic to relieve pain during operations, but it was difficult to control the dose
- In 1846 Robert Liston successfully amputated a leg using ether as an anaesthetic
- HOWEVER, one of the drawbacks was that sometimes the patient woke up in the middle of the operation
James Simpson
- In 1847, Simpson used chloroform after experimenting on himself and friends, to reduce pain in childbirth
- Chloroform indices dizziness, sleepiness and unconsciousness in patients and needs to be carefully administered
- This resulted in opposition, but this was partly overcome when in 1853 Queen Victoria used chloroform while having a baby
- These painkillers had to inhaled as a general anaesthetic in order to work
- In the 1850s, cocaine was produced and used as an anaesthetic
- The use of cocaine rapidly spread, especially once it could be produced chemically after 1891
- By the end of the century operations no longer had to be painful
- HOWEVER, anaesthetics didn’t necessarily make operations safer. Some struggled getting the dose right, some surgeons had higher mortality rates using anaesthetics, so in the 1870s stopped using chloroform altogether

Beating Infection: Joseph Lister and Carbolic Acid
- Antiseptic creams are used to prevent dirt getting into a wound and to prevent inspection
- The biggest killer after surgery was sepsis infection/known as hospital gangrene, an infection caught during or after operation
- Ignaz Semmelweiss was an Austrian doctor and suggested that doctors wash their hands in calcium chloride solution before treating their patients

Joseph Lister
- Born in Essex, Lister had researched gangrene and infection.
- Lister moved to Glasgow in 1860 and became a surgeon.
- He read Louis Pasteur’s work on germ theory.
- Lister had seen carbolic spray used to treat sewage.
- In 1865, after experiments he found that a thin mist of carbolic acid sprayed over the wound during surgery limited infection. By following this with careful bandaging, the wound would heal and not develop gangrene.
- By doing this he was able to reduce the mortality rate in his operations from 46% to 15% in only 3 years
- In 1875 he invented a machine that sprayed carbolic acid over the entire room

Aseptic Surgery
- Aseptic surgery involves cleaning and sterilising all equipment which prevents any germs entering the operating theatre
- In 1881, Charles Chamberland, a French biologist, invented a steam steriliser- he discovered that heating instruments in water at 140 degree C for 20 min. completely sterilised them
- Gustav Neuber, a German surgeon, insisted on thorough scrubbing before staff entered the theatre

Surgical clothing:
- William Halstead, an American doctor, had his team wear surgical gloves because one of his nurses developed an allergic reaction on her hand because of the carbolic spray

What was the impact of these changes?
✓ Anaesthetics allowed surgeons more time to carry out careful surgery
There wasn’t a revolution in surgery in the sense of innovative operations, but there was a revolution in the chances of patients surviving.

In 1892 Lister and Pasteur were, together, given an award at the Sorbonne University in Paris for their contribution to the fight against disease.

With some of the basic problems of surgery now solved, surgeons attempted more ambitious operations. The first successful operation to remove an infected appendix came in the 1880s. The first heart operation was carried out in 1896.

Opposition to change

| Some surgeons claimed that Lister's carbolic spray, which soaked the operation theatre, seemed extreme. It cracked the surgeon's skin and made everything smell. |
| Using carbolic solutions slowed down operations, which could lead to problems with blood loss. |
| Doctors who used Lister's ideas did not always copy them properly so if their patients died they said Lister's ideas were wrong. |
| Lister was sometimes seen aloof (cold and distant) at demonstrations and was often critical of other surgeons. |
| Lister himself kept changing his methods to improve his work. Many doctors thought this meant he was not sure of his ideas. |
| The equipment was expensive. |
| The new precautions of sterilising the theatre caused extra work and made operations more expensive |
| Some doctors argued that using carbolic acid stopped the body's own defensive mechanisms working properly. |
| During the Crimean War, a British military surgeon argued that it was better for soldiers in hospital to hear patients shout during an operation than to quietly subside and die |
| For centuries surgeons had been forced to accept that many patients died. When Lister said he achieved good results first they didn't believe him, then they became defensive feeling Lister was criticising them. |

Cholera

- Cholera epidemics were perhaps the biggest agent for change—there were epidemics in 1831-32, 1848, 1854 and 1866.

John Snow and the discovery of the causes of cholera

- Was a surgeon in London
- In 1849, after the 1848 epidemic, he published a book arguing that cholera was spread by dirty water rather than through the air
- Medical opinion ignored his findings
- In the first 10 days of the cholera outbreak in 1854, over 700 people died in his locality
- Snow mapped the location of each death and worked out that the one thing they had in common was that they had all collected their water from the
He also noticed that men in a nearby brewery, who had drank beer rather than water, hadn't been victims of cholera.

It was later discovered that a cess pit, less than 1 meter from the water pump, was leaking dirty water into the water supply.

**Agents of change**

- The government had long taken a *laissez-faire* (do nothing) approach when it came to acting over living and working conditions
- But this began to change in the 19th C

**Farr and Southwood Smith**

- William Farr was a civil servant
- He was the driving force behind the compulsory registration of births, marriages and deaths in 1837
- Thomas Southwood Smith was appointed as a physician in 1824, allowing him to study the diseases caused by poverty

**Chadwick**

- Edwin Chadwick was Secretary to the Poor Law Commissioners from 1834
- He used statics to investigate the links between ill health and poverty
- He published a report in 1842, which argued for an urgent need to improve living conditions if the economy was to continue to grow
- He was the driving force behind the establishment of the Health of Towns Association set up in 1844 - what was known as the 'Clean Party'
- The Clean Party pushed for government action to improve conditions in towns
- The 'Dirty Party' were a group of MPs opposed to such action
- Their opposition was largely based on the costs involved

**Dr Barnardo and the Ragged School**

- Thomas Barnardo trained as a doctor in London in 1866
- He was appalled by the poverty he found in East End
- So he set up the 'Ragged School' - a place where hungry children were given a cheap breakfast to help them learn
- There were evening classes and Sunday Schools for those in work
- The aim was to give them a better life than they would have as destitute children in London

**The Public Health Act, 1848**

- It was the cholera epidemic of 1848 rather than the Health of Towns Association that finally forced the Government to act
- It passed the PHA 1848
- This allowed local councils to improve conditions in their own town, if they wished, and if they were prepared to pay for it
- They could force towns with a high death rate to take action over water supply and sewage, and appoint a Medical Officer of Health

**Impact of the PHA**

- By 1872 only 50 councils had a Medical Officer of Health
- Many towns didn't improve its facilities
- Other acts followed: 1866 Sanitary Act, 1875 Housing Act and the 1875 Public Health Act
• These had more impact—local councils were forced to provide clean water and appoint Medical Officers of Health and Sanitary Inspectors
• 1875 Food and Drugs Act regulated food and medicines
• In 1868 there were 716 deaths from typhus in London, in 1885 just 28 and by 1900 none
• London started building sewers in 1858
• 1875 Housing Act allowed councils to knock down bad housing and replace it
• Flush toilets became more widely used in wealthier homes
• Compulsory vaccination against smallpox was introduced in 1853
Alexander Fleming and the discovery of penicillin

- Penicillin had been discovered in the 19thC
- During WW1, Alexander Fleming observed that antiseptics seemed unable to prevent infection, especially in deep wounds
- One of the ways of killing microbes that caused infections was *staphylococci*, however this caused septicaemia
- In 1928, on returning from holiday, Fleming noticed a mould-*penicillin*-that had grown on a petri dish
- He also noticed that the staphylococci bacteria around the mould had been killed off
- Fleming called it an **antibiotic**, meaning ‘destructive of life’

Howard Florey and Ernst Chain

- In 1937, Florey and Chain overcame the difficulties of producing enough of the drug
- They experimented first on mice in 1940, and then on humans in 1941
- Their first trial, on a policeman badly infected after being scratched by a rose bush, died after 5 days when their stock of the drug ran out, but the trial proved how effective penicillin was

The Second World War

- The war proved a huge incentive to the development of the drug
- In 1943 it was used for the first time on Allied troops in North Africa, with great success
- America and Britain produced huge quantities of the drug
- After the war it was used to treat many illness including bronchitis, pneumonia, syphilis etc.
- Fleming, Florey and Chain received the Nobel Prize for Medicine in 1945

Other antibiotics

- Streptomycin was developed in 1944
- Mitomycin was developed in 1956
- New vaccines emerged to treat polio and measles
- **Tranquilisers** (taken to reduce tension and anxiety) came on the market
- Birth control pill came on the market too
- There were new pills to treat depression, hypertension etc.

Too many pills are a problem?

- There were fortunes to be made with a successful drug, this sometimes led companies taking shortcuts or inadequately testing the drugs before they were distributed
- A good e.g.- thalidomide
- It was introduced in the 1950s as a mild sleeping pill, safe even for pregnant women
- However, it led to thousands of babies worldwide being born with malformed limbs
- It was in 1962 before the link was made and lawsuits followed
- A **positive outcome** was that it led to much tougher testing and approval process for new drugs

A growing belief in alternative medicine

- There has been a huge increase in interest in alternative/ **holistic medicine** (looking at and treating the body as a whole)
- Treatments like hydrotherapy, aromatherapy, hypnotherapy and acupuncture became popular
Many were based on old traditional treatments using herbs and 'pure' treatments designed to work in harmony with the body, rather than using chemicals. 

Acupuncture is a traditional Chinese method of treating illness by sticking needles into various parts of the body and tapping into the natural flows of energy around the body. 

Opposition: the British Medical Association has described homeopathy as 'witchcraft'.

**The impact of war and technology on surgery**

**The First World War**

- Over 8 million soldiers died, and more than 20 million injured during WW1.
- From 1915 Casualty Clearing Stations (CCS) were set up near the Front.
- Emphasis was placed on evacuating casualties as soon as possible.
- Injuries were split into 3 types: slightly wounded, quickly sent back to the Front; those needing hospital care; and those beyond help.

**Technological Strides**

- Mobile X-rays allowed better identification of items inside the body.
- Blood transfusions were pioneered by the British Army, and by 1917 blood was stockpiled and stored for up to 28 days.

**Shell-shock treatment**

- Between 1914 and 1918, the British Army identified 80,000 men with what would now be termed shell-shock.
- 306 British and Commonwealth soldiers were executed by firing squad because the condition was initially classified as desertion or cowardice.
- It wasn’t until 2006 when these men were pardoned.
- William Rivers, a psychologist, developed a 'talking cure'- this helped soldiers come to terms with what happened and they were encouraged to take part in sports and craft activities.
- The most famous patient to have went through this 'cure' were war poets, Wilfred Owen and Siegfried Sassoon.
- This technique was used after the war in treating mental illnesses.

**Skin grafts**

- Many soldiers suffered facial injuries.
- Harold Gillies developed new techniques to treat these.
By 1917 he had persuaded the army to set up special hospitals for facial repairs
Over 5,000 men were treated by Gillies and his colleagues
He is regarded as a pioneer of plastic surgery and was knighted after the war

How did technology change surgery?

X-ray technology
- X-rays were discovered in 1895 and developed by others
- War scientists worked to develop radiotherapy as a tool for targeting cancerous cells
- They also extended X-ray imaging, using CT scans (computerised tomography) that allows surgeons to see tissue as well as bone in 3D images

Blood Transfusions
- In 1901, Karl Landsteiner, an Austrian, discovered different blood groups
- Initially, blood had to be delivered directly from the donor to the patient, making it very difficult
- Later, it was discovered, that if you added an anti-coagulant to the blood, and kept it cold, blood could be stored for up to 28 days before use
- In 1915, blood banks were set up on the Western Front
- In 1921 the British Red Cross set up the first voluntary blood donor scheme
- In 1938, in preparation for WW2, the British Government set up the Army Blood Supply Depot in Bristol
- In 1940 it was discovered how to make blood plasma (dehydrated blood) making blood easier to store and transport
- Later in the war, plastic wallets replaced glass bottles

The Second World War and beyond

Sir Archibald McIndoe
- He worked on burn patients and developed upon Gillies' technique for skin grafting
- His patients set up the 'Guinea Pig Club' to celebrate his work

Preventative Measures:
- Mepacrine was developed as an effective anti-malaria tablet
- Rations were carefully balanced to ensure a healthy diet
- Gas masks were issued as a defence against chemical warfare
- During the Korean War (1950-53) Mobile Army Surgical Hospital (MASH) units were established by the US, taking surgeons as near the battlefield as possible
- This principle was used by the British Army in Iraq and Afghanistan

Technology in control
- Radiation therapy has been used to treat cancerous cells
- 1952- the first kidney transplant operation
- 1961- the first heart peacemaker (a mechanical device that keeps the heart pumping blood around the body)
- Louise Brown became the first test-tube baby in 1978
- Non-invasive surgery- using radiation or miniature cameras inserted via the mouth or other orifices, allowing a surgeon to see inside their patients without cutting them up
- Laser treatments- for eye operations or cancers ⟷ less invasive and quicker healing time
Better understanding

- The discovery of DNA in 1953 enhanced medical understanding of how the body works and how to make it better when it is malfunctioning.
- The NHS was established in 1948 by the Labour Government which created a demand and feeling of entitlement to medical services.
- However, the continued demand for services has made it difficult for NHS hospitals to deliver, e.g. waiting lists for operation.

Too much interference?

- Advances in medicine and technology have led some to argue that science has gone too far!
- Such as deciding the sex of a baby, illegal trade of kidneys from poor people.
- The Nazis introduced compulsory sterilisation for people they deemed as 'inferior' who didn't fit into the 'Master Race'.
- Experiments on cloning have taken place: 'Dolly the Sheep' was the world's first successfully cloned animal in Scotland in 1996. It's illegal to clone humans.

Despite current medical controversies, it's clear that in the last 100 years surgery has changed.

It is much safer, less painful and much better at 'fixing' human medical problems.

Modern Public Health

Identifying the problem

- Social surveys were carried out during the turn of the century to investigate the health and living conditions of ordinary people.
- Charles Booth: published Life and Labour of the People, in 1889. Found that 35% of London's population were living in utter poverty.
- Seebohm Rowntree: did the same in York. 1897-98 he interviewed 46,000 citizens in York. Found that nearly ½ of working class people lived in poverty.
- Maud Pember: 1913 study revealed how many workers, including policemen, struggled to live on an average wage of £1 a week. She found that women went without food to feed the man (wage earner) and the children.

Achievements of the Liberal Government of 1906-1914

<table>
<thead>
<tr>
<th>Year</th>
<th>Act passed</th>
<th>Effect of legislation</th>
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<tbody>
<tr>
<td>1906</td>
<td>Workmen's Compensation Act</td>
<td>Granted compensation for injury at work</td>
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<td></td>
<td>Education (Provision of Meals) Act</td>
<td>Introduced free school meals</td>
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<tr>
<td>1907</td>
<td>Education (Administrative Provisions ) Act</td>
<td>Created school medical inspections</td>
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<tr>
<td></td>
<td>Matrimonial Causes Act</td>
<td>Maintenance payments to be paid to divorced women</td>
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<tr>
<td>1908</td>
<td>Children and Young Person's Act</td>
<td>Made it illegal to sell alcohol, tobacco, or fireworks to children</td>
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<tr>
<td></td>
<td>Old-Age Pensions Act</td>
<td>Over 70s received 5 shillings a week, 7s 6d for married couples</td>
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<tr>
<td>1909</td>
<td>Labour Exchanges Act</td>
<td>Helped people find jobs</td>
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<tr>
<td>Housing and Town Planning Act</td>
<td>Made it illegal to build back-to-back houses</td>
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<tr>
<td>1911 National Insurance Act</td>
<td>Sick and unemployment pay introduced if you paid contributions into the scheme</td>
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</tbody>
</table>

Really achievements?
- Medical inspections were introduced in 1907, but poor families couldn't afford to pay for necessary treatment
- Pensions were introduced, but only if you had worked all your life and could prove you were not a drunkard
- The National Insurance scheme only applied if you paid regular contributions, but part of the cause of poverty was irregular employment
- The 1909 Budget was thrown out of the House of Lords by Conservative peers, who were opposed to paying for these reforms
- It caused a constitutional crisis!

Free School Meals: such a controversy!
- Dr Barnardo had provided very cheap/free meals for children attending his 'Ragged School' in London- arguing children couldn't learn properly if they were malnourished
- When the Liberal Government introduced FSM in 1906, it wasn't compulsory for local authorities to provide them until 1914
- Parents could be asked to make a contribution towards the cost if they could afford it
- During WW2 15% of the school population received FSM
- In 1988 the right to FSM was restricted by Margaret Thatcher
- In September 2014 the Coalition Government re-introduced FSM for Key Stage 1= children weren't learning properly because they were so hungry!
- Theresa May in 2017 in the Conservative manifesto stated that FSM were to be removed for 4-7 year olds. This was later scrapped!

The establishment of the National Health Service (NHS)
- Clement Atlee, the new Labour PM in 1945 created a Welfare State- state protects the health and well-being of its citizens through grants, pensions, and other benefits
- Part of this was the introduction of NHS in 1948
- For the first time, hospitals, doctors, nurses, pharmacists, opticians, and dentists were brought together under an umbrella organisation to provide services that were free for all at the point of delivery
- Demand for healthcare was hugel! (Showing how poor the health of ordinary people was)
- In 1950 the budget was under pressure and in 1952 charges for glasses were introduced, prescriptions cost 1 shilling and dental treatment £1. It was the end of a COMPLETELY FREE NHS!

Opposition to the NHS:
- Many in the medical profession saw the NHS as trying to curtail their livelihood and their rights to treat whoever they liked
- Churchill, leader of the Conservative Party, said it was a 'curse on the country' and that it discouraged voluntary efforts
- The British Medical Association found that only 10% of doctors were in favour of the NHS
Healthcare in the 20th Century

- Government policy can lead to a shortage of some drugs by refusing to pay high prices, or insisting that only cheaper versions of drugs are approved can cause problems.
- In Britain, the drug company Roche stopped the production of a drug, claiming it couldn’t make any money from the price the NHS was prepared to pay.
- The product is now imported and the price has risen from 67p an injection to £33.
- Some drugs and treatments are available in some areas, but not in others leading to a 'postcode lottery' for treatment.

The fight against AIDS

- AIDS or Acquired Immune Deficiency Syndrome was first identified in 1981.
- It took until 1983 for scientists to discover that a viral infection was attacking the immune system that protects the body from diseases.
- By 2014 an estimated 40 million people around the world have died from AIDS.
- Another 40 million are living with the disease.
- In the UK there are over 100,000 people, mostly young, living with AIDS- it’s believed that 25% of them don’t know they have it.
- It is thought to have originated from primates in Central Africa, and spread to humans around the turn of the 20thC.
- People DO NOT die of AIDS, but often from catching simple infections, like common colds, because the weakened immune system cannot fight off infections.
- Causes: AIDS is usually caused by having unprotected sex, with a male or female who has the disease; by sharing needles; by contaminated blood transfusions; and from mother to child during pregnancy or breast-feeding.
- There is no cure for AIDS.
- Without treatment people live an average 9-11 years with the disease.

Reaction to AIDS:

- AIDS is God’s punishment to us for our sinful behaviour and lifestyles.
- People suffering from AIDS should be isolated from the community so that they are unable to harm others.
- AIDS can be caught from touching others.
AIDS a modern equivalent of the Black Death? - Q3 Practise

- AIDS is seen as a modern day equivalent of the BD, cholera or Spanish Flu
- They all killed millions
- HOWEVER, AIDS is spread in a clearly identifiable way which can be avoided
- We know how to stop AIDS from spreading
- AIDS is different