

BBC Bitesize

Ahh... The Renaissance period. Sounds posh dunnit? The rebirth of learning, creativity, and, marvellously, of common sense! The Church's stranglehold on medicine was finally loosening, allowing a new generation of medical pioneers to advance. Not only that, but the invention of the printing press meant the spread of progressive ideas became cheaper and easier. Da Vinci was basically the viral meme of his day.

But – and it's a big butt - no, not that type of big but - some of the old, really - weird practices and ideas were still common...People even still believed in the magical properties of... err... stones. Bezoar stones were solid masses that grew inside the stomachs of goats...It was believed that rubbing these stones on the body cured all forms of poisoning, and even King Charles IX of France was a fan.

But his Royal Surgeon, an ambitious doctor named Paré, thought that the King was being as dense as his so-called magical stones...Paré was determined to prove it was all nonsense, so he did an experiment: He saved a criminal from being hanged...then he poisoned him.

Paré used the Bezoar stone treatment on the criminal which, of course, did nothing. This proved that you could challenge old beliefs with intrepid investigation. And that 'magical' stone treatment was a bit... well... stone dead.

Printed medical books were now prevalent if you were rich enough to be able to read, and had loads of pretty images of charming things like cut up frogs and dismembered corpses. This led to dissection being practiced more widely and, in turn, more medical understanding.

Things were changing on the battlefield too. New weapons meant new injuries. So doctors like Paré saved many lives when he developed new types of treatments, moving on from cauterising wounds with burning oils... to cleaning wounds with rosewater and sewing up veins. Still, ouch.

Ideas about blood flow were also evolving, as doctors realised that the heart was actually a pump! Pushing blood around the body! There was a physician called William Harvey, who dissected lizards. By cutting up these rampant reptiles he detailed a new theory of blood 'circulation', challenging Galen's old idea that blood was created in the liver and simply 'burned up' by our muscles.

But Renaissance medical knowledge was pushed to its limit by... drumroll please...The Great Plague of 1664. Like the Black Death 300 years earlier...the Great Plague was pretty damn harsh, killing around 100,000 people in London - almost a quarter of its population – in under 18 months.

Public health services were still non-existent, and people were living in towns so dirty and crowded you couldn't swing a cat (or a dog) in them. In fact, cats and dogs copped a lot of the blame for the plague. Not realising that flea-ridden rats were to blame, the London Mayor, ordered the death of 200,000 cats and dogs, as they were widely thought to cause the disease.

Meanwhile, people also falsely believed in such remedies as (ahem) bathing in urine - ewww - heavy pipe smoking, and the trusty... unicorn horn.

But there was some good news...Some doctors, such as George Thomson, were starting to challenge old beliefs about the plague. Thomson refused to evacuate London, so he could study the disease. He eventually caught the plague but miraculously survived! He claimed he did this by placing a frog

on his chest... and although this was scientific codswallop, his work demonstrated a renewed interest in observation, experimentation, and challenging the norm.

So, as you can see, by the end of the 16th and 17th centuries there had been some key developments in medicine. New medical books were flying off the printing presses, Paré was pioneering new surgical methods on the battlefield, blood circulation was now understood, and Thomson was so keen to investigate the plague he even caught it himself.

But these developments didn't trickle down to the wider population, and, even among doctors, there were still some hopping mad ideas. And it would be a few more years before medical science truly started to accelerate.