

# How did Christianity affect Medieval medicine?

Throughout the Medieval period, Christianity was the only main religion in Western Europe. The Christian Church was a powerful organisation that influenced the decisions of kings and emperors, and possessed great wealth. It advised both ordinary and great people about how they should live their lives. What were Christian attitudes towards the sick? And did the Church help or hinder medical progress in the Medieval period?

## Objectives

- ▶ **Outline** Christian ideas about medicine.
- ▶ **Explain** how the sick were treated by the Christian Church, including the role of hospitals.
- ▶ **Assess** the contribution of Christianity to medical progress in Medieval Britain.

## What were Christian ideas about health and medicine?

The Christian Church believed in following the example of Jesus, who healed the sick. For this reason, Christians believed that it was good to look after the sick, and so they founded many hospitals. However, there was a strong belief that illnesses came from God, and curing an illness would be a challenge to God who had sent it as a punishment or a test of faith. So, it was important to care for the patient, not necessarily cure them.

Prayers to God were therefore the most important treatment: 'To buy drugs or to consult with physicians doesn't fit with religion,' said Saint Bernard, a famous twelfth-century Christian monk. The Church also encouraged the belief in miraculous healing. There were many shrines filled with relics of the bones, hair and other body parts of a holy person. These shrines were places that people made **pilgrimage** to, for help with their illnesses, such as the shrine of Saint Thomas Becket at Canterbury.

While the Church valued prayers, it also respected the traditional medical knowledge of the Ancient World because it thought Hippocratic and Galenic ideas were correct. Monks preserved and studied these ideas: they copied out the books by hand, as well as traditional medical books like Pliny's *Natural History*, which was an encyclopaedia of everyday family remedies.

## How did Christians treat the sick?

Between 1000 and 1500, more than 700 hospitals were started in England. Many hospitals were centres of rest where sick people might recover in quiet and clean

surroundings. Some were small, with enough space for only 12 patients (the same number as Jesus had disciples). Many hospitals did not have doctors but a chaplain (a priest), and were run by monks or nuns to a strict pattern of diet and prayer.

Hospitals depended on charity for money, and were mainly financed by the Christian Church or by a wealthy **patron**. There were several different types of hospitals: for example, there were hospitals or asylums for the mentally ill, such as Bedlam in London. Monasteries had infirmaries (small dormitory wards) that could provide free treatment to the sick and the poor. There were a few large hospitals, such as St Leonard's in York.

▼ **SOURCE A** An illustration, from c1500, of the *Hôtel Dieu* in Paris, a late Medieval hospital; the French king's doctors worked there



## Key Words

pilgrimage patron leprosy contagious crusading order

## Fact

St Leonard's Hospital was built during the reign of the Norman King Stephen (1135–54). By 1370, St Leonard's could look after over 200 sick people. From the time of the Normans, the hospital enjoyed the patronage of kings and the right to collect special taxes from the surrounding area.

There were also special hospitals called 'Lazar houses' that dealt with people who had **leprosy**. The disease was **contagious**, so to prevent people catching it, leprosy hospitals were set up outside towns. In England these 'houses' were often started by the **crusading orders** such as the Knights Templar in the twelfth century, because many crusaders caught the disease, which was widespread in the Middle East at the time.

## Did Christianity help or hinder medical progress in the Medieval period?

In Europe, the training of doctors began after 1200, when the continent became more peaceful and prosperous. The Christian Church controlled the universities because that was where religion was studied and where Church leaders were trained; medicine was usually the second subject studied after religion. In Britain, the Church controlled the training of doctors in the universities of Oxford and Cambridge. There they taught the medical ideas of the ancient Greeks and Romans. The training was to make the old knowledge clear and understandable; it was not to discover new ideas.

The Christian Church approved of Galen's books because he believed in a single God: this fitted with Christian ideas. However this meant that it was difficult to challenge anything that Galen wrote, as it would be seen as a criticism of the Church. Church attitudes to new ideas was shown by what happened to the thirteenth-century English monk, Roger Bacon: he was arrested for suggesting that doctors should do original research and should not trust the old books.

Ultimately, the Church saw the role of the doctor not as a healer, but as someone who could predict the symptoms and duration of an illness, and provide the reasons for why God might inflict the illness on the person. This gave people comfort, and allowed patients and their families to put their affairs in order and die in peace. As Faritius, the famous eleventh-century doctor and abbot of Abingdon, said to the family of a little boy who died under his care, 'there is no medicine for death.'

▼ **SOURCE B** A sixteenth-century painting showing Saint Elizabeth of Hungary (tending to the patient, bottom left), who was famous in the thirteenth century for helping the poor and the sick



## Work

- 1 What did Medieval Christians think caused illnesses?
- 2 How did Christians treat sick people in Medieval times? Try to identify three points.
- 3 Study **Source A**. Describe what you can see in the hospital. How does it support what you have read about Medieval hospitals?
- 4 Do you agree or disagree that the Christian Church held back medical progress? Explain your answer.

## Practice Question

How useful is **Source B** for understanding Christian ideas about illness? **8 marks**

## Study Tip

In a 'how useful' type of question about a visual source, remember to consider what the provenance tells you as well as what you can learn from the image.

# How did Islam affect Medieval medicine?

Western Europe entered a period known as the Dark Ages (otherwise known as the early Medieval period) when the Roman Empire lost its power. At this time, Islam became the main religion in the Middle East and North Africa. Led by its Prophet, Muhammad, the followers of Islam established an enormous and unified Islamic Empire. During the height of Islam's culture and learning from c750–1050, Islamic doctors made great contributions to medical knowledge. What did they contribute to medical science? And why were they able to do so?

## Objectives

- ▶ **Outline** Islamic ideas about medicine.
- ▶ **Explain** why Medieval Islamic doctors made medical progress.
- ▶ **Assess** the contribution of Medieval Islamic medicine to medical progress.

▼ **A** A map showing the extent of the Islamic Empire by 750



The Islamic Empire was a single state ruled by one man, known as the **Caliph**. Caliphs provided the peace and order needed for medical progress. Moreover, many Caliphs were interested in science and supported Islamic medicine. During the reign of Caliph Harun al-Rashid (786–809), the capital city of Baghdad became a centre for the translation of Greek manuscripts into the language of Islam: Arabic. The Caliph's library preserved hundreds of ancient Greek medical books by Hippocrates and Galen, which were lost to Western Europe during the Dark Ages. Al-Rashid's son, Caliph al-Mamun (813–33), developed his father's library into 'The House of Wisdom', which was the world's largest library at the time, and a study centre for scholars. The Islamic religion itself encouraged medical learning: Prophet Muhammad inspired people to 'seek learning even as far as China' and said, 'For every disease, Allah has given a cure.' So, scientists were encouraged to discover those cures.

## What were Islamic ideas on health and medicine?

In the Islamic Empire the first hospitals were set up for people with mental illnesses. These people were treated with compassion as victims of an unfortunate illness. This was very different from how Christian doctors thought of them – as being punished by God.

In 805, Caliph al-Rashid set up a major new hospital in Baghdad with a medical school and a library. Unlike Medieval Christian hospitals, this was intended to treat the patients, and not simply care for them. Hospitals called *bimaristans* were built in many Islamic cities to provide medical care for everyone: men and women, rich and poor, Muslim and non-Muslim. Doctors were permanently present and medical students trained alongside them.

## Did Islam help or hinder medical progress in the Medieval period?

Two Muslim doctors in particular, Rhazes and Avicenna, had a great influence on medicine in Western Europe. Their discoveries, along with the old medical knowledge of the ancient Greeks, first found their way to Western Europe in the Middle Ages. This was through the Latin translations of a merchant named Constantine the African, who arrived in Italy around 1065. Gerard of Cremona, an Italian translator, continued this work in the twelfth century with the first Latin translation of Avicenna's book, *Canon of Medicine*. The universities in Padua and Bologna in Italy soon became the best places to study medicine in Europe. These medical ideas reached England through trade, as merchants brought new equipment, drugs and books.

## Key Biography

### Al-Razi (c865–c925)

Known in Western Europe as Rhazes, he stressed the need for careful observation of the patient, and distinguished measles from smallpox for the first time. He wrote over 150 books. Although a follower of Galen, he thought that all students should improve on the work of their teacher. One of his books was called *Doubts about Galen*.



### Ibn Sina (980–1037)

Also known as Avicenna, he wrote a great encyclopaedia of medicine known as *Canon of Medicine*. Comprising over a million words, it covered the whole of ancient Greek and Islamic medical knowledge at the time. It listed the medical properties of 760 different drugs, and contained chapters on medical problems such as anorexia and obesity. It became the standard European medical textbook used to teach doctors in the West until the seventeenth century.



## Key Word

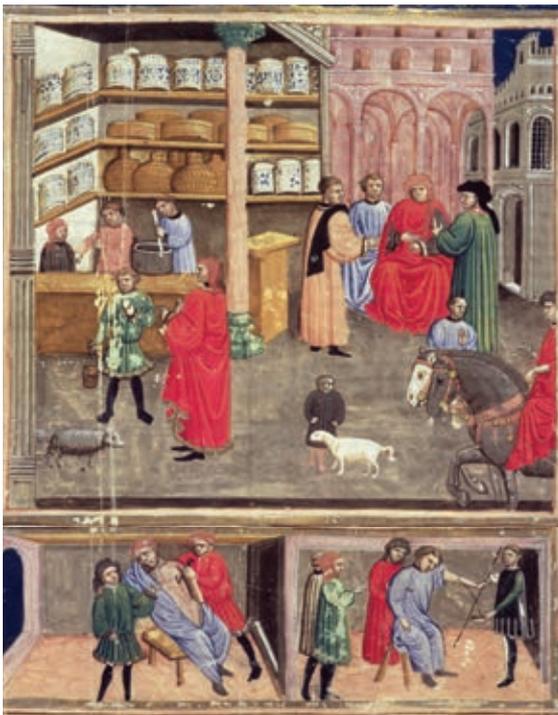
Caliph dissection

## Extension



As well as preserving the writings of the ancient Greeks and Romans, Islamic doctors added their own, new knowledge. Research some of the new drugs from the Islamic world such as camphor, laudanum, naphtha and senna.

▼ **SOURCE B** From the front cover of a fourteenth-century Italian copy of Avicenna's *Canon of Medicine*



## Fact



Although Islam did not allow human **dissection**, the thirteenth-century Islamic doctor, Ibn al-Nafis, concluded that Galen was wrong about how the heart worked. He said that the blood circulated round the body via the lungs. Unfortunately his books were not read in the West, and Europeans continued to accept Galen's mistake until the seventeenth century.

## Work

- 1 Identify three things that Islam believed about medicine and illness.
- 2 Study the provenance of **Source B** and what is happening in the picture. How does it link to what you have learned?
- 3 Did Islam help or hinder medical progress? Explain your answer using the following factors: government, ideas, science, communication, individuals.

## Practice Question

Was the preservation of the writings of the ancient Greeks and Romans the most important contribution that Islam made to medical progress?

16 marks

## Study Tip

What do you think were the different contributions that Islam made to medical progress? You might consider the scientific approach, the new drugs, the books, the discoveries, or the hospitals. Write about several contributions and then explain which one you think was the most important.

# How good was Medieval surgery?

## Objectives

- **Describe** who did surgery in Western Europe and the Islamic Empire during the Medieval period.
- **Explain** what types of surgery could be done at the time.
- **Evaluate** the medical progress achieved in surgery.

Surgery in the Medieval period was a risky business. Surgeons had no idea that dirt carried disease. Some believed it was good to cause pus in wounds, and operations were done without effective painkillers. Surgery was limited, since surgeons could not help patients with deep wounds to the body: these patients would die from bleeding, shock and infection. What kind of surgery occurred then? Did any surgeons make progress during the Medieval period?

## Who practised surgery?

Many Medieval surgeons were not surgeons in the modern sense. Most were barbers who combined hair cutting with small surgical operations such as bloodletting and tooth extraction. Compared with doctors, barber-surgeons were lower class medical tradesmen. Surgeons learned their skill by being apprenticed to another surgeon, watching and copying them; or they learned on the battlefield since wars were frequent in the Medieval period.

## What could a Medieval surgeon do?

The most common surgical procedure was bloodletting, which was done to restore the balance of humours in the body. It was performed by making a small cut on the inside of the arm, from which the blood was allowed to run out. Amputation, or the cutting off of a painful or damaged part of the body, was another common treatment. It was known to be successful in cases of breast cancer, bladder stones, and haemorrhoids. In Medieval times, it was thought that epilepsy was caused by demons inside the brain – so a surgeon might cure an epileptic patient by drilling a hole into the skull to let the demon out!

### ▼ SOURCE A A fourteenth-century illustration of trepanning



Most surgery took place on battlefields. In everyday life, surgery was performed as a last resort. Patients faced the problem of pain and shock in operations. Some attempts were made to put the patient to sleep, but more often than not the patient had to be held or tied down. Surgeons used natural substances such as mandrake root, opium and hemlock as **anaesthetics** for their operations, but too strong a dose might kill the patient. **Cauterisation** was a very common method of burning the wound to stop the flow of blood: it was usually done with a heated iron and was immensely painful. A surgeon would have many different tools: saws for amputation, arrow pullers, cautery irons and bloodletting knives.

## Who made progress in surgery during the Medieval period?

The science of surgery in Western Europe and in the Islamic Empire was advanced during the Medieval period by surgical pioneers who tried new methods. Their books were read in Latin by educated and religious men in Europe; in England, they were translated into English. By the end of the fourteenth century, English doctors and surgeons could read about the ideas of many surgeons. Some examples follow.

### Abulcasis

Abulcasis, a Muslim surgeon considered the 'father of modern surgery', wrote a 30-volume medical book, *Al Tasrif*, in 1000. He invented 26 new surgical instruments and described many new procedures, including using ligatures for tying off blood vessels. He made cauterisation popular.

#### ► SOURCE B

A fifteenth-century illustration of the surgeon Abulcasis and his assistant cauterising a mouth wound



### Frugardi

Roger Frugardi of Salerno, Italy, wrote a textbook on surgery called *The Practice of Surgery* in 1180. It was widely used in Europe. Frugardi warned against trepanning, tried ambitious operations on the chest, and attempted to remove bladder stones.

### Hugh of Lucca and his son Theodoric

Hugh of Lucca and his son Theodoric were famous surgeons who worked at Bologna University, Italy. They wrote a book in 1267 criticising the common view that pus was needed for a wound to heal. They used wine on wounds to reduce the chances of infection and had new methods of removing arrows. Despite being ahead of their time, their ideas about preventing infection went against Hippocratic advice and did not become popular.

### Mondino

There was a new interest in **anatomy** in the fourteenth century. In 1315, a public dissection was allowed in Bologna, supervised by Mondino de Luzzi, a famous professor. In 1316, Mondino wrote the book *Anathomia*, which became the standard dissection manual for over 200 years. Dissections were introduced in most European universities to train doctors and to show them that Galen was correct. Even if the body did not fit Galen's description, they did not doubt Galen: people believed that the body must be wrong!

## Key Words

trepanning anaesthetic cauterisation anatomy

### De Chauliac

One of the most famous surgeons of the Medieval period was the French surgeon, Guy De Chauliac. His famous textbook *Great Surgery* (1363) dominated English and French surgical knowledge for 200 years. The textbook contains references to Greek and Islamic writers like Avicenna; he quoted Galen about 890 times. He did not like Theodoric of Lucca's ideas about preventing infection and he wrote about his opinion in detail in his book, which was the main reason that Lucca's ideas did not catch on.

### John of Arderne

John of Arderne was the most famous surgeon in Medieval England. His surgical manual, *Practica* (1376), contained illustrations of his operations and instruments. It was based on Greek and Arab knowledge and his experience in the Hundred Years War between England and France. He used opium and henbane to dull pain. He charged a large fee for an operation he developed to treat an anal abscess (swelling with pus), a condition common in knights who spent long periods on horseback. In 1368, he tried to separate the surgeons from lower-class barbers by forming a work association called The Guild of Surgeons within the City of London.

## Work

- 1 a** Who carried out most surgery in the Medieval period?

**b** How did they learn their trade?
- 2** What were the two most common surgical procedures?
- 3** Three problems for the surgeon are to take away pain, prevent infection and stop bleeding. Discuss in pairs or in groups: what were the traditional solutions of most Medieval surgeons to these three surgical problems?

## Extension



Do you think there was any progress in surgery during the Medieval period? Explain your answer.