

## #6

Popular medicine was also important, as is evident in Ottoman advances against smallpox, a horrible disease that killed huge numbers of people each year over the course of millennia. Smallpox epidemics were frequent and widespread. The death rate was high – 20-60% of all infected died and most survivors were permanently scarred (sometimes blinded as well). The death rate was even higher for children – and for those whose people had never been exposed to the disease (such as Native Americans, whose geographic isolation had prevented them from exposure to the disease that ravaged Europe, Asia, and Africa. When European settlers arrived in the Americas, inadvertently bringing smallpox with them, many Native American tribes were nearly completely wiped out). In the Ottoman Empire – and apparently some parts of sub-Saharan Africa, people developed a way to prevent this terrible illness.

### **Description of Ottoman efforts to vaccinate their citizens against smallpox by an 18<sup>th</sup> century English visitor to the Empire, Lady Mary Wortley Montagu.**

“To [Miss Sarah Chiswell], 1 April 1717, Adrianople

. . . *A propos* of distempers, I am going to tell you a thing that I am sure will make you wish your self here. The small-pox so fatal and so general amongst us is here entirely harmless by the invention of *ingrafting* (which is the term they give it). There is a set of old women who make it their business to perform the operation. Every autumn in the month of September, when the great heat is abated, people send to one another to know if any of their family has a mind to have the small-pox. They make parties for this purpose, and when they are met (commonly fifteen or sixteen together) the old woman comes with a nutshell full of the matter of the best sort of small-pox and asks what veins you please to have opened. She immediately rips open that you offer to her with a large needle (which gives you no more pain than a common scratch) and puts into the vein as much venom as can lye upon the head of her needle, and after binds up the little wound with a hollow bit of shell, and in this manner opens four or five veins. . . . The children or young patients play together all the rest of the day and are in perfect health till the eighth. Then the fever begins to seize them and they keep their beds two days, very seldom three. They have very rarely above twenty or thirty in their faces, which never mark, and in eight days time they are as well as before the illness. . . . There is no example of any one that has died in it, and you may believe I am very well satisfied of the safety of the experiment since I intend to try it on my dear little son. I am patriot enough to take pains to bring this useful invention into fashion in England, and I should not fail to write to some of our doctors very particularly about it if I knew any one of em that I thought had virtue enough to destroy such a considerable branch of their revenue for the good of mankind, but that distemper is too beneficial to them not to expose to all their resentment the hardy wight that should undertake to put an end to it.”

Excerpt from the Turkish Embassy Letters were made from *The Letters and Works of Lady Mary Wortley Montagu*, vol. 1, ed. by Lord Wharnccliffe and W. Moy Thomas (London: Henry G. Bohn, 1861). <http://www.ic.arizona.edu/ic/mcbride/ws200/montltrs.htm>

Lady Mary Wortley Montagu took a keen interest in Ottoman “variolation” (also called “ingrafting”) because she had personal experience with the disease; she herself had nearly died from smallpox (and was permanently scarred by the disease), while several of her loved ones had died of the illness. The early Ottoman method was not without danger. Variolation, unlike most modern vaccinations, involved injecting the *live*, potentially lethal virus into patients. This would give them a (hopefully) mild case of the disease, which would leave them immune to it afterwards.

Lady Mary had her son treated while living in Turkey – to good effect. Upon returning to England, Lady Mary introduced the idea – and practice – of variolation. During a smallpox epidemic in London, she organized the procedure for her daughter, who had been too young to experience the procedure in Turkey, and later for members of the British royal family. Many people in England owed their lives to her efforts – as did many American colonists. (Reports of her claims were discussed in British medical journals, which reached Boston when the city was in the throes of a very widespread outbreak of the disease. A few American medical practitioners adopted the process – to good effect.) Later in the 18<sup>th</sup> century, Englishman Edward Jenner, himself variolated as a boy, developed a safe vaccine, using the less lethal cowpox virus. Hundreds of millions more people died of smallpox, however, before the vaccine was widespread enough to completely eradicate that disease in the mid-20<sup>th</sup> century.