A Cloak to Hide the Heart of a Viper: The Yellow Fever Epidemic of 1793 in Philadelphia

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Philadelphia was in the midst of political crisis in 1793 as Republicans and Federalists fought for control of the newly formed capital. A darker crisis, however, loomed as summer arrived. Issues of politics were swept away as the largest city in the United States was ravaged by a yellow fever epidemic. The sickness took its bloody toll as friends, neighbors, and families witnessed each other succumb to gruesome death. The fever lasted a few days, beginning with a raised temperature and followed by severe pain and chills. Then it declined, only to reappear with a deadly vengeance. The victims turned yellow, vomited blackened blood, and eventually reached a state of stupor from which they usually did not return. Ten percent of the population died this way, and about half of the population of more than 40,000 people fled, leaving Philadelphia and all of its previous problems by the wayside. Those who remained in the city had little time to devote themselves to anything beyond the fight for survival. Yet out of the macabre and gloom, heroism emerged in the form of the medical community’s response led by Dr. Benjamin Rush, as well as the African-American community and many other citizens. Through their collective efforts, Philadelphians learned how to manage the fever, cleanse the city, and grow once more from the decay. However, the fever instilled a somber sense of mortality as well as emotional and religious piety throughout the population. The once lively, thriving, young capital quickly donned a mask of somber morbidity.

To understand the daunting task facing the physicians of the eighteenth century, one should know that while there is a vaccination today, there is still no specific treatment for yellow fever. It is a virus transferred by the Aedes aegypti mosquito. After being bitten by the infected insect, one starts the three terrible stages of yellow fever, beginning with three to six days of the infection stage. During this time, the victim experiences extreme headaches, fever, lower back pain, nausea, dizziness, malaise, yellowing of the eyes, and discoloration of the tongue. After
this stage comes the period of remission, which lasts anywhere from two hours to two days. The fever subsides and the symptoms abate. Many will go on to complete recovery after this phase, but for fifteen to twenty-five percent of people affected, the period of intoxication follows. For three to eight days temperatures spike once more, jaundice turns the victim a sickly shade of yellow, and hemorrhaging causes blood to ooze from his or her orifices. The victim expulses black vomit thick with blood, has kidney failure, and eventually reaches a stupor and coma. It is an incredibly intimidating virus to fight today, and was all the more disheartening for the people of Philadelphia in 1793.

Scholarly medicine at the end of the eighteenth century was little more than folk medicine combined with sophisticated vocabulary and complex theoretical justification. The theory of humoral physiology proposed by Greek philosophers and used since the Middle Ages still dominated medical thought. This theory put forth that bodily health was a result of a proper balance of the four humors: blood, phlegm, black bile, and yellow bile. There were many different schools of thought that debated how to balance these humors, and therefore the medical community was greatly lacking in unity. William Cullen, a teacher of the eminent Dr. Benjamin Rush, revolutionized medicine by speculating that the nervous system was the source of all life. All disease and bodily failures were the result of either the exaggeration or weakness of all nervous system functions. While these modes of thought gave directions as to how to cure illness, they did not help the medical community agree upon nosology, or the systematic classification of diseases. Doctors sought to classify all illnesses into classes, genera, and species according to superficial symptoms. Therefore, a slight difference in symptom created an entirely new malady.

Dr. Benjamin Rush, however, believed that all sickness had a common cause and that classification was not therefore as important as treatment. A highly political figure, Rush was the premier physician in Philadelphia. He had represented Pennsylvania in the Continental Congress and had also signed the Declaration of Independence. After his involvement in the Congress, he was commissioned surgeon general of the Middle Department of the Continental Army. He did not hold this post for long, however, as he was greatly outraged by the disorganization and corruption plaguing army hospitals. He resigned from the army and returned to Philadelphia for his practice and professorship at the University of the State of Pennsylvania. Here, Rush conceptualized his beliefs drawn from Cullen’s work and began his practice of “heroic” medicine, so named because of its domineering style of treatment.

Meanwhile, Philadelphia, the newly formed nation’s capital, was in the midst of political crises. Tension rose between Republicans and Federalists after Britain’s declaration of war against revolutionary France. The Republicans wanted to offer aid to France, as France’s political ideals seemed similar to their own, whereas the Federalists felt Britain was standing against revolutionary anarchy. The capital thus became sharply divided by partisan politics.

Otherwise, Philadelphia was the nation’s largest and most cosmopolitan city, boasting a population of over 40,000 people. Spring came early and was uncommonly wet in 1793. Relentless rain caused streams to overflow and to create new marshes and swamps in the lowlands. Then summer arrived extremely hot and arid, causing many of the rivers and streams to dry up, leaving behind stagnant pools, the perfect breeding ground for death. In July, fleets of ships containing refugees from Santo Domingo (now Haiti) unloaded in the harbors of Philadelphia. They brought news of revolution in the sugar plantations, and of carnage, warfare,

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and a pestilential fever that had ravaged their island. They thought they had escaped Hell, but little did they know that they had brought it with them. Unbeknownst to them, they had carried the *Aedes aegypti* mosquito to Philadelphia, and with her, yellow fever.

Between mid-August and mid-November, an estimated 5,019 people died in the horrible epidemic. The exact figures are uncertain, as it was the duty of residents to report deaths, and with entire families being wiped out as well as countless of the poor dying in the streets, many deaths may have gone unreported. While the disease killed indiscriminately, poor people seemed to die at greater rates than the privileged. This was most likely because they spent more time outside, putting them at greater risk of being bitten, and because they could not afford to flee the city. However, many at the time believed that yellow fever was a plague sent to punish moral failings, and therefore found the poor more deserving of death. Others, such as citizen and writer Mathew Carey, thought that the poor’s higher mortality was due to their “neglect of cleanliness and decency.” These were incredibly misguided views, however. Neither soap nor moral purity would have protected any of the citizenry from *Aedes aegypti*. Indeed, many upper-class Philadelphians fell victim, including the family of Dolley Payne Todd, who later became first lady Dolley Madison. She lost her first husband, the middle-class lawyer John Todd, and her five-month-old son, William Temple, in the same day to yellow fever. She fell ill herself but fortunately recovered, saying that the thought of Payne, her surviving child, gave her the will to live.

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8 Ibid., 170.
Benjamin Rush lived down the street from the Todds, tirelessly seeking a cure for the malignant fever. For the first several weeks of the epidemic, the medical community fought over whether the pestilence was actually yellow fever or another malignant fever. When they finally reached the conclusion of yellow fever, they then became embroiled in a debate over its source. Rush asserted that the atmosphere was responsible. He therefore blamed the “putrid exhalations” emanating from shipments of spoiled coffee that were left behind on Water Street near the Delaware River, where the outbreak appeared to originate. With new cases presenting themselves at his doorstep at an alarming rate, and with no clue as to how to treat them, Rush fearfully offered only these words of wisdom: “Fly from it.” Most of those who were able to take his advice did so. Religious leaders, public administrators, doctors, key politicians, and George Washington himself fled the city. They had little choice. Almost half of the population of Philadelphia left, the federal government came to a standstill, and infrastructure within the capital halted. The people continued to get sick.

The doctors were beside themselves. No treatment they attempted appeared to have any effect. Still, Rush refused to believe that the disease could not be cured. Although his religious allegiances had been erratic, he had always been a staunchly pious man. He was convinced that Divine Providence had not failed to provide a cure for every illness, and so he fervently threw himself into his books in search of an answer. Eventually, he discovered an intriguing source: a letter written by Doctor John Mitchell of Virginia in 1741. After examining the corpses of people

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11 Powell, 37-46.
12 Ibid., 50.
14 Powell, 110-115.
15 Ibid., 133.
16 Benjamin Rush, An Account of the Bilious Remitting Fever, as It Appeared in the City of Philadelphia in the Year 1793 (Philadelphia: Dobson, 1794),196–97.
who died of yellow fever, Mitchell noted that the abdominal viscera were filled with blood. It
appeared that the body was packed with vicious humors, and the only way to stabilize it was to
evacuate the offensive matter.  

Rush was deeply inspired and his imagination piqued. Thus began the practice of heroic therapy in the treatment of yellow fever. For years, doctors had perceived themselves as assistants to nature, but what Mitchell had suggested was not only to ignore nature, but to overpower it. They had been attempting to strengthen and restore their patients, yet the patients were dying in spite of their best efforts. Instead, it appeared that the best method was to weaken the patient in order to weaken the disease; to dominate nature in order to bend her to one’s own will. Purging appeared to be the answer.

Rush’s treatment—excessive purgation and venesection, or bloodletting—was incredibly controversial. He started by offering fifteen grains of jalap, the tuberous root of a plant in the morning glory family, and ten grains of calomel, a tasteless mercurial powder, to his patients. Both functioned as toxically aggressive cathartics. After purging their systems, patients were then subjected to copious amounts of bloodletting. Quite regrettably, Rush was under the impression that the human body contained somewhere between twenty-five and twenty-eight pounds of blood—almost double the actual amount. He also told his students that they could safely remove four-fifths of the twenty-five pounds of a patients’ blood, which in actuality was more than human adults even had. It is very likely that his treatments were the cause of many deaths of his patients. However, his method appeared to work in some way. Rush joyfully reported that his technique “perfectly cured” four out of five patients. He began sharing his discovery with other doctors. Many physicians were captivated by what seemed to be an

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18 Powell, 81.
20 Kopperman, 551.
innovative new principle in medicine. With confidence, Rush offered a popular, new remedy to the citizens who were undoubtedly on the verge of hopelessness. The unfltering resolution behind his ideas must have brought a ray of hope to the despairing city.

The method was not without opposition; in fact, a great number of doctors recoiled with aversion, calling his use of the purgatives “a murderous dose.” There were five leading doctors who rivaled Rush: Dr. Adam Kuhn, Dr. William Currie, Dr. Jean Deveze, Dr. David Nassy, and Dr. Edward Stevens. In general, these doctors offered mild treatments, contrasting with Rush’s heroic approach, and followed a gentle or natural school of thought. Rather than attempting to dominate the fever, their treatments consisted of feeding their patients a mild diet of fruits and vegetables, chamomile tea, salts, and tree bark; giving them cold baths; and keeping them in fresh air.

Unfortunately, the public was caught in the midst of a mêlée within the medical community. As Dr. Robinson of Washington State University noted, “Dr. Rush truly embodied all contradictions of the early republic: He was an iconoclastic crusader whose many reform efforts all too often ended in ridicule or bitter public battles.” Benjamin Rush viewed his challengers with extreme distaste, seeing their resistance as nothing other than unenlightened self-interest. Indeed the opposing viewpoints were not particularly civil, and the physicians refused to collaborate with one another, adding to the chaos. However, little else could be expected. Medicine was a competitive practice at the time. There was no single accepted medical system, and different physicians therefore warred with each other over theory. It is no wonder

21 Powell, 83-84.
23 Ibid., 8.
that the physicians of Philadelphia lacked unified direction.\textsuperscript{25} The five opposing physicians were correct in assuming that Rush’s treatment was murderous, but it is likely that the people were running out of energy and needing to focus on something that gave the semblance of progress. As the disease ravaged the city with near apocalyptic vigor, they sought something more than just “gentle” opposition. They needed a champion, and Rush was their man, there to encourage heroic therapy.

As soon as hope reappeared, it was time for the panicking and flight to cease. Rush begged people to stop abandoning the city and remain to offer aid to those who had fallen ill. He quickly turned to the African-American community, especially the Free African Society led by Methodist Reverends Richard Allen and Absalom Jones.\textsuperscript{26} He was under the mistaken impression that people of color could not catch yellow fever. In fact, they did experience lower death rates compared to European-Americans, perhaps due to some innate resistance resulting from their origins.\textsuperscript{27} By mid-September, however, Rush was forced to abandon these false beliefs as African-Americans started becoming infected.\textsuperscript{28} Yet the African-American community largely remained in the city and continued their valiant efforts, as encouraged by Allen and Jones. Whereas one out of every four Europeans fled the city, only one out of every ten African Americans left.\textsuperscript{29}

Both Allen and Jones were born into slavery and took the long, arduous route of purchasing their own freedom. Jones had learned to read and write while still a slave, and somehow found time to attend night school. After buying his wife’s freedom and a home, at the

\begin{footnotesize}
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  \item Robinson, 244.
  \item Powell, 100-03.
  \item While some were born in the South, the majority of black people in Philadelphia were born in Africa or the Caribbean where yellow fever was more common. Therefore, they were more likely to have immunity due to previous exposure. See Powell, 102.
  \item Ibid., 105.
  \item Estes, 167.
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age of thirty-eight, he bought his freedom. Allen made his way through the world with the sheer strength and beauty of his spiritual force. He began preaching Methodism to blacks and whites alike at the age of seventeen, learned to read and write, and like Jones, purchased his freedom. At twenty-six, he came to Philadelphia and began preaching at St. George’s Methodist Church. There, he and Jones founded the Free African Society, and quickly grew famous for their piety, honesty, and ability.30 When approached by Rush on September 5, Allen and Jones immediately set about finding members of their community to help. Eager to take an opportunity to forge fresh bonds between members of their race and the larger community, they supplied nurses on demand and hired five men to gather the dead and see to their interment.31 Rush even trained Allen, Jones, and a man named Billy Grey to bleed and administer treatments. Whatever time they could spare from carrying the dead, they spent visiting the sick, helping to bleed over eight hundred people according to Rush’s prescriptions.

Yet, African-Americans were still deemed as predatory by Philadelphian media. It appeared that “no conduct, however heroic, could expiate the original sin of a dark skin.”32 Doctors opposed to Rush’s treatments attacked African Americans for practicing his cure, and many citizens accused them of profiteering, plundering, and extorting the ill. One such accuser was Mathew Carey, with whom Jones and Allen later engaged in a written dispute. Carey was a Philadelphian printer who produced one of the most popular pamphlets during the crisis, which went through four revisions between November 14 and December 20. He minimized the efforts of the African-American community based on the assumption that they had a complete immunity

30Powell, 101-03.
32 Powell, 104.
to the virus.\textsuperscript{33} He went on to accuse them of extortion, saying, “The great demand for nurses afforded an opportunity for imposition, which was eagerly seized by some of the vilest of blacks…Some of them were even detected in plundering the houses of the sick.”\textsuperscript{34} Jones and Allen did not take this accusation lightly, responding with their own pamphlet entitled, \textit{A Narrative of the Proceedings of Black People During the Late Awful Calamity in the Year 1793}. In it, they identified many examples of African-American heroism throughout the epidemic, and gave a list of incomes procured and expenses incurred. Contrary to Carey’s accusations, the Free African Society actually reported a net loss rather than a gain. For their services, including burying the dead and their beds, they received a total of £233.10. For the procurement of coffins, as well as the expenses of hiring hands, they spent £411. This left them a net loss of £177.90.\textsuperscript{35} Despite their tireless efforts and investments, their hopes of creating bonds between races were nullified in the public eye. Instead, they pleaded to other free Africans-Americans, even in their miserable conditions, to continue to do selfless good works in the name of an all-seeing God. They begged that their dispiriting situation not discourage others, but inspire other people of color to carry on their efforts for the betterment of black people throughout the United States.\textsuperscript{36} The last thing they wanted was for anyone to affirm Carey’s attacks.

Despite his defaming comments, Mathew Carey left one of the most complete accounts of the epidemic. His pamphlet gave an excellent depiction of the proceedings within the city after the majority of its people had fled. On September 10, Mayor Mathew Clarkson beseeched the remaining citizenry to stay behind. By September 12, a meeting was held and a committee of ten

\textsuperscript{33} Will, 565.
\textsuperscript{34} Carey, 78.
\textsuperscript{35} Richard Allen and Absalom Jones, \textit{A Narrative of the Proceedings of Black People During the Late Awful Calamity in the Year 1793, and a Refutation of Some Censures, Thrown Upon Them in Some Late Publications} (Philadelphia: Independence National Historical Park, 1993), 4-6.
\textsuperscript{36} \textit{Ibid.}, 26-27.
men were appointed to organize assistance for the ill and poor: Israel Israel, Samuel Wetherhill, Thomas Wistar, Andrew Agate, Caleb Lownes, Henry Deforest, Thomas Peters, Joseph Inskeep, Stephan Girard, and John Mason. With the government having vacated the city, these men were all that remained of an organized infrastructure. The first item on their agenda was the reform of Bush Hill, the hospital in charge of attending the sick.\textsuperscript{37} It was overcrowded and understaffed, but Girard and Mason managed to restore order to the dreaded place. The city slowly began to put itself back together piece by piece.

Meanwhile, those that fled encountered their own problems. The majority had escaped to the Pennsylvanian countryside, but such an act was not met without conflict. New York and other nearby cities hired guards to keep people from Philadelphia out. Many were forced into quarantine or strictly denied admittance.\textsuperscript{38} They were not even welcome to return to their homes. The committee asked that those who had fled not return to the filthy city until the fever was cleansed. They came back anyway, causing people to fear that cases would increase again. Therefore, on November 15, the committee resolved that all of the houses and stores in areas where yellow fever prevailed be aired, limed, and purified. If citizens did not comply, they could be tried for endangering the public welfare. The people came flocking back, since Governor Mifflin had returned the day beforehand. He proclaimed that God had put an end to the calamity, and that it was the duty of those who had survived to express penitence, submission, and gratitude for divine mercy. He named December 12 a day of thanksgiving and prayer.\textsuperscript{39} Throughout the nation, cities and towns therefore fasted and prayed.

A massive outburst of piety followed the epidemic. Religious activity had suffered quite a blow during the worst months. Like doctors, prostitutes, servants, and the poor, the clergy had

\textsuperscript{37} Carey, 40-50.
\textsuperscript{38} Ibid., 62-64.
\textsuperscript{39} Ibid., 52-54.
suffered an alarming mortality rate. A reverend had passed on from each of the Protestant Episcopal, German Reformed, Presbyterian, and Methodist churches. Two Roman Catholic priests died, and the Society of Friends lost four noted preachers. Another seven clergymen had fallen ill, but recovered.\textsuperscript{40} Those who had attempted to hold a congregation were scorned. As people crowded the churches, they were considered to have endangered the public welfare by coming together and spreading contagion.

In other parts of the country, congregations preached against the shortcomings of Philadelphia that had led her to the calamity. Reverend J. Helmuth of the German Lutheran Congregation in New York published a sermon which identified the pestilence as a sign of God’s wrath. According to him, the fever was a just and deserved punishment from God, due to several mistakes on Philadelphia’s part. Its citizens’ love of luxury and theatre had led them to withhold wealth that should have been spent on widows and orphans, and they had broken the Sabbath. Analysis of those greatest affected seemed to prove it was God’s wrath, as yellow fever mostly preyed on gluttons, drunkards, and rambunctious youth according to his account. They needed punishment. Indeed it had been a merry, sinful summer, which had led to a wicked autumn. He urged his congregation that salvation was in their own hands, and that they should act with piety if they cared for their souls.\textsuperscript{41} His attitudes were mirrored by John Mitchell Mason in his sermon before the Scotch Presbyterian Church in New York City, in which he entreated the people to prostrate themselves before God’s wrath and beg for mercy for their sins.\textsuperscript{42}

\textsuperscript{40} Ibid., 75-76.
\textsuperscript{41} J. Henry C. Helmuth, \textit{A Short Account of the Yellow Fever in Philadelphia for the Reflecting Christian} (Philadelphia: Jones, Hoff, & Derrick, 1795), 10-19.
\textsuperscript{42} John Mitchell Mason, “A Sermon Preached September 20, 1793; A Day Set Apart, in the City of New York for Public Fasting, Humiliation, and Prayer, on Account of a Malignant and Mortal Fever Prevailing in the City of Philadelphia” (New York: Samuel Loudon & Son, 1793), 6-10.
A shadow had fallen over the citizenry. They were told that emotional outburst increased the likelihood of infection. In Dr. Rush’s *Observations*, he stressed the importance of a meager diet and rigorous self-control in preventing the fever.\(^{43}\) Throughout the early modern period, disease was considered a product of sin, and was therefore considered as much a religious concern as a medical one. As the population witnessed the wrath of God felling many people who they knew and loved, the community underwent a heartrending transformation. While the medical community repeatedly stressed the importance of moderating one’s passions—especially anger, fear, greed, grief, and pride—they also encouraged the suppression of extreme love and joy.\(^{44}\) So the people developed into a populace of introverts. As their city fell into shambles, inhabitants focused a large amount of their energy on containing their fear. When their loved ones died, they stifled their grief. Only when the disease had them in its grasp was it finally acceptable to express negative emotions. Like zombies, the infected lost themselves in fits of madness. One Philadelphian merchant, Samuel Breck, wrote that “the burning fever occasioned paroxysms of rage which drove the patient naked from his bed to the street, and in some instances to the river, where he was drowned. Insanity was often the last stage of its horrors.”\(^{45}\)

Despair riddled the residents of Philadelphia, but they dared not show it. Fearing for their lives, they hid their true countenances behind a mask of moderation and eerie stability. This sentiment was well described by victim Isaac Heston, a member of the Religious Society of Friends, in a letter to his brother on September 19. In it he described the calamitous state of Philadelphia, as everyone was “a Dieing on our right hand and on our Left.” He listed the


\(^{45}\) Powell, 184.
numbers of the dead and the location of their burial plots, and he praised the Negroes, for he did not know what the people would have done without them. After he recounted a particularly tragic story of a widowed daughter who sought her father’s comfort only to be locked out of her family’s home upon suspicion of harboring contagion, Heston’s tone changed entirely. He said the lack of duty from father to daughter made his blood run cold, and caused him to disavow every show of religion “as only a cloak to hide the heart of a viper.”  

The epidemic took not only countless lives, but people’s sense of humanity as well. People became mere shades of human beings, withholding tenderness, emotion, and compassion for survival’s sake. Heston himself perished ten days after writing the letter and was interred along with ten others in the Quaker plot at Third and Arch Streets on September 29.

As Carey presented, “The whole of this disorder, from its first appearance to its final close, has set human wisdom and calculation at a defiance.” While it is entirely true that the epidemic caused economic, social, and political chaos, the city gained from the experience in some ways. For instance, due to the epidemic, Philadelphia formed the nation’s first Board of Health. Health regulation had never been part of the government’s concern before 1793, but the formation of this board set the precedent for emphasis on the “collective good” of society. Health policies were instituted in Philadelphia that other cities would not establish for another fifty years. Quarantine laws were strengthened and hospitals improved. Plans for tent cities were established if the public was ever encouraged to flee again. Waste collection and public sanitation became a crucial concern, and a desire for a clean water supply led the city to construct a new pumping station for fresh water. The disease even spurred the disarrayed

47 Carey, 61.
medical community to move towards unity and towards the use of scientific understandings rather than the previous method of competing logics.48

After such extreme losses, Philadelphia still managed to survive and thrive as the capital of the United States of America. Although the medical community had been embroiled in dispute, the epidemic had been an educating, albeit humbling, experience. Heroic therapy would become a uniquely American practice, despite its faults. Outbreaks would ensue in the following years, but Philadelphia was more prepared for the challenge when it returned. The Free African Society did not immediately forge the bonds between races that they had hoped to create, but it is unlikely that all of their sacrifices went unnoticed. It is impossible to tell how long the mask of somber humility the citizenry had assumed remained, but it certainly did not hinder the city’s ability to revitalize itself after the adversity had passed.

Bibliography

Primary Sources


Rush, Benjamin. *An Account of the Bilious Remitting Fever, as It Appeared in the City of Philadelphia in the Year 1793.* Philadelphia: Dobson, 1794.


Secondary Sources:


http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6W8X-43YY2JC-J&_user=650596&_coverDate=08%2F31%2F2001&_rdoc=1&_fmt=high&_orig=search&_sort=d&_docanchor=&view=c&_searchStrId=1265980782&_rerunOrigin=scholar.google&_acct=C000035098&_version=1&_urlVersion=0&_userid=650596&md5=3f224f9fd2b969f8269e565c224fde1a (accessed April 21, 2010).


