

Option 11

Topic pack



**Medicine in Britain c1250–present
and The British sector of the Western Front, 1914–18: injuries,
treatment and the trenches**

GCSE (9-1) History

Pearson Edexcel Level 1/Level 2 GCSE (9-1) in History (1HI0)

Option 11: Medicine in Britain, c1250–present and The British sector of the Western Front, 1914–18: injuries, treatment and the trenches

Medicine in Britain, c1250–present

The process of change

- In studying the content defined below in strands 1 and 2, students should understand how key features in the development of medicine were linked with the key features of society in Britain in the periods studied.
- They should develop an understanding of the nature and process of change. This will involve understanding patterns of change, trends and turning points, and the influence of factors inhibiting or encouraging change within periods and across the theme. The key factors are: individuals and institutions (Church and government); science and technology; and attitudes in society.
- They should also understand how factors worked together to bring about particular developments at particular times.
- The selected case studies in strand 3 of each period exemplify, in context, the elements defined in strands 1 and 2. They provide opportunities to explore the operation of the key factors and to make detailed comparisons over time.

c1250–c1500: Medicine in medieval England

1 Ideas about the cause of disease and illness	<ul style="list-style-type: none"> • Supernatural and religious explanations of the cause of disease. • Rational explanations: the Theory of the Four Humours and the miasma theory; the continuing influence in England of Hippocrates and Galen.
2 Approaches to prevention and treatment	<ul style="list-style-type: none"> • Approaches to prevention and treatment and their connection with ideas about disease and illness: religious actions, bloodletting and purging, purifying the air, and the use of remedies. • New and traditional approaches to hospital care in the thirteenth century. The role of the physician, apothecary and barber surgeon in treatment and care provided within the community and in hospitals, c1250–1500.
3 Case study	<ul style="list-style-type: none"> • Dealing with the Black Death, 1348–49; approaches to treatment and attempts to prevent its spread.

c1500–c1700: The Medical Renaissance in England	
1 Ideas about the cause of disease and illness	<ul style="list-style-type: none"> Continuity and change in explanations of the cause of disease and illness. A scientific approach, including the work of Thomas Sydenham in improving diagnosis. The influence of the printing press and the work of the Royal Society on the transmission of ideas.
2 Approaches to prevention and treatment	<ul style="list-style-type: none"> Continuity in approaches to prevention, treatment and care in the community and in hospitals. Change in care and treatment: improvements in medical training and the influence in England of the work of Vesalius.
3 Case studies	<ul style="list-style-type: none"> Key individual: William Harvey and the discovery of the circulation of the blood. Dealing with the Great Plague in London, 1665: approaches to treatment and attempts to prevent its spread.
c1700–c1900: Medicine in eighteenth- and nineteenth-century Britain	
1 Ideas about the cause of disease and illness	<ul style="list-style-type: none"> Continuity and change in explanations of the cause of disease and illness. The influence in Britain of Pasteur's Germ Theory and Koch's work on microbes.
2 Approaches to prevention and treatment	<ul style="list-style-type: none"> The extent of change in care and treatment: improvements in hospital care and the influence of Nightingale. The impact of anaesthetics and antiseptics on surgery. New approaches to prevention: the development and use of vaccinations and the Public Health Act 1875.
3 Case studies	<ul style="list-style-type: none"> Key individual: Jenner and the development of vaccination. Fighting Cholera in London, 1854; attempts to prevent its spread; the significance of Snow and the Broad Street pump.
c1900–present: Medicine in modern Britain	
1 Ideas about the cause of disease and illness	<ul style="list-style-type: none"> Advances in understanding the causes of illness and disease: the influence of genetic and lifestyle factors on health. Improvements in diagnosis: the impact of the availability of blood tests, scans and monitors.
2 Approaches to prevention and treatment	<ul style="list-style-type: none"> The extent of change in care and treatment. The impact of the NHS and science and technology: improved access to care; advances in medicines, including magic bullets and antibiotics; high-tech medical and surgical treatment in hospitals. New approaches to prevention: mass vaccinations and government lifestyle campaigns.
3 Case studies	<ul style="list-style-type: none"> Key individuals: Fleming, Florey and Chain's development of penicillin. The fight against lung cancer in the twenty-first century: the use of science and technology in diagnosis and treatment; government action.

The British sector of the Western Front, 1914–18: injuries, treatment and the trenches

The historic environment	
1 The British sector of the Western Front, 1914–18: injuries, treatment and the trenches	<ul style="list-style-type: none"> • The context of the British sector of Western Front and the theatre of war in Flanders and northern France: the Ypres salient, the Somme, Arras and Cambrai. The trench system - its construction and organisation, including frontline and support trenches. The use of mines at Hill 60 near Ypres and the expansion of tunnels, caves and quarries at Arras. Significance for medical treatment of the nature of the terrain and problems of the transport and communications infrastructure. • Conditions requiring medical treatment on the Western Front, including the problems of ill health arising from the trench environment. The nature of wounds from rifles and explosives. The problem of shrapnel, wound infection and increased numbers of head injuries. The effects of gas attacks. • The work of the RAMC and FANY. The system of transport: stretcher bearers, horse and motor ambulances. The stages of treatment areas: aid post and field ambulance, dressing station, casualty clearing station, base hospital. The underground hospital at Arras. • The significance of the Western Front for experiments in surgery and medicine: new techniques in the treatment of wounds and infection, the Thomas splint, the use of mobile x-ray units, the creation of a blood bank for the Battle of Cambrai. • The historical context of medicine in the early twentieth century: the understanding of infection and moves towards aseptic surgery; the development of x-rays; blood transfusions and developments in the storage of blood.
2 Knowledge, selection and use of sources for historical enquiries	<ul style="list-style-type: none"> • Knowledge of national sources relevant to the period and issue, e.g. army records, national newspapers, government reports, medical articles. • Knowledge of local sources relevant to the period and issue, e.g. personal accounts, photographs, hospital records, army statistics. • Recognition of the strengths and weaknesses of different types of source for specific enquiries. • Framing of questions relevant to the pursuit of a specific enquiry. • Selection of appropriate sources for specific investigations.

Medicine in Britain, 1250–present

Introduction

The topic is structured chronologically in four blocks of time: c1250–c1500, Medicine in medieval England; c1500–c1700, The Medical Renaissance in England; c1700–1900, Medicine in eighteenth- and nineteenth-century Britain; and c1900–present day, Medicine in modern Britain.

Within each time period there are three strands: ideas about the cause of disease and illness; approaches to prevention and treatment; and case studies, which exemplify strands one and two in context. These case studies include significant epidemics, such as the Great Plague of 1665, and key individuals, such as Edward Jenner. The extra level of detail afforded by such case studies enables students to apply their understanding of developments in strands 1 and 2 to specific contextual examples and make detailed comparisons over time.

The focus of the unit is on the reasons for change, the speed and development of change, the significance of change, and the parallel elements of change and continuity. While the course is split into four time periods, it is important to recognise that the coverage of an extended period in a thematic study means that questions will cover long time periods or will ask students to make comparisons between two different sections of the chronology. A number of key factors are specified which shape the exploration of the process of change over the whole period: individuals and institutions (Church and government), science and technology and attitudes in society.

Content guidance

It is important that students have an understanding of the context and society during each time period and how these influenced developments in medicine. Contextual knowledge of the influence of the Church in medieval society, the Reformation, and the Industrial Revolution and growth of cities will be particularly relevant as these represent broader factors that inhibited or promoted change in medicine. An overview of less common topics such as the Renaissance, the Scientific Revolution and the Enlightenment would provide students with a strong framework onto which they can build their study of medicine.

Although the study now begins in 1250, background knowledge of ideas from the ancient world, such as those of Hippocrates and Galen, will be important to help students to garner a sense of continuity when studying the Middle Ages.

Students should understand that medicine in medieval England was strongly influenced by the Church: the Church controlled medical knowledge and understanding, promoting the work of Hippocrates and Galen as it had done for centuries. They should appreciate, too, that there was also a strong belief in the role of the supernatural: that God both sent and cured disease, according to one's level of sin, so that prayer fell alongside more corporal attempts to treat disease, such as bloodletting and purging, and herbal remedies that had been passed down through generations. The full spread of treatments that desperate people were willing to try is exemplified in the case study of the Black Death, which spread across England from 1348.

In the period c1500–c1700, students should understand that the Medical Renaissance in England represented a significant development in approaches to diagnosis and treatment of disease, shifting to a more scientific approach, supported and promoted through the Royal Society towards the end of the time period. They should recognise that the English Reformation saw the power of the Church wane and with it control of medical knowledge and training, and the religious hospitals that had previously provided care for the sick, leading to significant changes in the way doctors were trained. Scientific experimentation

began in earnest, as exemplified in the case study on William Harvey and the circulation of the blood. Students should understand that new theories about the cause of disease were slow to develop and spread, however, and that old ideas, such as miasma, persisted throughout this period. The case study of the Great Plague outbreak in 1665 enables students to interrogate how much change there had been in understanding of infection and approaches to dealing with mass epidemics, making comparisons with attitudes and beliefs about the Black Death.

The third time period represents the most significant episode of change across the unit: ideas about the cause of disease saw their biggest alteration at this time, with improvements in science and technology. Students should understand the impact that this had on understanding about causes and treatment of disease, including the influence of Pasteur and Koch's work. The two case studies look at Edward Jenner and his smallpox vaccination, and John Snow and his theory about the spread of cholera. The latter provides an opportunity for comparison with the Great Plague and the Black Death, and attempts to prevent the spread of the disease. Students should also understand that surgical techniques were seeing a phenomenal improvement at this time, thanks to the discovery of anaesthetics and antiseptics, while hospitals were being cleaned up and redesigned, in part due to the work of Florence Nightingale. As the Industrial Revolution drew to a close, the government began to become more involved in all aspects of society, leading to laws focused on improving public health.

From 1900 onwards students should recognise that approaches to treatment and prevention saw a significant change. They should understand the impact of the NHS and government lifestyle campaigns such as mass vaccinations. They should also understand the impact of improvements in science and technology, leading to improvements in diagnosis and treatment. The first case study exemplifies how scientists such as Fleming, Florey and Chain developed treatments for specific diseases. Moving into the twenty-first century, the case study of the fight against lung cancer exemplifies the role of government, science and high-tech treatment in modern medicine and provides students with an opportunity to measure how much has changed in the treatment of disease since 1250.

Key terms

It may be useful to provide students with a list of key terms and concepts that they will need to be familiar with at the start of the course. The list of terms below is not intended to be a comprehensive checklist, rather simply a useful starting point for teachers to produce their own list of terms that their students may not fully understand or have difficulty spelling.

Students should understand chronological terms, such as medieval, Middle Ages, Renaissance, modern, and that, for example, 'the 1500s' is the sixteenth century and that 'c1900' means 'around 1900'.

Other key vocabulary for this option includes: diagnosis, observation, epidemic, pandemic, purging, bleeding, bloodletting, miasma, supernatural, physician, apothecary, the Church, circulation, dissection, microbe, anaesthetics, antiseptics, inoculation, vaccination, cholera, laissez-faire, genetics, DNA, penicillin, antibiotics, radiotherapy, chemotherapy.

Resources

The tables below list a range of resources that could be used by students and teachers for this topic. Inclusion of resources in this list does not constitute endorsement of those materials. While these resources — and others — may be used to support teaching and learning, the official specification and associated assessment guidance materials are the only authoritative source of information and should always be referred to for definitive guidance. Links to third-party websites are controlled by others and are subject to change.

Resources for students

Details of new resources published to support this specification will be added when these become available.

Resource	Details
<i>Edexcel GCSE History (9-1) Medicine through time, c1250-present</i> (Pearson, 2016)	Student book written for this option in the new GCSE specification.
<i>Hodder GCSE History for Edexcel: Medicine through time, c1250–present</i> (Hodder Education, 2016)	Student book written for this option in the new GCSE specification.
Cathy Warren and Nigel Bushnell, <i>Schools History Project: Medicine and Surgery</i> (Pearson, 2009, updated edition 2013)	Textbook written for the 2009 Edexcel GCSE History B specification.
Ian Dawson, Dale Banham, Dan Lyndon, <i>Edexcel Medicine and Health Through Time</i> (Hodder Education, 2009)	Textbook written for the 2009 Edexcel GCSE History B specification.
BBC Education Medicine through time www.bbc.co.uk/education/topics/zhphvcw	A set of videos aimed at GCSE students.
Science Museum Brought To Life: Exploring the History of Medicine www.sciencemuseum.org.uk/broughttolife	Extremely detailed website covering most aspects of the course. The profiles of the key individuals are particularly useful.
Ken Follett, <i>World Without End</i> (Pan Books 2008) Also a TV series – clips available on YouTube	Good for the Middle Ages. Shows the juxtaposition of medical treatments promoted by the Church and provided by local wise women. Also provides information on the Black Death.

Pain, Pus and Poison: The Search for Modern Medicine www.bbc.co.uk/programmes/p01f51s5	Documentary series about developments in surgery and treatment. The BBC website contains clips and related links from the BBC and across the web.
Scream: A History of Anaesthetics	Documentary detailing the development of anaesthetics in the nineteenth century. Can be found on YouTube.
Seven Wonders of the Industrial World: Bazalgette's Sewers	Covers the cholera epidemics of the nineteenth century and actions taken in relation to them (note that Bazalgette is no longer specified content). Can be found on YouTube.
CancerProgress.Net www.cancerprogress.net/timeline/lung-cancer	An American website with a timeline mapping the fight against lung cancer.

Resources for teachers

Resource	Details
William Bynum, <i>The History of Medicine: A Very Short Introduction</i> (Oxford University Press, 2008)	Good overview. Useful to read when preparing to teach the topic.
Carole Rawcliffe, <i>Medicine and Society in Later Medieval England</i> (Sutton Publishing, 1995)	Detailed information about the medieval period with many quotes from original sources.
Rosemary Horrox, <i>The Black Death</i> (Manchester University Press, 1994)	A collection of contemporary accounts of the Black Death, including accounts of its impact and theories about its origins and treatment.
Emily Cockayne, <i>Hubbub: Filth, Noise and Stench in England, 1600–1770</i> (Yale University Press, 2008)	Very readable text about public health and medicine 1600–1770, covering the Great Plague.
Evelyn Lord, <i>The Great Plague: A People's History</i> (Yale University Press, 2014)	Provides details of the impact of the 1665 outbreak of the plague on the whole country, from first-hand accounts.
Richard Thomas Williamson, <i>English Physicians of the Past</i> (General Books LLC, 2010)	Provides additional detail about Sydenham and Harvey and their work.
Sandra Hempel, <i>The Strange Case of the Broad Street Pump</i> (University of California, 2015)	Provides details of the cholera epidemics and public health conditions in nineteenth century London, using a wide variety of contemporary sources.
Thinking History activities http://thinkinghistory.co.uk/ActivityKS/ActivityGCSESHP.html	A number of activities are given under the heading 'Development Studies: Medicine'.
The Wellcome Library http://wellcomelibrary.org/	Wide variety of articles and publications relating to many aspects of the course.
Thackray Medical Museum www.thackraymedicalmuseum.co.uk	Online resources, as well as talks and tours for visitors.
Hunterian Museum www.rcseng.ac.uk/museums/hunterian	Run GCSE Medicine through Time workshops.

Overview frame

Factor	c1250–1500	c1500–c1700	c1700–c1900	c1900–present
Context				
Ideas about cause of disease/illness				
Treatment				
Prevention				