

Over the last 3000 years medicine and medical knowledge has progressed radically. Medical knowledge saves people's lives and improves their quality of life. If you're not healthy, medical treatments can usually make you more comfortable and sometimes offer a complete cure. This knowledge has evolved over many centuries - from primitive brain surgery to modern gene therapy - but most major medical discoveries have been made in the past 200 years. Medicine is now recognised as science; however this was not always the case.

We start off with prehistoric peoples, who believed strongly that evil spirits were responsible for causing disease. However, because there was no writing system, symptoms of disease were not recorded and it was difficult to pass on knowledge. This shows progression because man is recognising disease and trying to find methods to treat it.

Much later, the ancient Egyptians attempted to provide explanations for the causes of disease. The development of writing enabled them to record symptoms and cures for illnesses. However although the Egyptians managed to observe the human anatomy and come up with explanations as to how the body works they still had very strong religious beliefs, associating illnesses to have spiritual rather than physical causes. The ancient Egyptians were able to make considerable progress by writing down what they had found and observed so they could pass their cures on to other people. They were also able to examine what they saw and diagnose proposed cures. The only drawback with this being that it was forbidden to dissect any parts of the body needed for the after life!

The development of medicine in ancient Greece followed a similar kind of pattern. Philosopher scientists such as Hippocrates began to come up with rational explanations, based on observations. One of the more famous explanations for disease and illness put forward was “the Four Humours” theory, based on people studying the world around them and deciding that it was made up of four elements. It was actually quite a simple theory which shows progression because people are trying to look at the world around them and rather than simply explaining it all in religious or spiritual terms, as had previously been done, they looked for logical explanations for things. These new ideas existed alongside religious beliefs – but they did not replace them.

During the time of the Ancient Greeks and Romans (600BC-400AD) there was a faster rate of change in medical knowledge. The Romans accepted the theory of “the Four Humours”. The main progress made by the Romans was their recognition that diseases were spread by poor drinking water and poor disposal of sewage. They built aqueducts to bring fresh water into their settlements from fresh water springs and sewers to take the sewage into the rivers. The Romans also introduced public baths which they were very proud of. They could be found in most towns and cities throughout the Roman Empire and improved the cleanliness and therefore health of the people.

The Middle ages showed a definite regression in the field of Medicine. There was a return to the belief that illnesses were due to spiritual reasons (a punishment from God for sins). Illnesses were presumed to be punishments from God; other theories included the close position of the three great planets (Saturn, Jupiter and Mars). Herbs and flowers were carried around to try and remove the bad spirits; this method was used in prehistoric times so it shows that we have gone backwards from observing and diagnosing to earlier beliefs about herbs and evil spirits. Despite this early confusion this time period was also an age of progression; the early Christian church developed an understanding of disease and its treatment. Monasteries were being turned into hospitals and later the church began to provide training for doctors, however dissection was still strictly forbidden. In 900AD small pox and measles were identified. Towards the end of the Medieval period dissection became accepted however it was strictly controlled. The Christian church saw it the duty of all of its followers to care for the sick and needy. The population relied on local healers who were often women. Early 1200 the training of doctors began. The work of Galen was translated from Greek into Arabic and then into Latin, his ideas about medicine were similar to those believed by Christians. This shows great progress during the time period because it meant that organs and vital body parts could be examined more closely and observations written down in more detail. The more people understood about the body the easier it was to identify and cure diseases.

The Renaissance improved a lot of European medical ideas. In 1543 Andreas Vesalius pointed out the mistakes that Galen had made. Ambrose Pare decided that it would be better to sew up cut blood vessels after amputations, however infection still killed many of his patients. This break-through shows great progression because new methods were being found in an attempt to amputate and seal wounds. Another very important break-through was that of William Harvey's discovery of how blood circulated in 1616. However tragedy struck and Bubonic Plague (the "Black Death") spread rapidly throughout England between 1346 -1350 and killed between 30 and 50% of the population. The plague returned in the Renaissance period, most famously as the Great Plague of London in which 60,000 people died in a year (1665). In the Middle Ages there was no understanding of the cause of the plague. The people blamed the disease on a variety of different causes: the position of the planets, God's anger and bad air. However when the plague returned it was much better understood, the fact that it was contagious was recognised and so people infected would be isolated. This shows regression because they faced the same problems as they had 300 years ago and if this was still causing a problem then obviously there had not been much medical progress otherwise it wouldn't have reoccurred. So, despite the fact that the rate of change was becoming quicker, they still did not properly understand diseases.

During the Industrial Revolution (1750-1900) the first vaccination was given. It was given by a man called Edward Jenner found a new method of immunising people from small pox. After many experiments and observations he found that people who he had injected cow pox into didn't get small pox, this was the method he called vaccination and after receiving a lot of criticism his theory was generally accepted after members of the Royal Family were vaccinated. In the 19th century cholera was attacking people throughout Britain. By the mid 1830s over 21,000 people had died of the cholera epidemic. The outbreak of cholera shows regression because cholera was caused by cramped living conditions, dirty water and sewage. The Romans provided a solution to this problem many years ago however since then Britain had slipped back and so was facing another epidemic. In 1847 a Scottish doctor called Joseph Simpson discovered the use of anaesthetics. This showed great progress following the previous attempts to anesthetize people which often resulted in them being given too much and dieing.

Florence Nightingale became famous during the Crimean War in 1854-56. She was asked to go to the hospital of Scutari in Turkey with a team of 38 nurses. She transformed the hospital by improving sanitation, cleanliness and supplies to patients (within two years the death rate had fallen from 40% to 2%) this shows a rapid rate of progression because of all the medical advances which had happened within this period. Florence Nightingale recognised the problems in the hospital following the research which had been carried out in the earlier years and set about changing it. She played a vital role in the establishment of the nursing profession in Britain.

Louis Pasteur developed the germ theory in 1867; his work was to do with the link between germs and disease. This was very beneficial knowledge, it allowed others to go on and develop his theory. From this Robert Koch later discovered how each germ caused a specific disease.

Also from Pasteur's theory came the use of antiseptics. After cleaning the wound of an 11 year old boy and covering it in a dressing of carbolic acid, he decided that it must have killed the germs because the boy had survived and did not suffer from infection. This was very significant because it meant that surgery could be carried out without the constant fear of the patient dieing from infection.

During the 20th century the medical knowledge and understanding moved on at a much greater pace, many more break-throughs were occurring in the field of medicine which meant more lives were being saved. New techniques meant that surgery could be performed much more safely and regularly without the constant risk of death. The introduction of the National Health Service provides people with access to medicine and health care. Although medical advances are still being made rapidly, not all medical problems have been solved. AIDs still remains a life threatening illness with no known cure. The completion of this essay shows that throughout the past 3000 years there have been many bursts of progress, however there have also been some periods of regression (for example 400-500AD). Progress was slow until about 1400AD. Things seemed to get much better as religion declined as a big influence on people's lives. Technology, science and education have all been factors influencing the rate of change in medicine. However overall the pace of progression has become more rapid. Medical progress changes as attitudes change, which predicts that there will be many more advances in the field of medicine in the near future.