

DISTEMPERS AND PHYSIC VIRGINIA'S HEALTH IN THE EIGHTEENTH CENTURY

by Anne R. Davis, PhD*

In the eighteenth century, Virginia was exploding with advancements in commerce, government, politics, and education. Often referred to as Virginia's "golden age," one writer praised her as follows:

In wealth, size and power she stood first among the colonies. The political sagacity and intellectual stature of some of her notable men have gone into the making of the nation. Her manifold contribution to American history is a matter of common knowledge.¹

Another writer proclaimed "The Golden Age" as a title for his history of Virginia.² Using Robert Carter as an example of Virginia's strong leadership during this time, he listed some of Carter's enterprises: land holdings of 300,000 acres, divided into forty-eight separate plantations; manufacturing interests centered at his home at Corotoman, with docks and wharves where oceangoing vessels loaded and unloaded almost daily, making the estate a thriving town; and banking and financing, with mortgages lent to Virginians and investments in bonds in the Bank of England.³



Robert Carter on September 1, 1727.

Carter noted in his diary that day that he had "sat to the Paintr." The portrait captures Carter in the final weeks of his term as acting governor of the Virginia colony (William Gooch took office September 11, 1727) during a time when he suffered from gout and other maladies.

Photograph by Gary Andrashko of a copy of an original portrait of Robert Carter in Carter Reception Center, Historic Christ Church, from original at Sabine Hall.

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1 Wyndham B. Blanton, MD, *Medicine in Virginia in the Eighteenth Century* (Richmond: Garrett & Massie, Incorporated, 1931), 3.

2 Clifford Dowdy, *The Golden Age: A Climate for Greatness, Virginia 1732-1775* (Boston: Little, Brown and Company, 1970).

3 *Ibid.*, 9.

Yet there existed simultaneously almost complete powerlessness for Virginians where medical matters were concerned. Throughout the eighteenth century, medicine looked backward to earlier centuries when few cures or effective treatments were available and religion was invoked to halt epidemics. Physicians in Robert Carter's time lacked a comprehensive theory of disease that would have enabled them to diagnose and then treat it based on the diagnosis. When someone became ill, Wyndham Blanton notes in his history of medicine in Virginia in the eighteenth century, physicians treated them with the seventeenth-century procedures of "sweat, blister, purge, vomit and bleed," and the patient was often sicker after treatment than before.⁴

In the spring of 1727, Virginians were sick. A "long and violent Sickness and Grievous Mortality" had struck the colony. Robert Carter, president of the council and acting governor of the colony, issued a proclamation calling for Wednesday, the tenth of May, to be a day of "public Fasting and Humiliation." Carter followed a tradition brought from England that natural disasters and other calamities could be suppressed by spending a day in church hearing sermons "suitable to the Occasion." Appeals to the Almighty could accomplish what medicine and science could not. Failure to comply would result in punishment by the county sheriff, Carter warned:

By the President and Comander in Chief of this Dominion Virginia Ss

A Proclamation for a Fast

Whereas it hath pleased Almighty God for the punishment of Our Sins to afflict this Colony with a long and violent Sickness and Grievous Mortality And to the End all persons may be Excited to a Speedy Repentance that So the Almighty may be moved to avert his Judgments I have thought fitt by and with the Advice and Consent of the Council to appoint That Wednesday the Tenth day of May next be observed and kept throughout this Colony and Dominion as a Day of Publick Fasting and Humiliation Whereby in His Majestys Name requiring and Comanding all his Majestys Subjects That laying aside all Secular Employment and Bodily Labour they Religiously attend Divine Service at their respective Churches and Chappels And I do require the Ministers of the respective Parishes That on the Said Day they preach Sermons suitable to the Occasion And that in all Churches and Chappels where there are no Ministers Divine Service and a proper Homily be read by the Clerk or Reader And I do further command and require all persons whatsoever to Observe and keep the said Day of Fasting and Humiliation with all due Devotion as they tender the Favour of Almighty God and on pain of suffering such punishments as may be Justly Inflicted on them for their Neglect of so Religious and Necessary a Duty hereby Comanding the Sherifs of the respective Counties to Cause this Proclamation to be read and Published in all Churches and Chappels within this Dominion

4 Blanton, *Medicine in Virginia*, 5-6.

Given at the Council Chamber in Williamsburgh the Twenty First Day of
April 1727 In the Thirteenth Year of the Reign of our Soverain

Lord King George

Robert Carter

God save the King⁵

England and the Continent were equally unenlightened. One writer saw the prevailing confusion reflected in early eighteenth-century medical texts, whose tables of contents strung together many separate subjects “like random beads on a string” with no guiding principles to connect the beads.⁶ Medical thinking had no comprehensive theory of disease, which meant that practitioners grasped at mistaken theories from earlier centuries, then made treatment decisions that were not based on facts. When new observations were made, they were simply fitted into old frameworks.⁷ Without a basic understanding of disease, most treatments were ineffective or harmful, even in hospitals. In his study of medicine in eighteenth-century Virginia and elsewhere in colonial America, Wyndham B. Blanton wrote, “Hospital management was bad in the Seventeenth Century and world over. It was worse in the Eighteenth.”⁸ Not until the end of the eighteenth century did scientific thinking begin to move toward what we today consider modern medicine.

One prominent theory of the time was that of humors, first defined by Hippocrates in ancient Greece. It held that the body was filled with four basic fluids or humors: yellow bile, black bile, blood, and phlegm. Good health resulted when they were in balance and poor health when they were not.

Each humor related to a season, an organ in the body, a quality (warm, moist, cold, dry), and one of the four classical elements of air, water, fire, and earth. Treatment was directed toward changing amounts or balances of these fluids, so as to eliminate excesses or deficiencies. Bleeding, purging, or sweating all worked to eliminate excess fluids. Rest and diet changes worked to make up any deficits.⁹ Medicines or drugs were used for both purposes.

5 Transcription by H.R. McIlwaine, ed., *Executive Journals of the Council of Colonial Virginia*, Vol. IV, Oct 25, 1721-Oct 18, 1739 (Richmond: The Virginia State Library, first edition 1930; reprint 1978), 452. This was the only proclamation of this nature between 1720 and 1750. Prior to that time there were three: a 1708 proclamation refers to a “pestilentiall distemper which has already swept away great numbers of the Inhabitants of the Eastern Shore and is now lately spread and continues to rage in some parts of the Western Shore” (*Executive Journals*, 568); a 1709 proclamation about “Extraordinary Sickness & Mortallity” (*Executive Journals*, 572); and a 1710-11 proclamation mentioning “Epedemick Distemper” that “has proved Mortall to a Great Number of persons” (*Executive Journals*, 582). All dictate a day of fasting and church attendance.

6 Lester S. King, *The Medical World of the Eighteenth Century* (Chicago, University of Chicago Press, 1958), 193-94.

7 *Ibid.*, 63.

8 Blanton, *Medicine in Virginia*, 269-70.

9 C. Keith Wilbur, *Revolutionary Medicine, 1700-1800* (Chester, CT: The Globe Pequot Press, 1980), 8.



The alchemic approach to the four humors in relation to the four elements and zodiacal signs.

Illustration from Leonard Thurneysser, Quinta Essentia, 1574

Hippocrates is also credited with the theory of miasmas, again related to heat and moisture. In the eighteenth century and by the early nineteenth century, miasmatic theory had become the “most popular theory... one that dominated both American and European medical thinking.” It held that miasmas were products of decay, heat, and moisture, borne by spore-like particles that incubated in standing water and swampy land. Temperatures above sixty degrees were favorable to the growth of these spores; temperatures below thirty degrees were not. Not until the late nineteenth century did the germ theory of disease supplant humors and miasmas.¹⁰

Other equally unfounded theories prevalent in the colonies were based on those advocated by leading European physicians. Dutchman Hermann Boerhaave believed that disease was an imbalance of natural causes. Scottish physician-scientist William Cullen emphasized nerves and spasms; Cullen’s pupil John Brown believed that disease was caused by tissue and nerve

¹⁰ Susan Anthony-Tolbert, “The Medical Practice of Dr. Joseph Basye: Northumberland County Physician in the 1840s,” *The Bulletin of the Northumberland County Historical Society* XLVIII (Heathsville, VA: Northumberland County Historical Society, 2011), 17-18.

excitability: when tissue function increased, he called the resulting disease “sthenic,” and when tissue function decreased, he called that state “asthenic.”¹¹

On a smaller scale, another example of misguided disease theory appears in a *Colonial Williamsburg Journal* article entitled “To Bathe or Not to Bathe: Coming Clean in Colonial America.” It states that few colonists bathed more than a couple of times a year. The reason? “Everyone knew that too much bathing would destroy your natural oils and leave you wide open to the ravages of various diseases.” The author notes that a six-sided bathhouse, dating from perhaps 1720 and standing among the buildings of the Governor’s Palace in Williamsburg, was used for cooling down, not for cleaning up.¹²

DISTEMPERS

In the eighteenth century, the general term for diseases and illnesses was “distempers.” More specific names were used if information was available. While disease and illnesses were much the same then as they are today,¹³ the striking differences in treatments, and the fallacious perceptions on which treatment was based, led to different vocabularies that can make it difficult for twenty-first-century Virginians to understand exactly what our ancestors meant when they wrote about their distempers.

Names given to distempers in the eighteenth century often related to the symptoms patients experienced. Epilepsy was “falling sickness” and fluid discharges were “flux.” If the same symptom applied to more than one distemper, confusion arose. For example, “flux,” referring to fluid discharge, could be either hemorrhage or diarrhea.

Sometimes distempers were named according to an identifying feature. For example, typhus was called “jail fever” because it spread in the close, unsanitary conditions of jails; kidney stones were called “gravel” because of their appearance; and tuberculosis was “lung sickness” because of the site of the disease. Other names of eighteenth-century diseases continue to be used today, e.g., cancer, colic, pox, and jaundice.

Because there were so many distempers in Robert Carter’s time, and so many different names even for the same distemper, it may be helpful to list the most frequently mentioned ones. In addition to Carter’s diaries and letters, other sources used were the *Virginia Gazette*, published between 1736 and 1780, and John Tennent’s *Every Man his own Doctor: OR, The Poor Planter’s Physician* published between 1734 and 1737.

11 Blanton, *Medicine in Virginia*, 4-5. A professor at the esteemed Edinburgh Medical School, Cullen’s students included Philadelphia doctor and Declaration of Independence signer Benjamin Rush and John Morgan, who with William Shippen, Jr., cofounded the Medical School of the College of Philadelphia, today the University of Pennsylvania, the first medical school in the colonies.

12 Edwards Park, “To Bathe or Not to Bathe: Coming Clean in Colonial America,” *Colonial Williamsburg Journal* (Williamsburg, VA: Colonial Williamsburg Foundation, Autumn 2000), 1-2.

13 Blanton, *Medicine in Virginia*, 9.

The following combined list of distempers reflects all of the confusion and duplication in eighteenth-century medical nomenclature but also attempts to give a modern name for what Virginians were experiencing:

MODERN NAMES FOR EIGHTEENTH-CENTURY DISTEMPERS

Eighteenth-Century Names	Twenty-First-Century Names
adder bites	adder bites
ague (intermittent, tertiary, bilious, or country fever)	malaria
apoplexy	stroke
asthma	asthma
Black Death	typhus
black pox	smallpox
bleeding	bleeding
brain fever	meningitis
burns	burns
cachexy (cachexes)	chronic ill health, wasting syndrome
calenture (yellow jack, putrid fever, American plague, bilious yellow fever)	yellow fever
camp fever	typhoid fever
cancer	growth, tumor, hard lump
cankerworms	cankerworms
catarrh	inflammation in nose, throat
cholic	colic, discomfort of the stomach
colds	colds
consumption	pulmonary tuberculosis
costiveness	constipation
deafness	deafness
distemper	distemper
dropsy	swelling, of legs and ankles caused by heart or kidney disease
eruptions, cutaneous	eruptions, cutaneous
evil (King's Evil)	scrofula, tuberculosis of lymph glands
eye diseases	eye diseases
eyes, sore	eyes, sore

falling sickness	epilepsy, disorder of the nervous system
female disorders	female disorders
fever (griping, slow, or intermittent fever)	fever
fitts (vapors, hysteric fits)	convulsions, also used to mean an occurrence. Robert Carter's letters mention "a fit of the Gout."
flooding	excessive menstrual bleeding
flux (bloody flux)	dysentery, diarrhea, gastroenteritis
French malady (French pox, French disease)	syphilis
gleet (running of the reins)	gonorrhea
gout	inflammation of the joints
gravel	kidney stones
green sickness	iron deficiency, anemia
gripes (dry gripes, gripes)	cramps in the stomach, usually associated with influenza. Carter Burwell's biographer believed it was ulcers.
head disorders	head disorders
inappetency	lack of appetite
itch	itch
jail fever (gaol distemper)	typhoid fever
jaundice	today, a symptom rather than a disease, as in yellow fever.
leprosy	Hansen's disease
looseness	dysentery
measles	measles
mortification	gangrene, necrosis, any widespread infection
nervous complaints	nervous complaints
palsy	limbs numb and disabled; paralysis
phthisis (tissick, hectic fever, consumption)	tuberculosis
piles (bleeding or blind piles)	hemorrhoids
plagues	plagues
pleurisy	colds, inflammation of the lung. Tennent calls it "the most fatal of all our distempers."

pox (great pox)	syphilis, gonorrhoea
putrid fever	typhoid fever
quinsey	cold with fever
red plague	smallpox
rheumatism	rheumatism
ringworm	ringworm
ruptures	ruptures
sciatica	sciatica
scurvy	scurvy
ship's fever	typhoid fever
skin disorders	skin disorders
sores	sores
stomach disorders	stomach disorders
stone and gravel	stone and gravel
strains	strains
swellings	swellings
throat distemper	sore throat
titters	uncertain. It appears in a <i>Virginia Gazette</i> ad for a physician claiming to cure it.
toothache	toothache
ulcers	ulcers
urine suppressions	urine suppressions
variola	smallpox
warts	warts
white swelling	tuberculosis of the bone
whitlows	boils
whooping cough , putrid sore throat	whooping cough, sore throat
worms	worms
wounds	wounds
yaws	tropical infection, scurvy
yellow jack	yellow fever

The “violent Sickness and Grievous Mortality” to which Robert Carter referred is not named in the sources we have today. The *Virginia Gazette* did

not begin publication until almost ten years later, and Carter's surviving diaries skip from March 19, 1727, to May 29, 1727, with no mention of a spreading illness. His personal letters also spanned this period, but no letter is recorded between February 15, 1727, and May 11, 1727. In the May 11 letter, written almost four weeks after the April 21 date of the proclamation, Carter notes that he had suffered "a griveous mortality" that had "Swept away abundance of my people" so that he had been "forc'd to buy a large parcell of new Negroes." He estimated the cost of replacing them to be about £300.¹⁴

Nor do lists of major epidemics in the colonies tell more because they include only the largest cities and use general notations such as smallpox in "Most of the Colonies." For example:

1715-22: Smallpox in most English and French colonies and Native American settlements.

1715-25: Smallpox in "Most of the Colonies"

1732-33: Influenza "Worldwide"

None specifically mentions an epidemic in Virginia in 1727.¹⁵

Not knowing the specific illness that moved Carter to make his declaration in 1727, we can only assume that it was overwhelming and devastating. As one historian observed, "The demographic history of early Virginia is both sad and tragic. Sad because so many died; tragic because they died needlessly."¹⁶

Distempers were not always so widespread or dramatic but nevertheless caused pain and suffering for many individuals and households. Even the work of governing Virginia was affected. Robert Carter's papers contain many such descriptions. In May of 1727, he confided to his son John, "I am under such daily & hourly Afflictions with my distemper that it is hardly possible for me to give my Attendance at the Seat of Governmt."¹⁷

And on October 14, 1727, he wrote, "I am now under a severe distemper with the gripes & Tormenting pains in My left side which renders me incapable of going to the first of the general court as I intended."¹⁸

14 Edmund Berkeley, Jr., ed., "Robert Carter to Edward Tucker, May 11, 1727," *The Diary, Correspondence, and Papers of Robert "King" Carter of Virginia, 1701-1732*, <http://carter.lib.virginia.edu/index.html>.

15 Larisa R. Schumann, "Epidemics in Colonial North America, 1519-1787: A Genealogical Perspective," *MyTrees.com Newsletter*, July 25, 2003 <http://www.mytrees.com/newsletters/nlselect/20030725.html> and <http://www.mytrees.com/yao/Smallpox.html>; *Some Major Epidemics in The U.S.* <http://www.tsgraves.com/relics/epidemics/htm>.

16 Carville V. Earle, "Environment, Disease, and Mortality in Early Virginia," Thad W. Tate and David L. Ammerman, eds., *The Chesapeake in the Seventeenth Century: Essays on Anglo-American Society & Politics* (Chapel Hill, NC: University of North Carolina Press, 1979), 125.

17 Berkeley, ed., "Robert Carter to John Carter, May 15, 1727," *Papers of Robert "King" Carter*. See also "Robert Carter to William Robertson, May 15, 1727."

18 *Ibid.*, "Robert Carter to William Camp, October 14, 1727."

Life was fragile in the eighteenth century. Death was necessarily accepted as a matter of fact. In 1762, Lancaster County planter-merchant James Gordon recorded in his diary, "July 31. Our poor little child Sally very ill, so that my wife went to Dr. Flood for medicine & directions for her, but of no service, as the child is so ill. August 1. About 9 o'clock our dear child left us."¹⁹

Of all the distempers that Virginians suffered in the eighteenth century, the most deadly were the infectious diseases, chiefly malaria, yellow fever, typhoid fever, smallpox, and dysentery. They were a large part of the "table talk and letter writing of its people," and diaries contained "endless notations of the prevailing symptoms."²⁰ Robert Carter was no exception, and many examples appear in his diaries and letters.

MALARIA

The "Ague and Fever," as it was popularly known, came to be closely associated with the living conditions in the Virginia colonies: a long warm season, proximity to water, and land that was low and often swampy. Malaria quickly became endemic; that is, an ever present part of the landscape, unlike epidemics that disappear, then reappear.²¹

The mosquito vector that thrived in Virginia's coastal colonies, the *Anopheles gambiae*, has earned the title, "The Most Dangerous Animal in the World," and even today it is responsible for four hundred thousand deaths every year, chiefly in Africa.²² Transmission occurs when this mosquito bites an infected person, then an uninfected person.

Symptoms included regular alternations of fever and chills, thus the names fever and ague or intermittent fever. Malaria was the most common disease in the English colonies, and in the eighteenth century, a constant threat. Robert Beverley, Virginia's first native born historian, called it "The first Sickness that any New-Comer happens to have."²³

Indeed, the first bout of malaria was called the "Seasoning." This severe fit, expected shortly after one's arrival in the colony, was an unpleasant introduction to the new environment. While it was not especially lethal, malaria weakened its victims, leaving them vulnerable to other diseases.

19 "Journal of Col. James Gordon, of Lancaster County, VA," *William and Mary Quarterly* (hereafter cited as *WMQ*), 1st Series XI, 4 (Williamsburg, VA: April 1903), 232.

20 Blanton, *Medicine in Virginia*, 50.

21 Charles C. Mann, *1493: Uncovering the New World Columbus Created* (NY: Vintage Books, 2011), 102.

22 Jerry Adler, "A World Without Mosquitoes," *Smithsonian Magazine* 47, 3 (Washington DC: Smithsonian Institution, June 2016), 38.

23 Louis B. Wright, ed., Robert Beverley, *The History and Present State of Virginia* (Chapel Hill, NC: University of North Carolina Press, 1947; reprint, Charlottesville, VA: University Press of Virginia, 1968), 306.

Acquired immunity in people who survive the disease, with or without symptoms, is “virtually 100% effective against severe disease and death” among heavily exposed adults.²⁴ The first slave owners soon learned of their economic edge over other planters whose servants were not immune.²⁵ However all adult slaves still had to undergo a “seasoning” period because the strains of malarial parasites in this country sometimes differed from those in their native lands.²⁶

The native Indians proved to be particularly vulnerable to malaria. In the seventeenth century they were said to have “pledged all their possessions in order to have some clothes to cover them in the ague-chill of their fever.”²⁷

It was a bout with “feaver and ague” that possibly persuaded Robert Carter to sign his will. His diary entries in 1726 report being “taken with a feavr & Ague” on August 18, followed by “a violent fitt Ague very severe” on August 20. On August 22, Carter “Signd my Will very uneasie.”²⁸

Landon Carter, son of Robert “King” Carter, writes poignantly of his young daughter’s malaria. According to his diary, Sukey first became ill on November 25, 1756. Throughout 1757, she was intermittently ill, and Carter lamented, “It is necessary that man should be acquainted with affliction and ’tis certainly nothing short of it to be confined a whole year in tending one’s sick Children. Mine are now never well.” Sukey “dyed between 11 and 12” on April 25, 1758.²⁹

YELLOW FEVER

This disease was “peculiarly an American epidemic disease of the Eighteenth Century.” The first symptoms of yellow fever were pains, temperature, jaundice, and delirium. Patients usually recovered in about a week; those who did not were among the 10 to 25 percent for whom the distemper proved fatal.³⁰

Infected *Aedes Aegypti* mosquitos passed the virus from person to person. Larvae of this mosquito lived easily in stagnant water or rain barrels.³¹ In the absence of public water supplies, both were nearly ubiquitous. This particular mosquito is also the culprit that spreads dengue fever and zika virus.³² Yellow

24 Doolan, Dobano, Baird, National Center for Biotechnology Information, / Acquired Immunity to Malaria, *Clinical Microbiology Reviews*, 2009 Jan., 22(1):13-16, nlm.nih.gov.

25 Mann, 1493: *Uncovering the New World*, 137.

26 Ronald L. Numbers and Todd L. Savitt, eds., *Science and Medicine in the Old South* (Baton Rouge, LA: Louisiana State University Press, 1989), 329-30.

27 John Duffy, *Epidemics in Colonial America* (Baton Rouge, LA: Louisiana State University Press, 1953), 205.

28 Berkeley, ed., “Diary of Robert Carter,” *Papers of Robert “King” Carter*, entries for August 18, 20, and 22, 1726.

29 Jack P. Greene, ed., *The Diary of Colonel Landon Carter of Sabine Hall, 1752-1778*, 2 vols. (Charlottesville, VA: University Press of Virginia, 1965), 190, 194, 222.

30 Blanton, *Medicine in Virginia*, 50-53.

31 Wilbur, *Revolutionary Medicine, 1700-1800*, 15.

32 Adler, “A World without Mosquitoes,” 41.

fever probably came to the colonies from Barbados aboard the many ships bound for the New World. Because some slaves proved to be immune to yellow fever, an African origin was strongly suggested. The disease was particularly overwhelming in cities on the coast, where outbreaks began in the seventeenth century in Boston, New York, and Charleston, and reached true epidemic proportions in the eighteenth century.

Also referred to as calenture, yellow jack,³³ putrid fever, American plague, or bilious yellow fever, it first struck in Virginia in 1737 and again in 1741-42. Outbreaks continued throughout the eighteenth century. Fithian's journal of 1774 mentions the arrival of one ship, with two passengers already dead and "many of Mr Atwells Slaves are infected."³⁴

Blanton quotes a Dr. Mitchell, who practiced along the lower Rappahannock and reported thirty or forty cases, mostly among slaves. Blanton notes that the lower Rappahannock was visited by seagoing vessels that were the likely source.³⁵

In September 1793 Virginia governor Henry "Lighthorse Harry" Lee issued a proclamation that required all vessels sailing from Philadelphia, the Grenades, and the island of Tobago to anchor off Craney Island at the mouth of the Elizabeth River for twenty days, with no passengers or cargo leaving the ship.³⁶ By the end of the century, all seaport towns had quarantine officers and various requirements.

A vaccine for yellow fever was not discovered until the twentieth century. Max Theiler, a South African virologist and physician, received the Nobel Prize in 1951 for its development, becoming the first African to receive the prize.³⁷

TYPHOID FEVER

Typhoid fever, also known as camp fever, jail fever, or gaol distemper, is spread by lice or fleas; hence it flourished in situations where people lived in close quarters with low standards of living. Prisons or ships on long sea voyages offered ideal conditions for transmission. An item in the *Virginia Gazette*, which was published in Williamsburg between 1736 and 1780, is an extremely useful source of information about both distempers and physic. A notice in July 1737 tells of a typhoid fever outbreak among convicts on a ship:

33 Mann, *1493: Uncovering the New World*. Quarantine ships flew a yellow jack flag, see 140.

34 Hunter Dickinson Farish, ed., *Journal and Letters of Philip Vickers Fithian, 1773-1774, A Plantation Tutor of the Old Dominion* (Williamsburg, VA: Colonial Williamsburg, Incorporated, 1957), 68.

35 Blanton, *Medicine in Virginia*, 54.

36 *Ibid.*, 54-55.

37 www.nobelprize.org/nobel_prizes/medicine/laureates/.../theiler-lecture.htm.

We hear from *Potowmack*, That a Ship is lately arriv'd there, from *London*, with *Convicts*. *Capt. Augustine Washington*, and *Capt. Hugh French*, took their Passage in her; the Former is arriv'd in Health; but the Latter dy'd at Sea, and 'tis said of the *Goal Distemper*, which he got on Board.

The News by this Ship, came too late for this Week's Paper; I must therefore refer my Readers to the next. 38

It was not until the early twentieth century that Charles Jules Henri Nicolle discovered typhoid fever's transmission by the body louse. It earned him a Nobel Prize in 1928.³⁹

SMALLPOX

In 1717, Robert Carter wrote to London merchants Micajah and Richard Perry about his son John's recovery from smallpox in London. His letter conveys some of the dread of the disease:

'Tis shocking news, my son's being seized with the Small Pox—a fatal distemper to his countrymen. You give me great hopes he is in a fair way to do well. Pray God grant it. Then 'twill rejoice me that he hath had it. Pray give my blessing to him. I hope ere long to have it from himself how he hath been treated in this cruel discouragement to an English education.⁴⁰

Smallpox was unknown in America until the arrival of Spanish ships from Africa, where it had long been endemic. Boston, Philadelphia, and Charleston experienced serious epidemics between 1721 and 1738, but it did not appear in Virginia in epidemic proportions until 1747. That January the town of Williamsburg passed a bylaw requiring “every inhabitant or freeholder of this city, who shall hereafter entertain or receive into his or her house any Negro or other person infected with the smallpox” to pay a fine of two pounds sterling.⁴¹

Landon Carter's diary contains accounts of smallpox among his slave population. After describing a rather tumultuous course of disease among his slaves in February 1757, he concludes with good news, “Small pox man 19 days from his Eruptions. All his Scabs etc. gone these three or four days and he perfectly well.”⁴² William Byrd of Westover was not so fortunate.

38 *Virginia Gazette*, July 22, 1737, 4:1.

39 Nobelprize.org, The Official Web Site of the Nobel Prize, Section: The Laureates and their Work.

40 Berkeley, ed., “Robert Carter to Micajah and Richard Perry, October 3, 1717,” *Papers of Robert “King” Carter*.

41 *Virginia Gazette* (Purdie and Dixon), January 21, 1768, 3:2; Blanton, *Medicine in Virginia*, 62.

42 Greene, ed., *The Diary of Colonel Landon Carter*, 141-47.

During a visit in London, his first wife Lucy Parke died of smallpox after a short and sudden illness, “by the very same, cruel distemper that destroyed her sister.”⁴³

The College of William and Mary was the site of an outbreak of the disease in 1766. When it was over, the president and masters of the college placed an advertisement in the *Virginia Gazette* informing the public of the “extirpation of the late destructive and expensive disorder” and admonishing young gentlemen to immediately “return to the College, which it is hoped they may now do with the greatest security.”⁴⁴

But only two years later, the college must have suffered another outbreak, because these same officials agreed to pay for help it had received. Fifty pounds were to be given to the “Corporation of the City of Williamsburg to be apply’d towards defraying the Expenses of stopping the Progress of the Small Pox” and another fifty pounds would be given to “Doctr. Ia. Carter for his Care and attendance on those infected with the said Disorder at the College.”⁴⁵

Treatment for smallpox began many centuries ago in the Near East, India, and Africa where “inoculation” (or “variolation”) was practiced. The procedure was based on the observation that a course of smallpox produced lifetime immunity to the disease. Inoculation exposed patients to live smallpox virus through a small cut in the skin, into which active smallpox virus was inserted.

The idea spread to the West by at least two different routes. The first was from Turkey, where Lady Mary Wortley Montagu observed the practice when she accompanied her ambassador husband to Constantinople in 1717. She had her children inoculated, publicizing the procedure after her return to London. African slaves were a second route of transfer. Having seen the practice in their homeland, they told of it when they arrived in the New World. Cotton Mather in Boston learned about it from his slave, Onesimus.⁴⁶

The treacherous Boston smallpox epidemic of 1721 arrived on a British warship, the HMS *Seahorse*. During the next year almost half of the town’s population was infected. Some three hundred of those who escaped the disease had been inoculated, thanks to the efforts of Mather.⁴⁷

Giving smallpox virus to an uninfected person was not a panacea, however. If the procedure was not carefully executed, or the inoculated virus was particularly robust or given too liberally, patients contracted the disease. And

43 Marion Tinling, ed., “William Byrd II to [John Custis, Extract?], December 1716,” *The Correspondence of the Three William Byrds of Westover, Virginia, 1684-1776*, 2 vols. (Charlottesville, VA: University of Virginia Press, 1977), I, 296.

44 *Virginia Gazette* (Purdie and Dixon) March 10, 1768, 3:1; Blanton, *Medicine in Virginia*, 63.

45 “Journal of the Meetings of the President and Masters of William and Mary College,” *WMQ*, 1st Series, V, 1 (July 1896), 15; Blanton, *Medicine in Virginia*, 63.

46 nim.nih.gov, History of Medicine, Smallpox, A Great and Terrible Scourge, Variolation, 1.

47 Stephen Coss, *The Fever of 1721: The Epidemic That Revolutionized Medicine and American Politics* (NY: Simon & Schuster, 2016), x.

sometimes, death resulted from this very procedure designed to prevent it. It may have been concerns of this type that caused a petitioner in Williamsburg in 1769 to warn the House of Burgesses of “the destructive Tendency of Inoculation with Small-Pox” and request “that no such Practice may be allowed in Virginia.” Another petition from residents in Norfolk set forth the “Inconveniences from Inoculation with the Small-Pox” and called for an act for “restraining and regulating the Practice of Inoculation.”⁴⁸

Doctors provided inoculation as well as a quarantined place so patients would not spread the disease as they recovered from fevers brought on by the procedure. John Smith from Indian Creek in Northumberland County implored his patients to be prepared to pay him should their stay exceed the customary two weeks. In June of 1768 he placed an ad:

To inform the public, that I am returned to my house at *Indian creek*, to inoculate for the small-pox, on the terms formerly advertised; and as I shall be necessarily confined with my patients, and cannot possibly transverse the country to collect my debts, it is hoped, for the future, that all persons who come will be provided to pay, not only the fee of inoculation, but for the time also they stay above the fifteen days. I shall endeavor to make everything as convenient and agreeable as possible.⁴⁹

Thanks to Thomas Jefferson's cosmopolitan experiences and enlightened views, inoculation became acceptable in Virginia earlier than in other colonies. He personally vaccinated his slaves at Monticello and also furnished the virus to doctors in other parts of the country.⁵⁰

Edward Jenner's work to prevent smallpox began at the end of the eighteenth century, when he successfully made serum from a cowpox lesion. Cowpox was a disease in the same family as smallpox, but much less virulent. Jenner's “vaccination,” so called because of the Latin word for cow, *vacca*, removed the risks that had been associated with inoculation.

DYSENTERY

The flux, or bloody flux, was a particularly dreaded distemper in the eighteenth century because of its high mortality rate.⁵¹ It was most deadly in populations weakened by other sicknesses or malnutrition. During this period, prior to the introduction of antibiotics, the death rate for dysentery has been estimated to have been between 12 to 25 percent for those who experienced the disease.⁵²

48 John Pendleton Kennedy, ed., *Journals of the House of Burgesses of Virginia, 1766-1769* (Richmond: Library Board, Virginia State Library, 1906), 203; Duffy, *Epidemics in Colonial America*, 99-100.

49 *Virginia Gazette* (Rind), June 9, 1768, 4:1.

50 Blanton, *Medicine in Virginia*, 62.

51 *Ibid.*, 68.

52 Earle, “Environment, Disease, and Mortality in Early Virginia,” 100.

The source of dysentery can be viral, bacterial, or parasitic. All spread with poor hygiene, via ingestion of contaminated food or water, or oral contact with contaminated entities. As with typhoid fever, conditions in jails or aboard ships on long ocean voyages were well suited to transference of the germs.

It was the flux that is thought to have caused Robert Carter's death. His obituary in *The American Weekly Mercury*, Philadelphia, August 10-17, 1732, reads as follows: "We hear from Virginia that Col. Carter of that place died on Monday the 7th Instant, after a short Indisposition of three Days. He died of the Flux, which 'tis supposed he caught on board a Vessel from which he bought several Negroes."⁵³

OTHER DISEASES

The diseases for which today's children are immunized, such as measles and whooping cough, were quite serious in the eighteenth century, when there was neither cure nor prevention. Both children and adults could be dangerously affected.

Measles and whooping cough threatened Col. James Gordon's plantation in the summer of 1759. On July 6, Gordon noted "All our family have had the measles now, about 30. I thank God they seem in a recovering way." The next month, on August 14, he mentioned whooping cough, saying, "Jamey very ill with the whoopingcough, & we are afraid of Molly & Betty getting it." Less than two months later, Betty had contracted it, as he noted on October 10, "Poor little Betty very ill with whoopingcough"⁵⁴

In 1761, Col. Gordon mentioned pleurisy, or colds. His entry for November 4, 1761, recorded "There are few of our negroes but are sick today with colds, or rather, pleurisies, 12 or 13 laid up."⁵⁵

Sometimes these now preventable diseases proved fatal. During a measles outbreak in Virginia in 1717, Col. Philip Ludwell wrote to Francis Nicholson that:

The measles hath been epidemical amongst us this winter, it hath run quick through my family tho' I thank God I have lost none but a young Negro woman, but poor Mr. Berkeley dyed of it as did Jenny Burwell, Mrs. Churchill, Mrs. Page [who was her daughter] Mrs. Corbin & some others.⁵⁶

Likewise, colds were life threatening. A 1736 *Virginia Gazette* article tells of the dire consequences of a cold for Robert Carter's daughter Mary:

53 Berkeley, ed., "Robert Carter's Obituaries and Other Records of his Death, 1732 and Later," *Papers of Robert "King" Carter*.

54 "Journal of Col. James Gordon," *WMQ*, 1st Series XI, 2; 107, 110.

55 *Ibid*, XI, 4, April, 1903, 225.

56 Duffy, *Epidemics in Colonial America*, 169.

Last Friday, died Mrs. Mary Braxton, Daughter of the late Col. Carter, President of the Council of this Colony, and Wife of Mr. George Braxton, of King and Queen County: She was a Gentlewoman of a very good Character, well belov'd by her Neighbours and Acquaintance, and her Death is much lamented. She was lately delivered of a Son, and in a fair Way of Recovery; but unhappily catching Cold, was soon carried off; and the Child also died the Monday following.⁵⁷

Other distempers, while not infectious, and usually not fatal, were nevertheless seriously disabling. Robert Carter's diaries and letters abound with references to sicknesses that afflicted him, his family, friends, and slaves. He mentions all of the most common distempers of the time, from gripes to toothaches to the flux (dysentery) that was the likely cause of his death. But it was gout that caused him the greatest anguish and restricted many of his activities, such as his work in the capital. He wrote on March 25, 1721, of one episode: "I have now bin confin'd to my house for above a month by that cruel companion the Gout."⁵⁸

One of the most detailed descriptions of Carter's struggles with gout is found in his diary of 1723, beginning in late August and continuing throughout the rest of the year. On August 26, Carter noted that he "was taken a little lame in my right Ancle.... at noon I grew worse by five of Clock I prepared for a fit of the Gout at night could hardly stirr."⁵⁹ Entries through September 27 mention different aspects of his suffering:

August 28—in a great deal of pain...cant stand without a Crutch & very badly with one

August 29—In a shivering & cold sweat lay in a great deal of misery

August 30—am an intire Creeple have not movd a Step these sevl daies only as I am carried abt in a Chair

September 11—cant wear a Shoo on my right foot

September 27—rise very lame cant walk without a great deal of Pain⁶⁰

Carter did not mention his gout for the next two months, but he could not end the year gout free. December entries include "downright lame could hardly stand... was carried into the boat;" "continue very lame just able to hobble with my Cane & Crutch," and finally a happier note, "Christmass day I walk a little bettr with my Cane can Endure my great slips."⁶¹

57 *Virginia Gazette*, September 24, 1736, 4:1. On October 15 the *Virginia Gazette* reported that the account of the child dying was incorrect "for the Child is still living." This child turned out to be Carter Braxton, a signer of the Declaration of Independence, see *Virginia Gazette*, October 15, 1736, 4:1.

58 Berkeley, ed., "Robert Carter to Micajah Perry, Sr., and Jr., March 25, 1721," *Papers of Robert "King" Carter*.

59 Ibid., "Robert Carter Diary," August 26, 1723.

60 Ibid., entries for August 28 through 30 and September 11 and 27, 1723.

61 Ibid., entries for December 12, 23, and 25, 1723.

MEDICAL PRACTICE IN THE EIGHTEENTH CENTURY

CHURCH AND MEDICINE

One forgets how closely religion and medicine were allied in early history. Divine healers such as medicine men date back thousands of years, both in Europe and the Americas. In Europe, the alliance was broken by the Catholic Church in the thirteenth century. Amid concern about priests who shed blood in their ministrations or gained income inconsistent with vows of poverty, the pope convened the Fourth Lateran Council in 1215. It forbade surgical operations by priests. Later the Dominican order forbade medical treatises to be brought into monasteries. The effect of these, and similar edicts that followed, was to prevent the participation of ecclesiastics in the science and art of medicine.⁶²

It was not until the end of the Renaissance, however, that the Church of England followed the example set by the pope. Initially King Henry VIII, seeking to increase the power of the Church of England in 1511, gave clergy the power to restrict the practice of medicine in London. Within city limits, only those passing an examination by the bishop of London, with assistance from surgeons or the dean of St. Paul's, were allowed to practice. Outside of London, the bishop of the diocese would be the examiner. However, after ten years the failure of this system of ecclesiastical oversight forced King Henry to establish an independent college of physicians in London. Admission to the college became a prerequisite to medical practice in London.⁶³

By the eighteenth century, medical practice and religion were separate in Europe. Practitioners would come from secular institutions from this point forward, and their practice, if regulated at all, would come from the state.

PRACTITIONERS

When Robert Carter needed a doctor, he might have summoned a physician, surgeon, or midwife. If the distemper was not considered grave, he might have used a local assistant, such as a friend or family member. Occasionally even an Indian or an enslaved person living on one of the farms or plantations was called into service. Richard Chapman, an indentured servant who worked

62 Andrew Dickson White, *A History of the Warfare of Science With Theology in Christendom*, 2 vols. (NY: D. Applewood Company, 1896); Project Gutenberg EBook, Produced by An Anonymous Volunteer, and David Weger, Release Date: November 27, 2009, EBook #505,, last updated: January 25, 2013), II, Chapter VI: New Beginnings of Medical Science, ninth paragraph,; <http://www.gutenberg.org/files/505/505-h/505-h.htm>.

63 King, *The Medical World of the Eighteenth Century*, 2-3.

for Carter as a clerk at Corotoman, also served as a doctor to Carter.⁶⁴ In the course of treatment, an apothecary may have supplied drugs to any of the above practitioners, or Carter may have used drugs from the supply he, like most plantation owners, kept on hand.

PHYSICIANS

At the top of this hierarchy were the university-trained physicians, who enjoyed more prestige than surgeons and apothecaries but were comparatively few in number. There was no medical school in the colonies until 1765, when a medical department was added to the College of Philadelphia, later to become the University of Pennsylvania. Prior to that time, university training meant years spent abroad. The very wealthy attended Oxford or Cambridge. In addition to being exclusive and expensive, those institutions required fourteen years of matriculation for graduation with a doctor of medicine degree.

Other medical schools were less exclusive, expensive, and time-consuming, and as their standards improved, colonists turned in their direction. Pithy advice from Samuel Johnson urged Arthur Lee of Virginia in 1760: "if you have a large fortune and time enough to spare, to go either to Cambridge or Oxford." If one lacked these resources, Johnson suggested study at either Edinburgh or Leyden.⁶⁵ Founded in 1726, Edinburgh was highly respected in the colonies, and between 1749 and 1812, sixty-five Virginians trained there, including Arthur Lee and Dr. Charles Carter of Corotoman, Robert Carter's great-grandson.

Robert Carter mentions a Dr. Alexander Edgar at least sixteen times in his diaries and correspondence, although little is known about him. His inventory first brought him to the attention of historians. Researchers suggest that his personal estate would have been in Christ Church Parish, Lancaster County, based on known residences of the administrator and appraisers of his estate. Edgar's inventory, taken in January 1731, listed instruments, "1 Sett Silver Instruments," and drugs, "2 boxes medicines," among other items such as clothes, horses, and "1 old wigg."⁶⁶

Dr. Edgar's frequent attentions to Robert Carter and his family over a period of four years suggest strong respect for his skills. An example of Edgar's

⁶⁴ Robert Carter's son Landon identifies Chapman as a doctor in an August 1770 deposition related to a dispute between Charles Carter of Corotoman and Robert Carter III concerning lands and slaves from the estates of Robert Carter and Robert Carter II. Landon Carter calls him "Doctor Chapman" and says he "had lived a long time in the family as a Clerk and Doctor." See Landon Carter Deposition, August 2, 1770, Carter Family Papers, 1667-1862, Special Collections, Research Center, Swem Library, College of William and Mary, Williamsburg, VA.

⁶⁵ Arthur Lee to R.H. Lee, December 25, 1760, "Early Letters of Arthur Lee," *Southern Literary Messenger* 29, 1 (Richmond: Macfarlane, Fergusson & Co., July 1859), 63; Blanton, *Medicine in Virginia*, 86.

⁶⁶ Inventory of Alexander Edgar, January 13, 1730/31, Lancaster County Deed and Will Book 12 (1726-1737), Clerk's Office, Lancaster County Courthouse, Lancaster, VA, 182-83.

attendance to the family appears in a diary entry in July 1724: “Edgar came here Thursday in the rain stayd with my Son til sond[ay] morning 26th.”⁶⁷

The journal of Col. James Gordon, covering a later period from 1759 to 1763, is particularly interesting for its details about the different doctors who attended the family and their interactions with each other and the Gordon family and slaves. For example, on March 22, 1760, as Gordon’s son-in-law Richard Chichester’s complications from sciatica grew “very dangerous,” Gordon “Agreed to send for Dr. Robertson only as a surgeon.” An entry three days earlier referred to “a fever falling into his hip & thigh,” and this condition is apparently what Col. Gordon thought required surgery.⁶⁸

The next day, Dr. Robertson, who was Chichester’s brother-in-law, “came & agreed to attend Mr. C. as a surgeon.” Gordon noted that Robertson “had been somewhat displeasd for employing a negro doctor before him.”⁶⁹ It is not clear who that doctor was and whether he was free or enslaved. The previous November a Mr. Diggs had treated Chichester by putting “a plaster” to his feet.⁷⁰ Gordon also regularly summoned a Dr. Flood to treat his family, sending his slave Scipio to contact him.

SURGEONS

Surgeons, too, were forced to go abroad, usually to Paris, the center of surgery in the eighteenth century. University trained surgeons were even rarer than university trained physicians, largely because of the historical stigma that still lingered. While the “chirurgion” of the seventeenth century had disappeared, surgeons still had a difficult time escaping their roots as barbers, bonesetters, and stonecutters. Surgery was considered beneath the dignity of the doctor. A good illustration of the disdain for surgeons is found in the constitution of the Virginia Club of Edinburgh. This group of physicians, formed by the half-dozen Virginians at that university in 1761, imposed on every member a promise “to make it his endeavor, if possible, for the honor of his profession not to degrade it by hereafter mingling the trade of an apothecary or surgeon with it.”⁷¹

Thus the work of surgeons most often involved treating ulcers, hernias, broken bones, gunshot wounds, and abscesses; surgeons also undertook the ligation of aneurysms, performed amputations, and interceded when needed

67 Berkeley, ed., “Robert Carter Diary, July 24-26[?] 1724,” *Papers of Robert “King” Carter*.

68 “Journal of Col. James Gordon,” *WMQ*, 1st Series XI, 3, 197. Gordon had identified Chichester’s condition as “Sciatica” on September 1, 1759. See “Journal of Col. James Gordon,” XI, 2 (October 1902), 108.

69 Ibid.

70 Ibid, XI, 2 (October 1902), 111; Carolyn H. Jett, *Lancaster County, Virginia: Where the River Meets the Bay* (Lancaster, VA: Lancaster County History Book Committee in association with the Mary Ball Washington Museum and Library, 2003), 101-3.

71 Blanton, *Medicine in Virginia*, 12.

during difficult childbirths.⁷² Little changed until late in the eighteenth century, when the Revolutionary War introduced new surgical techniques from abroad and new medical schools in this country offered courses of study in surgery.

It is not surprising that, with the demand for physicians and surgeons outstripping the number of practitioners with degrees, others who had no university training quickly filled the gap. Their numbers far exceeded those of the university-trained. One author estimates that by the time of the Revolutionary War, the colonies had three thousand, five hundred physicians, only two hundred of whom had university medical degrees.⁷³ Another calculated that in Virginia at the end of the century, the percentage had doubled, with five hundred physicians, fifty-five of whom held university degrees.⁷⁴

The designations “physician” and “surgeon” were applied indiscriminately, and practitioners were free to use any title they chose, regardless of their training. Late in the century, the Bill of Rights in 1791 permitted states to regulate licensure of physicians. Unfortunately it was not until some sixty years later that states began exercising this right, and formal licensing of physicians began.⁷⁵

The best option for would-be physicians and surgeons who did not choose to pursue degrees, but wanted to practice medicine, was to undertake an apprenticeship. That process began when a young man, usually between the ages of fourteen and eighteen, agreed to a period of indenture with a local practitioner for three to seven years. During that period, he had the opportunity to use the practitioner’s library, learn about the preparation of drugs, accompany the practitioner on bedside visits, and begin learning simpler procedures such as bleeding, cupping, tooth extraction, and minor surgery.⁷⁶

An advertisement in the *Virginia Gazette* succinctly summarizes the qualities desired in an apprentice and the benefits offered during the apprenticeship period:

Wanted immediately, AN APPRENTICE, to serve at least four or five years in the business of Physick, Surgery, Pharmacy, &c, who has had a good education, and whose character will bear a strict inquiry; he will be well accommodated with bed, board, and washing. For Further particulars, apply to RAMSAY & TAYLOR Norfolk, Dec. 4, 1766⁷⁷

72 Ibid., 11

73 18th Century American Medicine, www.aaofoundation.org/what/heritage/exhibits/online/18Cent.cfm.

74 Blanton, *Medicine in Virginia*, 207-8.

75 Huayan J. Chaundry, “The Important Role of Medical Licensure in the United States,” *Academic Medicine, Journal of the Association of American Medical Colleges*, Number 2010, volume 85, Issue 11 (Philadelphia: Lippincott Williams & Wilkins, November 2010), 1657.

76 Blanton, *Medicine in Virginia*, 76.

77 *Virginia Gazette* (Purdie and Dixon), December 4, 1766, 3:2.

The training experience of William Baynham shows a more complete medical education that combined several apprenticeships with formal course work, but still without a medical degree. His father, Dr. John Baynham of Caroline County, was a practicing physician, a magistrate, and a vestryman. William followed his father's path and at age fifteen began an apprenticeship with Dr. Thomas Walker of Albemarle County, a prominent physician, explorer, Indian commissioner, and member of the House of Burgesses. After a five-year apprenticeship, Baynham went to St. Thomas's Hospital, London, (which did not confer degrees), where he completed a course in two or three years. Next Baynham began additional apprenticeships, first splitting his time between Cambridge and Margate, where he worked with professors of anatomy and surgery, then practicing in London for several years. He returned to America in 1785 and settled in Essex County to practice surgery and medicine.⁷⁸

All of the early practitioners were not so dedicated or well-trained, however. A surprisingly large number of practitioners were simply dishonest. "Avaricious men" were neglecting patients, overprescribing medications, and billing excessively, prompting Virginia's General Assembly to begin regulating medical practice. As early as 1639, the Assembly ruled that a "phisitian or chirurgeon" who sent unreasonable bills, either for "his pains or for his druggs or medicines" would have to appear at quarter or county court to declare the true value of services rendered. The court would then "adjudge and allow to the said phisitian or chirurgeon such satisfaction and reward as they in their discretions should think fit." Likewise, neglecting a patient or refusing assistance could result in censure for the offender.

ACT XV.

WHEREAS by the 9th act of Assembly held the 21st of October, 1639, consideration being had and taken of the imoderate and excessive rates and prices exacted by practitioners in physick and chyrurgery and the complaints made to the then Assembly of the bad consequence thereof, It so happening through the said intollerable exactions that the hearts of divers masters were hardened rather to suffer their servants to perish for want of fitt meanes and applications then by seeking reliefe to fall into the hands of griping and avaricious men, It be apprehended by such masters who were more swayed by politick respects than Xpian [Christian] duty or charity, That it was the more gainfull and saving way to stand to the hazard of their servants then to entertain the certain charge of a physitian or chirurgeon whose demands for the most parte exceed

Former act compelling physicians & surgeons to declare on oath the value of their drugs and medicines, revived.

the purchase of the patient, It was therefore enacted for the better redress of the like abuses thereafter until some fitter course should be advised on, for the regulating phisitians and chirurgeons within the collony, That it should be lawfull and free for any person or persons in such cases where they should conceive the acco't. of the phisitian or chirurgeon to be unreasonable either for his pains or for his druggs or medicines, to arrest the said phisitian or chiurgeon either to the quarter court or county court where they inhabitt, where the said phisitian should declare upon oath the true value worth and quantity of his druggs and medicines administred to or for the use of the plt [patient] whereupon the court where the matter was tryed was to adjudge and allow to the said phisitian or chirurgeon such satisfaction and reward as they in their discretions should think fitt, And it was further ordered that when it should be sufficiently proved in any of the said courts that a physitian or chirurgeon had neglected his patient, or that he had refused, being thereunto required, his helpe and assistance to any person or persons in he and sicknes or extremity, That the phisitian or chirurgeon should be censured by the said court for such his neglect or refuseall, which said act and every clause therein mentioned and repeated, this present Grand Assembly to all intents and purposes doth revive, rattifie, allow and confirme with this only exception that the plts. or patients shall have their remedie at the county courts respectively, unless in case of appeale.⁷⁹

Courts may allow what is reasonable.

Penalty on physicians and surgeons neglecting their patients or refusing assistance

Jurisdiction Given county courts.

APOTHECARIES

Historically, apothecaries first organized in London, where in 1617 they became an official society with a charter and entry requirements into the society that specified a seven-year apprenticeship, followed by an examination.⁸⁰ Their work was deemed sufficiently important by the London Company that it sent two apothecaries to the Virginia colony before 1624.⁸¹

During the eighteenth century in Virginia, most apothecaries did not pursue a degree. Most lacked social standing, and their education continued to follow the apprenticeship model of the previous century, with three to six years served.

79 William Waller Hening, ed., *The Statutes at Large; Being A Collection of all the Laws of Virginia, From the First Session of the Legislature in the Year 1619* (New York, Philadelphia, and Richmond: B & W & G Bartow, 1819-1823), reprint (Charlottesville, VA: University of Virginia Press, 1969), 316-17.

80 King, *The Medical World of the Eighteenth Century*, 4.

81 Blanton, *Medicine in Virginia*, 30.

Some of those who chose this occupation apprenticed with a doctor who limited instruction to the pharmaceutical arts only. Others chose to work with practicing pharmacists with established practices, where their duties included going out into the woods in search of the plants required for compounding, as well as extracting and mixing the drugs.⁸² Concerned with the preparation of drugs rather than theory, apothecaries earned the pejorative designation of physicians' "cook."⁸³ As noted above the Virginia Club at the University of Edinburgh required each member to promise not to degrade his profession by practicing as either a surgeon or an apothecary. The condescension of physicians with degrees is obvious.

Closely tied to physicians by the nature of their work, the apothecaries struggled unsuccessfully to become a separate group. It was not until the Revolutionary War that pharmacists were able to make that separation. Until then physicians prescribed, mixed, and sold drugs themselves. In the above cited 1639 legislation, physician charges for drugs had become problematic, suggesting that many physicians found the practice lucrative.

In the capital at Williamsburg, physicians conducted a thriving drug business. The many advertisements for services in the *Virginia Gazette* are a good source of information about drugs used in physic. Dr. James Carter's notice in the April 10, 1752, issue stated that "A FRESH Assortment of Drugs and Medicines" had just arrived from London aboard the *Rachel* and were available at the Unicorn's Horn, his shop in town. Carter later moved his shop to the Duke of Gloucester Street, just west of the Raleigh Tavern, on a lot where he had built a large brick house. Carter divided the house into two shops, one for his brother, a merchant, and the other for the new apothecary shop.⁸⁴

Other physician-apothecaries also worked in Williamsburg. Dr. George Gilmer had a shop "nigh the Court-House, the Corner of Palace-Street, Williamsburg." Dr. George Pitt's shop was at the Sign of the Rhinoceras on Duke of Gloucester Street. Dr. Kenneth McKenzie, a respected physician and apothecary, also operated a shop on Duke of Gloucester Street in 1745 before moving to a house near the Governor's Palace.

Other apothecaries who opened Williamsburg businesses between 1738 and 1769 were William Pasteur, John M. Galt, Dr. Henry Potter, and Benjamin Bucktrout.⁸⁵

Some who sold medicines were neither apothecaries nor physicians. A chemist, for example, placed a notice in the *Virginia Gazette* in 1737, advertising a shipment of medicines recently arrived from London: "Just Imported, from London, A Parcel of choice Medicines, which are to be sold at reasonable

82 Ibid., 33

83 Harold B Gill, Jr., *The Apothecary in Colonial Virginia* (Williamsburg, VA: Colonial Williamsburg Foundation, 1972), 1.

84 Blanton, *Medicine in Virginia*, 35.

85 Ibid, 34-36.

Rates, by Wholesale or Retail, at Mrs. Sullivan's, in Williamsburg, by Thomas Goodwin, *Chymist*".⁸⁶

MIDWIVES

Childbirth in the eighteenth century often proved fatal. The fortunate women who survived frequently suffered compromised health as a result of the experience. The wives of Landon Carter, for example, all had short lives. His first wife, Elizabeth, died at age twenty-seven after bearing four children. His second wife, Maria, bore him one child and lived a little over two years after their marriage. Elizabeth, his third wife, bore two daughters and lived afterward the longest of the three, about ten years.⁸⁷

While it was clear that women needed help to enable them to survive childbirth, physicians were not interested. Blanton dismissed the physician's attitude toward childbirth succinctly, writing that they "shunted the business off onto the midwives as they had surgery upon the barbers."⁸⁸ The traditional midwife was a woman who had no formal training but may have served an apprenticeship with a physician. Mary Rose advertised that she had studied and practiced "with Success" under the tutelage of Drs. Galt and Pasteur, two of Williamsburg's most prominent physicians.⁸⁹

Midwife Julia Wheatley informed the public in 1766 that she was moving from Norfolk to Richmond. She championed her success "in her profession of a midwife" she could "also cure the most inveterate ringworms... sore eyes... and many other disorders incident to both the sexes."⁹⁰

On the large plantations of Virginia, the role of midwife was usually filled by females who lived on the property; the owner's wife, a servant, or a slave. An enslaved woman named Sarah owned by Benjamin Harrison of Berkeley served as the midwife for that plantation. Nomini Hall also kept a slave midwife.⁹¹ Robert Carter mentions a "mrs. Falconer" as the midwife for two of his children, Charles and Mary.⁹² Midwives were not always wives, however, especially in Europe. The *Virginia Gazette* in September 1737 reported that "the French Queen was so near her Time, that M. Perard, the famous Man-Midwife, was not suffer'd to stir from Versailles."⁹³

But not in Virginia. Strong opposition to "Man Midwives" appeared in the *Virginia Gazette* on October 1, 1772, spreading across almost half of the front page. The author believed that male midwives did not confine their work to midwifery. He wrote:

86 *Virginia Gazette* (Parks), April 22, 1737, 4:2.

87 Greene, ed., *The Diary of Colonel Landon Carter*, Introduction, 5.

88 Blanton, *Medicine in Virginia*, 22.

89 *Virginia Gazette* (Purdie and Dixon), November 28, 1771, 2:3.

90 *Virginia Gazette* (Pickney), January 20, 1776, 3:2.

91 Blanton, *Medicine in Virginia*, 24.

92 Berkeley, ed., "Robert Carter Diary, " May 17, 1726, *Papers of Robert "King" Carter*.

93 *Virginia Gazette* (Parks), September 9, 1737, 2:1.

It is to the almost universal Custom of EMPLOYING MEN-MIDWIVES that I attribute the frequent ADULTERIES which disgrace our COUNTRY . . . For my own Part, if I was a married Man, I declare it would be *a Matter of the utmost Indifference* to me whether my Wife had spent the Night *in a Bagnio* or an Hour of the Forenoon locked up with a Man-Midwife in her Dressing-Room.

He concluded by admitting that some male midwives were well respected, saying that “Doctor Hunter, indeed, and one or two Men besides, *may perhaps*, by the Help of *cold* Constitutions, and Dint of very long Practice, do their Business *nearly as well* as Women . . .”

The letter ended, “True *Modesty is incompatible with the Idea of employing a MAN-MIDWIFE*,” the last words falling on the final separate line where the signature typically appeared.⁹⁴ The author’s name and gender are unknown, as there is no other signature.

In addition to midwives, both female and male, physicians and surgeons advertised broadly as midwives, often placing advertisements in local newspapers multiple times. Among this group, two examples from the *Virginia Gazette* follow:

William Coakley, having moved from the West Indies to Norfolk, announced that he could treat: CANCERS, CANKERS, MORTIFICATIONS, FISTULAS, POLYPUSSES, RINGWORMS of all kinds, the GRAVEL, DROPSY DRY GRIPES,” and all branches of “SURGERY, MIDWIFERY, and PHYSICK.⁹⁵

Another doctor, also recently relocated to Norfolk, advertised more succinctly that he could “profess all sorts of operations in surgery and man midwifery, particularly women when in imminent danger of life,” but could not resist adding that he could cure a “long and tedious” list of disorders, among which were teeth cleaning and cataract removal. He also listed his credentials: authorization by “certificates, from Princes, Generals, Governors, and City Corporations, and in particular from his *Britannick* Majesty, King *George III.*”⁹⁶

Estate listings in the *Virginia Gazette* are also a good source of information about the professional practice of the deceased. Dr. Walker’s estate listings, for example, suggest that he also worked as a man midwife:

TO BE SOLD At Hanover Town, on the 25th Current, at the Shop of the deceased Doctor JOHN WALKER, A COMPLETE Set of Shop Utensils, SURGEONS and WIDWIFERY [*sic*] INSTRUMENTS, together with the MEDICINES and BOOKS of the said Deceased.⁹⁷

94 *Virginia Gazette* (Purdie and Dixon), October 1, 1772, 1:2, 1:3.

95 *Ibid.*, July 25, 1766, 4:1.

96 *Virginia Gazette* (Rind), July 21, 1768, 4:1.

97 *Virginia Gazette* (Dixon and Hunter), May 13, 1775, 1:1.

QUACKS

Some practitioners took advantage of the need for medical care, carrying on a public and often rancorous contest for patients. These were the so-called "quacks," a common term at that time. Because there were no formal standards for medical training or education, there was little to discourage them from filling both a need and their pockets.

One who waged public war about credentials and expertise was a man named John Tennent, who may or may not have been a quack. He freely admitted his lack of formal training and recognized that the educated medical establishment considered him a quack. Their opinion was apparently of little concern, for Tennent took out a large advertisement on the front page of the *Virginia Gazette* in 1738 to castigate his detractors, "The Gentlemen of the Faculty in this Country." They refused to use a drug he recommended, rattlesnake root, because it was "not in the *Materia Medica*," "nor did they ever know it in practice," so he concluded that they were "Quacks in the most strict sense of the word Quack."⁹⁸

Notwithstanding his lack of credentials, Tennent wrote an important book, *Every Man his own Doctor: OR, The Poor Planter's Physician*. It proved to be so popular in the colonies that multiple printings appeared in two

Accomack county; May 25, 1768.

A CERTAIN person who calls himself WILLIAM FREDERICK MYER (tho' by very good authority, I am informed he went in *North Carolina* by the name of DE WOLF) he is a *German* by his dialect, and pretends to be a physician and surgeon, but in fact, a great impostor, and knows nothing of either: He is a great beaver, wears a gold laced suit of whitish coloured broadcloth, a silver laced blue silk jacket, and sometimes wears a green coat, a fawn coloured ditto, a green jacket, red velvet breeches, a blue cloth cloak, with red lining, a gold laced hat, a plain ditto, with a gold button and loop, and a wig. He is a well made fellow, rather lower than the middle size, with a tolerable good countenance, boasts much of his abilities as a doctor, and what he has made by the practice; he deals much in the marvellous, and tells he has valuable lands in *South Carolina*, and large sums of money due there for lands sold; he shews a licence, with the names blotted out, obtained in *North Carolina*, and says it was granted to him, to be married to a young Lady of considerable fortune; but the day before the intended marriage, he heard something of her character, that he chose to be off. Many such things he tells, to amuse and deceive those he wants credit from; and what is more prevailing, he intimates, that he has a large sum of money with him in gold, by which means he generally gains credit where he resides (which is never longer than two or three months in a place) and then privately absconds. This, I am informed, is his constant practice, and now experience has told me (and several others in this county) that it is too true. I just give this description and character of the Gentleman, that others may be guarded against such deception from him, as he is gone to the *Western Shore of Virginia or Maryland*.

JAMES ARBUCKLE.

James Arbuckle's public warning about the deceits of a quack passing as a physician in Accomack County in 1768.

cities. William Parks, who would begin publishing the *Virginia Gazette* in 1736, printed editions of Tennent's book in Williamsburg in 1734 and 1736. Benjamin Franklin printed editions in Philadelphia in 1734, 1736, and 1737.⁹⁹

Most of the remedies suggested by Tennent were natural herbs. Tennent proclaimed in the index to the book: "The Remedies I have prescrib'd, are almost all of our own Grown, there being no more than 5 or 6 foreign Medicines; and they so very cheap, that if I happen not to cure my Patient, I am sure I shan't ruin him."¹⁰⁰ Written prior to his public arguments about quacks, this book also mentions them, but in a less argumentative way, and with more optimism than his newspaper advertisements conveyed. He states on the final page of *Every Man his own Doctor* that:

IN the mean Time, there is no Question, but some of my *Brother Quacks* will make themselves merry with these Prescriptions. Let them shoot their *harmless Bolts*. I by no means envy those Gentlemen the only Way they have of appearing wiser than their Neighbours. Tho' after all it is not impossible but they many do by some of these, just as the good People of *England* do by the *French* Fashions, laugh at them first, and then have the Humility to *follow* them."¹⁰¹

It appears that Tennent's optimism was justified. Despite his lack of credentials, whether a quack or not, the Virginia House of Burgesses gave him one hundred pounds for "publishing his Discovery of the Use of the Seneca Rattle-Snake Root." The sum would be paid "out of the Public money in the Hands of the Treasurer."¹⁰²

Other quacks were easier to identify. In 1768 James Arbuckle of Accomack County warned readers of the *Virginia Gazette* about a flamboyant German quack named William Frederick Myer. Believing that Myer was headed to Virginia's western shore or Maryland, pretending to be a "physician and surgeon," Arbuckle called him "a great imposter [who] knows nothing of either."¹⁰³ Another *Virginia Gazette* notice praised a "Dr. Rowan, from London" who was apparently in Richmond and could cure almost everything.

Along with cures for "evil," "headache in a few minutes," and "all disorders of the eyes," the good doctor offered treatments for "leprosy," "scald heads," and "old sores of ever so long standing." Most impressively, the doctor promised "no cure, no pay."¹⁰⁴

99 John Tennent, *Every Man his own Doctor: OR, The Poor Planter's Physician*, foreword, second edition (Williamsburg, VA: William Parks, 1734); facsimile edition (Williamsburg, VA: Printing Office, Colonial Williamsburg Foundation, 1971), 2.

100 *Ibid.*, 57.

101 *Ibid.*, 56.

102 *Virginia Gazette* (Parks), December 22, 1738, 3:1.

103 *Virginia Gazette* (Rind), July 7, 1768, 2:3.

104 *Virginia Gazette* (Purdie and Dixon), June 8, 1769, 3:2.

While John Tennent probably did no harm, other less dedicated men were more suspect. John Duffy, a noted medical historian, quotes two very negative views of eighteenth-century doctors. In the first, John Oldmixon observed that “The Virginians have but few Doctors among them, and they reckon it among their Blessings, fancying the number of their Diseases would increase with that of their Physicians.”¹⁰⁵

The second quote from Duffy is from a contemporary observer, William Byrd, who wrote in 1706, “Here be some men indeed that are call'd Doctors: but they are generally discarded Surgeons of Ships, that know nothing above very common Remedys.”¹⁰⁶ Robert Carter would likely have agreed with Byrd. He employed a former ship's doctor to care for the slaves on his plantations, a doctor named Joseph D. Belfield. On June 30, 1729, he wrote to Dr. Belfield terminating his employment. He accused him of “Stuffing my Peoples with poisonous drugs... that cost you nothing,” neglecting “my sick people when sent for” and failing to visit Coles Point Plantation “above two or three times.”¹⁰⁷ Not surprisingly, competition among the many providers of physic engendered disputes that ultimately required legal oversight. Almost a century after the legislation of 1639 concerning excessive fees and patient neglect, the Assembly passed a new law in 1736 to regulate fees based on training. Its scope included all who practiced as “surgeons, apothecaries, or such as have only served apprenticeships to those trades, who often prove very unskilful in the art of a phisician; and yet do demand excessive fees.”

The law imposed two fee schedules, based on training. It applied to both visits and prescriptions. In addition, bills were to be clearly written: charges for medicines were to be stated clearly at the time the bill was rendered; the bill was to differentiate between a “simple, or compound” substance, with the “true name” identified; it was to include all “pills, bolus, portion, draught, electuary, decoction, or any medicines, in any form whatsoever;” and it should list quantities and prices for each. This information was to be used in all court cases involving medicine.¹⁰⁸

105 Duffy, *Epidemics in Colonial America*, 9.

106 William Byrd II to Hans Sloane, April 20, 1706, *WMQ*, 1st Series, 1, 3, (July 1921), 186; Duffy, *Epidemics in Colonial America*, 9.

107 Berkeley, ed., “Robert Carter to Doctor [Joseph] Belfield, June 30, 1729,” *Papers of Robert “King” Carter*.

108 Hening, ed., *The Statutes At Large*, IV, 509-10. The act was entitled “An Act for regulating the Fees and Accounts of the Practicers in Phisic.”

Surgeons and apothecaries, who have served an apprenticeship to those trades, shall be allowed,

	<i>l.</i>	<i>s.</i>	<i>d.</i>
For every visit, and prescription, in town, Or within five miles,	00	5	00
For every mile, above five, and under ten,	00	1	00
For a visit, of ten miles,	00	10	00
And for every mile, above ten,	00	00	06

With an allowance for all ferriages in their journeys

	<i>l.</i>	<i>s.</i>	<i>d.</i>
To Surgeons, For a simple fracture and the Cure thereof	02	00	00
For a compound fracture, and The cure thereof,	04	00	00

But those persons who have studied phisic in any university, and taken any degree therein shall be allowed

	<i>l.</i>	<i>s.</i>	<i>d.</i>
For every visit, and prescription, in any Town, or whithin five miles,	00	01	00
If above five miles, for every mile more, under ten,	00	1	00
For a visit, if not above ten miles	1	00	00
And, for every mile, above ten,	00	1	00

With an allowance for feriages, as before.

The Virginia House of Burgesses not only passed laws related to the practice of medicine, it also continued to reward individuals for drugs that seemed efficacious. Already mentioned are a payment of one hundred pounds to John Tennent for his rattlesnake root cures in 1738. Almost thirty years after paying John, the House voted to pay the sum of one hundred pounds sterling to Constant Woodson as a reward for her discovery of a method of curing cancer.¹⁰⁹

In following years, however, similar requests from at least two different individuals were denied by the House, with no reasons given. One can hope the denials were based on more scientific and rigorous assessments of the appeals, so that quacks were not rewarded as in the past.

¹⁰⁹ John Pendleton Kennedy, ed., *The Journals of the House of Burgesses of Virginia, 1766-1769* (Richmond: Virginia State Library, 1906), 124-25, 128, 131.

INFORMAL PRACTITIONERS: FAMILY MEMBERS, NEIGHBORS, SLAVES, AND INDIANS

Finally, there was the most informal group of all, members of a family or extended family, who cared for those near them. Col. James Gordon's journal mentions calling people who must have been friends or neighbors to "bleed" members of his family. Col. Tayloe was sent for several times to bleed patients (June 25, 1760, August 6, 1760, Sept. 1, 1760, and May 31, 1762), as were Maj. Campbell (March 11, 1761); Billy Boatman (October 26, 1762); and C. Lowry (April 13, 1760).¹¹⁰

Included among the "local" practitioners were the occasional slave or Indian who developed expertise in certain procedures and cared for those around them. One interesting example is the slave Papaw. In 1729, the Council of Virginia, with both Robert and John Carter in attendance, agreed to set Papaw free because of his discovery and use of medicines that cured yaws and other venereal distempers. The notice pointed out that Papaw had satisfied the "Governor and the Gentlemen appointed by him to inspect the application and operation of the said medicines," and the board expected "great benefit to mankind, and more particularly to the preservation of the lives of great numbers of the Slaves."

April the 29th 1729

Present

The Governor

Robert Carter

James Blair

William Byrd

Cole Digges

John Robinson

John Carter

Rich^d Fitzwilliam

John Grymes

William Dandridge

John Custis &

William Randolph Esq^c

Whereas upon consideration of the many extraordinary Cures perform'd by Papaw a Negro Slave belonging the M^{rs} Frances Littlepage of the County of New Kent, it was resolved that means should be used to obtain from him a discovery of the secret whereby he performs the said cures; and the said Papaw having upon promise of his freedom now made ample discovery of the several medicines made use of by him for that purpose to the satisfaction of the Governor and the Gentlemen appointed by him to inspect the application and operation of the said medicines, It is the opinion of the Board and accordingly ordered that as a reward for so useful a discovery, which may be of great benefit to mankind, and more particularly to the preservation of the lives of great numbers of the Slaves belonging to the Inhabitants of this Country frequently infected with the Yaws,

110 "Journal of Col. James Gordon," *WMQ*, 1st Series, XI, 3 (January 1903), 198, 200-202; XI, 4 (April 1903), 218, 230, 234.

and other venereal distempers, the said Papaw be set free; and that the sum of £50 current money to be paid to the said M^{rs} Frances Littlepage out of his Majesty's Revenue of 2 shillings per hogshead, for his freedom; but that he remain still under the direction of the Government until he make a discovery of some other secrets he has for expelling poison, and the cure of other diseases.¹¹¹

After the church ceased to be directly involved in health care, church officials found other ways to support those in physical distress. One practice that continued in Virginia well into the eighteenth century was care of the sick by the parish vestry. The twelve men who governed church affairs in their parish accepted assistance to the sick as part of their responsibility for social welfare. Vestry books are filled with examples of help for parishioners with a variety of illnesses. In 1725 Margaret Butler of Bristol Parish in Prince George County petitioned the vestry for help during her illness, and they complied with an interesting arrangement:

Upon the pett. of Margaret Butler And she appearing to this vestry declaring that she being disabled by Sickness is not Able to help her selfe; Tis ordrd by the Vestry that ye s'd Marga Butler live with Rich. Butler until the Vestry can Agree with A Docter to cure her if possible he can the fores'd Rich. Butler to be allow by ye P'ish for the time she lives with him at ye rate of Eight Pds of Tobb, per month, & he to find her diet, lodging, & washing for the time."¹¹²

When someone needed immediate physic, plantation owners had to rely on people and supplies close at hand. For assistance in such emergencies, the only support came from small libraries of medical books, a supply of drugs, and perhaps a few crude medical instruments.

Robert Carter's inventory listed both medicines and books about medicine. Of the approximately three hundred books in his extensive library (about one hundred of which were legal books), eight were medical in nature, and two of those eight were series of books with multiple volumes. Four of the oldest books had been passed to Robert in the estate of his older brother John.

This list tells us not only about Robert Carter's interest in medicine, and perhaps his need for reference material on the subject, but it also reveals something of the current thinking about disease and treatment. The "Inventory of Robert Carter's Estate, November [1733]" lists the following medical works, with their dates of publication added:

111 H.R. McIlwaine, ed., *Executive Journals of the Council of Colonial Virginia*, Vol. IV (Richmond: 1925), 199.

112 Churchill G. Chamberlayne, ed., *The Vestry Book and Register of Bristol Parish, Virginia, 1720-1789* (Richmond: Churchill Gibson Chamberlayne, 1898), 25-26; Blanton, *Medicine in Virginia*, appendix II, 409.

1. Crooke's *Anatomiae*, 1655
2. Riverius's *Practice of Physick*, 1655¹¹³
3. Dr. Richard Mead, *Machanical Account of Poisons*, 1702
4. *Mosons General Practice of Physic*, 1598
5. William Salmon, *The New London Dispensatory*, 1676
6. *Culpeper's Practical Physick*, twelve volumes, 1655
7. Dr. George Cheyne, *Essay of Health and Long Life*, 1724
8. Dr. Thomas Fuller, *Pharmacopoeia Extemporanea*, 1710¹¹⁴

One historian noted that all but two of Carter's books were outdated, the only new books being Mead's *Machanical Account of Poisons* and Cheyne's *Essay of Health and Long Life*. He concluded that Robert's library was inferior to John's, though he added that perhaps in Robert Carter's later years, medical practice had improved so that a medical library was less important than in earlier years.¹¹⁵

Plantation owners not only needed to have available the knowledge from a medical library, they also needed the tools for the practice of medicine. Virginians often found a ready supply of medical instruments in estate sales of doctors and other would-be medical practitioners in the colony. Along with stockings, hats, and "sundry suits of mens cloaths," James Gordon advertised for sale at Lancaster Court House in 1769 a collection of surgeon's instruments that he had acquired from the "property of a Gentleman in *Britain*." It reads, "To be SOLD on Thursday the 28th instant, if fair, if not, the next fair day, at Lancaster court-house, for ready money, ... a compleat set of SURGEON'S INSTRUMENTS.... JAMES GORDON."¹¹⁶

Another need was a supply of drugs, so orders of drugs from London were quite common. While Robert Carter's inventory did not include surgical instruments such as the ones James Gordon evidently kept at his plantation, its listing of drugs was not unusual. One chest held a small box of Jesuit bark and three "chests with medicines." The contents of one box were listed as "Gingl. Brimstone [sesame oil]," "horse Senna [tropical plant used as a cathartic and emetic]," and "3 Bottles Stoughton's Drops [a compound of twenty-two ingredients]"¹¹⁷. Presumably some of the unlisted medicines included his Anderson's Scots Pills, so frequently used for gout treatment.

113 Carter's inventory lists the *Practice of Physic* by Riviere (Carter spelled the name differently) in two different places, the lower chamber closet of the "Old House," and the black walnut case in the brick store on the Corotoman property. It is possible that the seventeen volumes contained in the set were split between the two locations.

114 There is some question about Carter's listing of this last book. Berkeley writes in his notes on the items in Carter's estate that Carter "might have owned" this book, and he notes that Wright includes it in one list but not in another.

115 Louis B. Wright, *The First Gentlemen of Virginia* (Charlottesville, VA: Dominion Books, 1964), 278-79. Wright is a respected Carter scholar, as evidenced by Berkeley's dependence on Wright's research in his commentaries about the individual books in Carter's library.

116 *Virginia Gazette* (Rind), September 7, 1769, 3:2.

117 Berkeley, ed., "Inventory of Robert Carter's Estate, November [1733]," *Papers of Robert "King" Carter*. Information about uses and composition of drugs is from Berkeley's endnotes.

In 1766, Rawleigh Downman, of Morattico Plantation in western Lancaster County, ordered from merchants in London “a little box of Medicines.” The list that followed included thirty-two items in specified amounts. Many were not medical in today’s thinking; e.g., turpentine, olive oil, and rhubarb. But two very common drugs were included: laudanum, or tincture of opium, and Anderson’s Scots Pills.¹¹⁸

A similar list, detailed below, was sent by Mann Page in a letter to London merchant John Norton on February 22, 1770. Along with household goods and garden seeds, Page requested a “Physick Bill” which included some forty-five medicines, most in much larger quantities than Downman ordered. Downman’s request for laudanum was for one-half ounce; Page’s was for one pound.¹¹⁹

Physick Bill

1 lb. Jallop	8 oz. Sal Ammoniac
4 oz. Calomel	1 Pint Tincture Myrrh
1 lb. Magnesia albe	1 Pint Vol: Tincture Valerian
2 lb. Cream of Tartar	8 oz. Spt. Nitre
4 lb. Glauber Salts	8 oz. Spt. Hartshorn
2 lb. Jesuits Bark	1 Qrt. Brioney Water
1 lb. Liquid Laudanum	2 Qrts. Small Cinnamon Water
2 lb. Orange Peel	1 Qrt. Pepper Mint Water
1 lb. Cardamun Seeds	2 lb. white Diachylon
1 lb. Carraway Do.	2 lb. Do of the Gums
2 lb. Gentian	2 lb. Mellilot
1Qrt. Opr. Dildock	1 lb. Sear Cloth
1 lb. Dialtha	2 Oz. Coral
½ lb. Yelow Basilican	¼ lb. Diascordium
4 oz. Lucatellus’ Balsam	¼ lb. Venice Treacle
½ lb. Turner’s Cerate	1 lb. Syrup diacordium
1 Pint Turlington’s Balsam	¼ lb. Salt Vitriol
¼ lb. Thompson’s Stiptick Powders	1 Qrt. Spt. Wine
¼ lb. Ethiop’s Mineral	4 oz. Balsuam Capivi
2 oz. Oil Mace	4 Bottles of the Poor Knights of Windsor’s red Fit Drops
1 lb. Sperma Ceti	Best double distilled Lavendar Water
8 oz. Sal Volatile	
	#2
1 Pint Elixir Parragorick	

Mann Page

118 “Rawleigh Downman, to Edward & Samuel Athawes, August 14, 1766,” Joseph Ball Letter Book, Library of Congress (typed transcript courtesy of Mary Ball Washington Museum & Library, Historic Christ Church research files); Gill, *The Apothecary in Colonial Virginia*, 35.

119 Frances Norton Mason, ed., “Mann Page to John Norton, February 22, 1770,” *John Norton & Sons, Merchants of London and Virginia* (Richmond: Dietz Press, 1937), 123-24.

PHYSIC

The art or profession of medicine was called “physic”¹²⁰ or “physick” in the eighteenth century and generally referred to any treatment rendered. Physic consisted largely of treating symptoms, given the lack of understanding of the causes of distempers. “Bleed, Blister and Purge”¹²¹ were bywords, all designed to eliminate harmful fluids from the patient’s body.¹²²

BLOODLETTING

Bloodletting (phlebotomy, bleeding, or bleeding as it was also known) was used for almost every known distemper: inflammations, asthma, sciatic pains, coughs, epilepsy, rheumatism, strangling, drowning, suffocation, and for falls, blows, bruises, or other violent hurts,¹²³ fevers, hypertension, comas, drowsy headaches, and inflammation of the lungs.¹²⁴ Throughout the eighteenth century, bleeding was “almost always the first part of any treatment.”¹²⁵ Herodotus records bloodletting and cupping in use in Egypt in 400 BC.¹²⁶ Later it was popularized by Galen who believed that blood was the most important of the four humors, thus most in need of control.

Bleeding, and its related process, cupping, both work to move the blood, as Hippocrates’s humor theory suggested. Bleeding involved tying a bandage or tourniquet near a vein, making a small cut with a lancet, then releasing the bandage when the blood began to flow.

Because bleeding was originally the province of barbers, the barber’s pole of today symbolizes the process of bloodletting. A brass ball at the top of the pole represents the basin used to collect the blood. The red and white stripes represent bloodied bandages. When the bandages were washed and hung to dry on the rod outside the shop, they would twist in the wind, forming the

120 Berkeley’s notes following his transcription of Carter’s diaries state that *the Oxford English Dictionary* defines the term “physic” as a procedure such as a cathartic or purge. In most of the Virginia literature of the time, however, “physic” or “physick” referred to medical practice, as in the title of a Colonial Williamsburg monograph, Sharon Cotner, et al., *Physick: The Professional Practice of Medicine in Williamsburg, Virginia, 1740-1775* (Williamsburg, VA: Colonial Williamsburg Foundation, 2003).

121 Ira Rutkow, “Up From Bleed, Blister and Purge,” Bookshelf, *Wall Street Journal*, November 28, 2008.

122 *Colonial Medicine*, Jamestown-Yorktown Foundation (Williamsburg, VA, 1992) 3tp://www.historyisfun.org/pdfbooks/colonial_medicine.pdf.

123 *Ibid*, 2.

124 Ali Parapia Liakat, “History of bloodletting by phlebotomy,” *British Journal of Haematology*, Volume 143, Issue 4, November 2008, 490-95.

125 J. Motley Booker, MD, and Norman R. Tingle, MD, “Andrew Robertson, Pioneer Physician of Lancaster County,” *Northern Neck of Virginia Historical Magazine* (Montross, VA: Northern Neck of Virginia Historical Society, 1972), 2391.

126 J.L. Turk and Elizabeth Allen, “Bleeding and Cupping,” *Annals of the Royal College of Surgeons of England*, Vol. 65 (London: Royal College of Surgeons, 1983), 128, <http://www.ncbi.nlm.nih.gov/pmc/journals/386>.

familiar spiral pattern on barbers' poles of today.¹²⁷ The pole itself symbolized the stick squeezed in the patient's hand to dilate the veins.¹²⁸

Cupping was a different method of drawing blood, using a heated cup. It was applied next to the skin, and as the heated air within cooled, it created a vacuum that caused the blood to flow more freely. When cupping included small scratches or incisions within the area under the cup, it was called wet cupping; otherwise, it was dry cupping.¹²⁹

The processes of both bleeding and cupping were administered to a vein, often in the arm. However if smaller veins were to be used, or if the patient was a child, the procedure might have involved use of a leech. There were some disadvantages when leeches were used; i.e., bleeding was difficult to stop, the wounds created did not heal easily, and it was impossible to know how much blood had been taken.¹³⁰

Nevertheless, leeches continued to be used, especially in Europe. In France in the eighteenth and nineteenth centuries, the leech was considered an endangered species, due to heavy demand from the medical world. In the colonies, leeches were used less frequently, but did not disappear until the nineteenth century.¹³¹

Even John Tennent could not avoid recommending bleeding. While he favored treatments using native plants, such as his snakeroot, for ten of the thirty-four distempers he discussed, he advised bleeding in addition to the plant-based drugs.¹³² Bleeding does not appear to have been used by Robert Carter or his family. He was aware of the procedure, however, as shown by his description of "Poor Adam Graves" who had "an abundance of blood ta[ken] from him and looks very pittyfully."¹³³ Cupping, however, he did use for "a pain in my head & swellings & soreness behind my Ears & Neck." He "cupp'd twice," but concluded "yett after all my head remains all over prodigiously sore."¹³⁴ In contrast, Col. James Gordon mentioned bleeding in his diaries quite frequently: a slave boy (Nov. 16, 1760); his son Jamey (May 31, 1761); and several guests and friends (e. g, "Mr. Waddell & Mr. Chichester

127 Dr. Lindsey Fitzharris, "The Bloody History Behind the Barber's Pole," huffingtonpost.co.uk.

128 "In the 2nd Millenium," Bloodletting, en.Wikipedia.org, 3.

129 [britishcuppingsociety.org/Wet and Dry Cupping](http://britishcuppingsociety.org/Wet%20and%20Dry%20Cupping); An interesting current use of cupping appeared in the 2016 Olympic games, when swimmer Mark Phelps and other Team USA athletes revealed cupping scars, the procedure having been used to increase blood flow.

130 King, *The Medical World of the Eighteenth Century*, 320.

131 "Medical Use of Medicinal Leeches," University of Connecticut, Department of Molecular and Cell Biology, web.uconn.edu/mcbstaff/graf/Medical.html.

132 Tennent, *Every Man his own Doctor*.

133 Berkeley, ed., "Robert Carter to William Dawkins, February 13, 1724," *Papers of Robert "King" Carter*.

134 *Ibid*, "Robert Carter to Mann Page, March 3, 1721."

were blooded by Col. Taylor who came here to dinner." May 31, 1762.)¹³⁵ Those who performed the bleeding were, as noted above, often not doctors but friends, family, or slaves.

Bloodletting continued to be used in the colonies until it began losing favor in the nineteenth century. It may not be coincidental that George Washington's death in 1799 marked that turning point.

Washington's last days are well documented, including reports of the physicians who attended him. At age sixty-seven, in mid-December of 1799, George Washington inspected his Mount Vernon property on horseback, despite the bitter cold and a threatening ice storm. He rode for five hours, then joined his guests for dinner without changing from his wet clothes. He became ill during the night. The next day, his doctor assembled a team of physicians because the illness was considered life threatening. Their decision: take five pints of blood¹³⁶ and give calomel as a purgative. After several days, Washington ordered the doctors to stop treatment, and he expired shortly after.¹³⁷ Most medical authorities agree that a bacterial infection caused Washington's death. Most also maintain that bleeding greatly weakened his condition and was an indirect cause of his death.

SURGERY

In addition to bleeding, physic in the eighteenth century encompassed surgery, primitive though it was. As noted in a previous section, surgery was confined to a very limited set of conditions such as broken limbs, difficult childbirths, and hernia repair. Its course changed radically during the Revolution when colonial physicians saw the superior surgery practiced in the foreign armies that were taking part in the war.¹³⁸ The change was gradual, however. As late as 1781, a French marquis who traveled through North America is quoted as saying,

I make use of the English word doctors, because the distinction of surgeon and physician is as little known in the Army of Washington as in that of Agamemnon.¹³⁹

135 "Journal of Col. James Gordon," *WMQ*, 1st Series, XI, 3 (January 1903), 204 and XI, 4 (April 1903), 220, 230.

136 The total volume of blood in an adult is about five quarts; in George Washington's day, it was thought to be much greater.

137 Michael Hebert, What Killed George Washington? open.salon.com/blog/Michael_Hebert/2009/02/16/what_killed_george_washington, 1-4.

138 Blanton, *Medicine in Virginia*, 12.

139 Wilbur, *Revolutionary Medicine*, see quote by Marquis de Chastellux from *Travels Through North America*, 27.

DRUGS

After “Bleed,” the two other frequently mentioned procedures, “Blister” and “Purge,” were entirely nonsurgical and drug based. Like bleeding, they were used to correct imbalances in the body. Emetics and enemas (or clysters) emptied the digestive tract. Blisters, raised on the skin with a caustic agent, drained toxic fluids from the body. Each procedure depended on one or more “drugs,” usually compounded into other forms such as pills, potions, draughts, or decoctions.¹⁴⁰ Druggists of that day favored compounds of many different drugs, often with fifteen or twenty different ingredients.

Despite several long lists of hundreds of drugs stocked in pharmacies, or mentioned in the *Virginia Gazette*, there is general consensus by medical historians about a few of the most frequently used drugs for physic. Several of them were actually curative, and in fact are still in use today in some form. However, physicians in the eighteenth century prescribed drugs based on symptoms, and because symptoms for many diseases were similar, the physic did not necessarily match the distemper. If the drug was not given for the patient’s specific distemper, it would have been worthless and the patient would not have benefited. Further, if the drug’s use was questionable, the appropriate dosing was even more so.

The six drugs that follow appeared with the greatest frequency in drug orders, letters and diaries, and advertisements:

BARK (Jesuit’s bark, Peruvian bark, or cinchona) was one of the eighteenth-century drugs that could cure distempers and is still used today. It was first described by Jesuit priests in Peru. There they learned from indigenous Indian tribes about a medicinal bark used for the treatment of fevers. When this bark cured the Countess of Chinchon, the wife of the Viceroy of Peru, of her fever, the bark from the tree was then called Peruvian bark. The tree was named cinchona after the countess. Today the medicine from the bark is known as quinine.¹⁴¹

The Jesuit order strongly promoted the bark, and it was sometimes called Jesuit’s bark or powder. Juan de Lugo, who became a cardinal in 1643, studied the bark on orders from Pope Innocent X to learn more about it. His report to the pope was positive.¹⁴² Quinine is still used to treat malaria but generally in synthetic form. However, in cases of resistance to the synthetic drug, quinine itself is used.¹⁴³

140 A complete listing can be found in the earlier discussion of the 1736 law governing apothecary practice, found at the end of the section “Quacks.” That law lists apothecaries’ products as “pills, bolus [a compound larger than a pill], portion, draught, electuary [substance mixed with honey], decoction [plant material that has been boiled to extract medicinal essences], or any medicines in any form whatsoever.”

141 cdc.gov, Malaria, The History of Malaria, an Ancient Disease, Quinine (Early 17th Century), 2

142 Juliet Burba, Annual Bell Lecture, University of Minnesota, <https://www.lib.umn.edu/bell/.../cinchonabark>

143 Cotner, et al., *Physick*, 28.

Robert Carter ordered Jesuit's bark (six pounds on one occasion from London in 1729) and took it frequently, mentioning it specifically in six letter and diary entries. He also left it in his inventory.¹⁴⁴ Gordon, too, used "the Bark" frequently. In 1762, for example, he used it when he had ague and fever.¹⁴⁵ Carter's son Landon was less enthusiastic. In 1756, when he and his daughter were both ill, Landon wrote, "I don't find above 2 or 3 cases that the bark has operated at all favourably." He added, "Neither do I know of any certain success attending any Physician. Do what they could the byle would flow again and the disorder return."¹⁴⁶ It is not clear from the context whether he and his daughter actually used the bark.

Landon Carter was in the minority, however. During the Revolutionary War, in 1776, Congress ordered three hundred pounds of Peruvian bark to send to troops in the south where malaria was particularly troublesome.¹⁴⁷

LAUDANUM or tincture of opium is also in the pharmacology of the twenty-first century. It was an herbal preparation, approximately 1 percent opium. A bitter, reddish-brown fluid extract of opium, laudanum was one of the most frequently used drugs in the 1700s and 1800s, both as a drug and as an ingredient in the numerous patent medicines called "snake oils." Like Peruvian bark, it was an effective drug if used properly and is still available today, though only by prescription.¹⁴⁸ Laudanum was a potent narcotic, used to treat a variety of ailments. Its principal uses in the eighteenth century were for treatment of pain, diarrhea, and severe coughing.¹⁴⁹ Robert Carter's diary describes its use for his son Robert's stomach distress (gripes). One Sunday in July 1724, Robert (Robin) was not well, and as his illness continued, he was given laudanum "in the Extremitie of his pain." One of his father's doctors, likely Alexander Bell, spent three days with Robin.¹⁵⁰ Carter also used the drug himself. In August 1726, when he had symptoms of ague (malaria), he took laudanum, with the happy result of "no more of the feavor."¹⁵¹ Col. James Gordon's wife gave it to Mr. Chichester for pain in his hip in 1760 and declared that it "eased him very much."¹⁵²

144 Berkeley, ed., "Robert Carter to Micajah Perry, November 13, 1729, Robert Carter Diary, February 24, 1725/26;" and "Robert Carter's Inventory, 'A small box with Some Jesuit's Bark in it,'" *Papers of Robert "King" Carter*.

145 "Journal of Col. James Gordon," diary entry for November 11, 1762, *WMQ*, 1st Series XI, 4 (April 1903), 234.

146 Greene, ed., *The Diary of Colonel Landon Carter* I, 128.

147 Blanton, *Medicine in Virginia*, 259.

148 Chris Kilham, Fox News Health, "Opium: A powerful medicine for pain relief," published July 24, 2013, FoxNews.com.

149 Cotner, et al., *Physick*, 28.

150 Berkeley, ed., "Robert Carter Diary, July 19 and 23, 1724," *Papers of Robert "King" Carter*. In the editor's note 72, it says that "Dr. Bell has not been positively identified but may have been Dr. Alexander Bell of Lancaster County who died in 1742."

151 Berkeley, ed., "Robert Carter Diary, Aug 18, 20, 22, 1726," *Papers of Robert "King" Carter*."

152 "Journal of Col. James Gordon," June 25, 1760, *WMQ*, 1st Series XI, 3, I, 200.

CALOMEL was most used in the eighteenth century as a purgative. Chemically a mercury chloride, it was taken internally as a laxative to release impurities from the body. It even found favor with John Tennent, who strongly preferred botanical remedies. In a front page article in the *Virginia Gazette*, he endorsed Peruvian bark and mercury as “more certain Remedies, than any in the Whole *Materia Medica*.”¹⁵³

An interesting use of calomel was associated with giving inoculations for smallpox, as “Thomas Dimsdale, M.D.” described in his “Directions for Inoculation” in 1769. Eight grams were prescribed as the first step. On the second day after the inoculation was performed, calomel was again prescribed.¹⁵⁴

SNAKEROOT is perhaps on most lists of drugs because of John Tennent. He discovered that the local Indians found it effective against rattlesnake bites. Tennent give the Indians full credit for the discovery and widely recommended its use for many distempers, including pleurisy, gout, and pneumonia.¹⁵⁵ It acted as a laxative, or emetic, or both.

Despite the fact that he was not a trained physician, Tennent waged written and verbal war against the medical establishment of his day in an effort to establish snakeroot as an authentic drug. He took an entire front page of the *Virginia Gazette* in October 1736 as his platform to argue with the Hon. Sir Richard Mead, M.D., that his snakeroot cured gout and pleurisy. He also argued that, for his patients, the “Manner of their Recovery is unprecedented.”¹⁵⁶ One month later, another ad warned that several persons had provided rattlesnake root “which is not of the genuine Kind,” so evidently he was successful enough that he had imitators.¹⁵⁷

Perhaps William Byrd was familiar with Tennent’s writings and praise for snakeroot, or he may have simply observed firsthand its use for treating several distempers. He wrote to a physician friend in London that “Then as for the rattlesnake root the reputation of it encreases every day. The tincture of it has done wonders in the gout.... It is of great use in the dropsy and has recoverd several from that fatal distemper.”¹⁵⁸ By the mid-eighteenth century, snakeroot was one of the plants being exported in large quantities. An advertisement in the *Virginia Gazette*, for example, told of Mr. John L. Fulwell’s interest in obtaining the drug in quantity:

WANTED 1000 wt. [pounds] of good snakeroot, to be delivered to Mr Ginter at York, or to me in Northampton. A reasonable price will be given for it, and any quantity however so small, will be taken.¹⁵⁹

153 *Virginia Gazette* (Parks), October 8, 1736, 1:1.

154 *Virginia Gazette* (Rind), November 30, 1769, 2:3.

155 *Ibid.*, 1.

156 *Virginia Gazette* (Parks), October 8, 1736, 1:1-2

157 *Ibid.*, November 5, 1736, 4:2.

158 Tingling, ed., “William Byrd II to Sir Hans Sloane, August 20, 1738,” *The Correspondence of the Three William Byrds of Westover, Virginia*, Vol. II, 528.

159 *Virginia Gazette* (Dixon and Nicolson), March 26, 1779, 3:2.

ANDERSON'S PILLS, or Anderson's Scots Pills, were a product of the 1630s, having been invented by Patrick Anderson, a Scot. He wrote in a book published in 1635 that he had learned the secret of the pills in Venice. He passed the formula to his daughter Katherine who in turn gave it to a doctor named Thomas Weir in 1686. Weir obtained letters patent on the formula from James II in 1687.¹⁶⁰

The plant materials in Anderson's Pills (aloes, colocynth, and gamboge) actually do combine to relieve constipation.¹⁶¹ Robert Carter's usage was less focused, as he wrote of using Anderson's Pills for indigestion, stomachache, headache, and pain in his side.

The many references to Anderson's Pills illustrate the drug's popularity. They were extensively advertised in the *Virginia Gazette*. Almost every announcement of the arrival of drugs from England included Anderson's Pills. One early notice, posted by George Gilmer at his "Old Shop, near the Governor's," assured readers that, despite rumors of his death, he was still able to supply all manner of medicines including Anderson's Pills.¹⁶²

IPECAC (also ipecacuanha and Indian physick) was used as an emetic to induce vomiting. Robert Carter used a mixture of "Ypoco" and tartar as an emetic in July 1726.¹⁶³ A clearer reference is found in William Bryd's writings, where he praised the "true Ipocoacanna, which in this part of the World is call'd Indian-Physick." He believed that it worked well for intermitting "Fevers and Bloody Fluxes," with only one or two doses needed.¹⁶⁴

Any discussion of physic in the eighteenth century would not be complete without mention of the diets of eighteenth-century Virginians. Diet was used to adjust the body's fluid imbalances, but as with drugs, it was approached most unscientifically.

Diaries are particularly good sources of what people ate, and how they changed their diets when they were ill. Robert Carter's are quite specific on this topic. Typically, dinner in the evening at Corotoman included one or more meats,¹⁶⁵ served in large portions, accompanied by perhaps a vegetable and/or starch, and several different kinds of alcohol. However, in times of illness, Robert Carter changed his diet.

160 Berkeley, ed., *Papers of Robert "King" Carter*, Notes, 55.

161 The Cullen Project, The Consultation Letters of Dr. William Cullen (1710-1790) at the Royal College of Physicians of Edinburgh, Anderson's Pills/Scotch Pills, ID: i63; cullenproject.ac.uk.

162 *Virginia Gazette* (Parks), May 27, 1737, 4:2.

163 Berkeley, ed., *Papers of Robert "King" Carter*, Notes, [86]: "Given Carter's inventive and phonetic spelling, it is difficult to know what this word may be, but 'ipecac' seems most likely as it is an emetic that had come into use in the previous century; it fits the context."

164 John Spencer Bassett, ed., "History of the Dividing Line," *The Writings of Colonel William Byrd Esqr. of Westover in Virginia* (NY: Doubleday, Page & Co., 1901), 113; also quoted in Blanton, *Medicine in Virginia*, 184.

165 Katherine L. Brown, *Robert "King" Carter* (Staunton, VA: Lott's Wife Publishing for Historic Christ Church, Weems, VA, 2001) 37-38.

One day when he was so ill he “was ready to Dye for want of breath,” he ate nothing for a day. Other times, he ate only gruel with currents or bread boiled in wine and water. He frequently wrote of meals consisting of only three dishes of coffee and milk, or three dishes of tea.¹⁶⁶

More surprising are two occasions when Carter was ill, but continued his rich diet, though reducing the variety and volume. Both occasions found him ill with gout. Once his dinner was peas, a wing of chicken, one-half dozen fried oysters, and probably some kind of alcohol though it is not mentioned. Another time he ate a whole squirrel and drank plentifully of cider and six glasses of wine.¹⁶⁷

CONCLUSION

Changes in medicine began slowly in the second half of the eighteenth century. The first hospital in the country was founded in Pennsylvania in 1751. During the Revolutionary War, other important changes appeared. Inoculation rates improved with George Washington’s efforts in 1776 to have all troops inoculated “as fast as they are enlisted.”¹⁶⁸ Surgery began its rise to respectability, marked by the Virginia Assembly, which raised two regiments, each with one surgeon and two surgeon’s mates. Well trained French and British surgeons came to the colonies and remained after the war. Hospitals grew in importance when, in October 1776, the Virginia legislature authorized the governor to use public funds to establish hospitals and barracks for soldiers. Nursing developed into a calling equally divided between the sexes. “If anything improved the tone of nursing in this century,” Blanton argues, “it was the Revolutionary War.”¹⁶⁹

It was not until the second half of the nineteenth century that the era of modern scientific medicine arrived. The change in life expectancy began climbing from thirty-seven years, the expected life span in England in 1700, to forty-one in 1820, to fifty at the beginning of the twentieth century and to seventy-seven years, today’s expected lifetime. The group most affected by this decline were children, who had been the most susceptible to infectious diseases and benefited most from their elimination.¹⁷⁰ The result is a life expectancy today that is more than forty years longer than eighteenth-century Virginians enjoyed, and with a lifetime of good health for the most part. Perhaps even a king in eighteenth-century Virginia would have been envious.

166 Berkeley, ed., “Robert Carter to John Carter, May 15, 1727,” and diary entries for August 27-29 and September 2, 1723, *Papers of Robert “King” Carter*.

167 Ibid., diary entries for January 14, 1726, and August 31, 1723.

168 Blanton, *Medicine in Virginia*, 259. Progress in the next century would be marked by the use of vaccination instead of inoculation, with a sharp drop in smallpox mortality.

169 Ibid., 49, 268.

170 The National Bureau of Economic Research, “The Determinants of Mortality,” 1, www.nber.org/bak/spring06/w11963/html.

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