

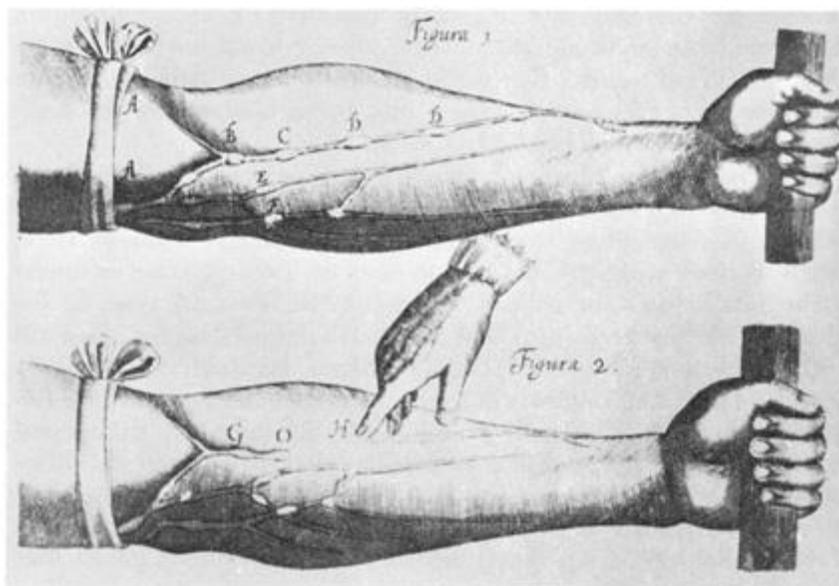
Medicine in the Renaissance

The Renaissance was a period of many discoveries and new ideas. Students need to be able to establish whether these discoveries led to improvements in the way that people were treated. Did the ideas of medical greats such as Vesalius, Harvey and Pare result in immediate, gradual or no improvements?

William Harvey

William Harvey became Royal Physician to James I and Charles I. He was a leading member of the Royal College of Surgeons and trained at the famous university in Padua, Italy.

Harvey's contribution to medical knowledge was great but the impact of his work was not immediate. In 1615 he conducted a comparative study on animals and humans. He realised that many of his findings on animals could be applied to Humans. Through this study he was able to prove that Galen had been wrong to suggest that blood is constantly being consumed. Instead, he argued, correctly, that blood was constantly pumped around the body by the heart. Harvey went on to identify the difference between arteries and veins and noted that blood changes colour as it passes through the lungs. Harvey also identified the way in which valves work in veins and arteries to regulate the circulation of blood.



An illustration of William Harvey's findings. Source - wikimedia.

Andreas Vesalius

Vesalius was born into a medical family and was encouraged from an early age to read about medical ideas and practice. He went to Louvain University from 1528 to 1533 when he moved to Paris. Vesalius returned to Louvain in 1536 because of war in France. He was anxious to continue his study of anatomy and made moves to acquire a Skeleton to enhance his understanding.

The major developments that Vesalius made in medical theory came as a result of his work in Padua. He moved here after falling out with his professor in Louvain. In Padua Vesalius conducted his own dissections: unheard of at the time, and made detailed notes and drawings. Many who felt that drawings had little place in a scientific field frowned upon this practice. He continued however and in 1538 published a collection of labeled drawings entitled 'Tabulae Sex'. These drawings demonstrated that he understood some of the faults in Galen's work, yet he made no open criticism of Galen's theories. His drawings in fact contradict themselves: one picture show a liver with 5 lobes, as Galen had suggested, and another has two: as found in Humans.

Vesalius then produced his letter on Venesection, which is the bleeding of patients. In this he criticised doctors who bled on the opposite side of the body and only let a small amount of blood out. He provided drawings that showed why he, and Hippocrates and Galen, were correct to advocate bleeding the infected area and removing a larger amount of blood. To justify this he produced drawings showing how the veins were connected and used a scientific argument to justify his logic.

Vesalius' next piece of work was of monumental proportions. His book 'The fabric of the Human body' published in 153 was a comprehensive study of the human body. It contained anatomical drawings of all parts of the body and offered many new conclusions as to the way of treating disease. The book showed how muscle is built up in layers, highlighted errors in previous theories of anatomy and made, for the first time, good use of drawings to support the argument being presented. Vesalius

was anxious to ensure the accuracy of his book and personally oversaw the production of the plates that were used for his illustrations.

The book was a major breakthrough in medical history for a number of reasons. It developed the use of technical drawings and disproved theories that had been in place in Europe for many hundred of years. Despite the clarity of his work, argument and presentation however, many people chose to dispute his theories at the time: convinced that the works of Galen were correct.