



Mr Isa Khan
Member, RCoA Lay Committee
laycom@rcoa.ac.uk

Patient perspective

Wondrous excellence: the contribution of Islamic medicine to modern healthcare

'A man will be imprisoned in a room with a door that is unlocked and opens inwards; as long as it does not occur to him to pull rather than push.'

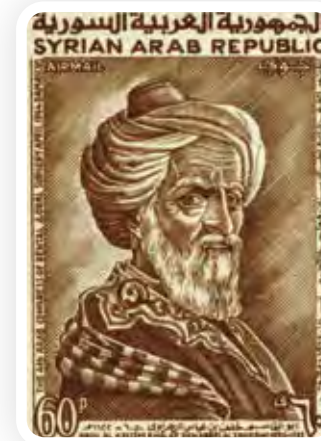
[Ludwig Wittgenstein]

When I was first asked by the College to write a short article on the talk I had given earlier in the year on the history of medicine, I was initially hesitant for the simple reason that the subject was so vast to do justice to, and moreover that it had to be accessible to everyone. The diplomatic and persuasive skills of my colleagues encouraged me to write this short article on an extremely fascinating and illustrious period in the life of medicine and healthcare – the period from the 8th to the 15th century. I am passionate about patient-centred and evidence-centred medicine, and hope to show how these principles were taken to unprecedented levels of excellence and refinedness in this period by Islamic medicine in a way that is to be seen in very few other areas of the history of medical science.

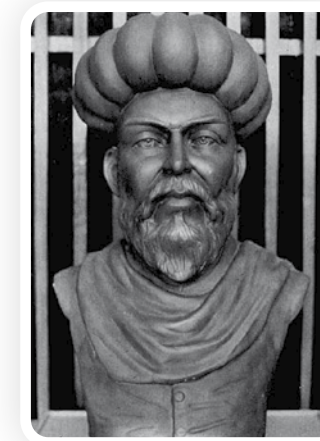
When one elucidates each story in this history it can only be described by Bolt's phrase: sophistication upon sophistication. Due to prescribed editorial limits, the article will centre on only three illustrious individuals: Abulcasis, Ibn al-Nafis and Avicenna. Firstly, the article looks at the overall contribution, and then secondly at the specific contribution and impact of these master clinicians.

If there was in the annals of history a period so founded in excellence and devotion to precise and clear thought in medicine and healthcare, then it was the golden age of Islamic medicine. Sarton, the Harvard academic, argues that, for the first time, medicine and healthcare were given a systematic and precise scientific foundation: a

complete paradigm shift. Medicine was no longer under the jurisdiction of barbers, rooted in barbarity, and blanketed in darkness and superstition, but was to come into the hands of such polymaths as were going to not only subject the field to evidence (make it an applied and practical science), but also to put the patient and ethics at the centre of it all. Science and not superstition was now the dominant convention in the practice of medicine. What differentiated these golden-age practitioners from the Greek theoreticians was a focus on practical scientific evidence: the day of order, logic, checklists for repeatability, all topped off by empathy, had finally arrived – things that serve us today for the betterment of all.



Drawing of Abulcasis (Al-Zahrawi) on a 1964 Syrian postage stamp
Credit: Public domain, via Wikimedia Commons



Photograph of Ibn Al Nafis statue from the Arabic book on Ibn Al Nafis 2003
Credit: Unknown author, via Wikimedia Commons



Portrait of Avicenna on a 1950 Iranian postage stamp
Credit: Public domain, via Wikimedia Commons

Surgery today is a sophisticated science. However, I would argue that its advancement is based upon the devotion and innovation of geniuses like the Spanish Muslim medic Abulcasis (also known as al-Zahrawi), whose works have been studied by surgeons for at least 400 years. Indeed, Garrison, the acclaimed medical historian, argues that it was during this period that the foundations of anaesthesia were being put down. Darnel was used by Abulcasis to effect partial or complete sedation, and he was the first to encourage the use of surgical suture from animal intestines, called catgut. Abulcasis is also one of the first surgeons to use cauterisation and to encourage the use of cotton to control bleeding. When Abulcasis's works were translated into Latin it brought about a revolution in Western surgical procedures. The lifesaving ethical principle – one that he had derived from his religion – meant that he would utilise any method to save lives; this included using surgery as a last resort. Abulcasis dedicates a whole chapter (Ch.61 of his work On Surgery – his total work includes about 29 other

books) to the removal of urinary bladder stones using an instrument he invented to crush them before removal.

This fascination with surgery led other giants to question standard knowledge. It was a man called Ibn al-Nafis who first described accurately the pulmonary circulation and corrected what Galen had previously described. His work was translated into Latin in 1547, making it accessible to Western European physicians. Subsequently, William Harvey was credited with this discovery in 1628, and Ibn al-Nafis had to wait seven centuries to be acknowledged as the discoverer of the pulmonary circulation.

Another giant of Islamic medicine is Ibn Sina, commonly known in the West as Avicenna, who is seen as an equal to Galen and referred to as the 'prince of physicians'. In his 'Canon of Medicine' (the basis of medical education in Europe for six centuries) he describes in detail the theory of delayed splintage – something that will be further refined many centuries after Avicenna by Perkins and his traction technique for bone fractures.

Medicine and surgery are a broad church and there have been many players, but the huge parts played by the above individuals in the history of humanity were solely played for the betterment of all. Their contributions still benefit us all – centuries after their distribution of those gifts.

***Diseases desperate grown
By desperate appliance are relieved,
Or not at all.***

[William Shakespeare, Hamlet]

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