

The Medical Community's Response to the Cholera Epidemic In London, 1831 -1832

by Michael Jennings

The years 1831 and 1832 were a frightening time to be in London, England. For the first time a disease which was suspected to be viable only in the tropics had entered England. This disease is cholera. At the time it was a devastating disease capable of killing its victims within hours of infection. Today it is known that cholera is typically ingested through tainted water supplies and anchors itself within the intestine, causing rapid dehydration through diarrhea. Through this process, a person's electrolytes are decimated, causing deterioration of the blood. This results in a person's skin becoming blue, muscle spasms, and an inability to retain body heat. It is indeed a very violent way to die. Cholera was all the more frightening in 1831-32 because the medical community was baffled by its nature and had no effective means for treating it. It is the objective of this paper to focus on the many ways the medical community dealt with this epidemic.

Cholera had been known and studied for many years in Bengal prior to its arrival in England and for this reason it was termed Spasmodic Cholera of India. The cause and the transmission had yet to be discovered once the disease had reached England. The transmission of the disease as it penetrated through Europe and Asia is still uncertain. Trade routes, however, appear to have been the arteries which carried cholera. Once a person already infected with cholera arrives at a place with a warm, moist climate and poor sewage facilities, the disease is entrenched as long as these conditions persist.

Cholera's best means of infection are through tainted water supplies and food contaminated by flies. England became a prime target for the disease due to the rapid urbanization caused by industrialization. <1> The high-density, inner-city living along with antiquated toilet facilities particularly encouraged the growth of the cholera bacillus. It was not uncommon for over forty families to share one water closet in the slums of London. Those that did have access to a toilet were considered fortunate since most "were in the habit of depositing their excrete in a newspaper, folding it up, and throwing it with its contents out of a backwindow." <2> Such practices allowed cholera easy access into the public's drinking water. Once ingested, the bacteria anchors itself within the intestine and wreaks havoc with the body as it violently dehydrates it. The medical community in the 1830s had some what of a different view of the mechanics of this disease. Dr. Alexander Smith of London stated, "I have attributed the epidemic form of cholera to a vitiated atmosphere acting on predisposed persons." <3> Such "vitiating atmospheres" indicate that the disease was air-borne and that only "predisposed" persons, people somehow unique compared to others, were open to infection. A correspondent from Newcastle submitted his opinion to *The Times* of London that people who attend funerals of cholera victims subject themselves to the disease which is much stronger emanating from a corpse. After the funeral, it is the imbibing of spirits which causes them to be vulnerable to the full affect of cholera and become symptomatic the very next day. This view was later challenged by a subsequent article in the *Times*. One of the paper's

own correspondents stated that he ". . . would ascribe the effect of the contagion at this time to the influence of the grief entertained for the departed." <4> One member of the medical community, Dr. William Condell, gave his own speculations as to the cause of the disease. It also illustrates that the functions and systems of the body were still very much a mystery to the science community. Condell wrote,

When the function of the liver is carried on in a healthy manner, the blood is deprived of some of its pernicious property's, it becomes *decarbonized*. In cholera, then, I believe, that this decarbonization does not go on in the liver, but the blood is returned to the heart in an unfit state, to be circulated through the lungs, which are expected to perform double duty (viz. their own and that of the liver); nature, however, refusing black blood, or blood imperfectly decarbonized, (and that which gives the blue appearance to the skin) is circulated through the system. <5>

Condell's subsequent remedy is even more interesting. If the remedy did not kill the patient outright, it would have killed him the next day. Condell later stated that the black blood once in the lungs was subjected to the atmospheres where it would be reinfected. This speculation does in fact have a modicum of merit. These atmospheres later were less abstractly described as foul air which carried cholera. This concept was later termed the miasma theory. <6> Foul indeed, since it was later realized that the habitats of most cholera victims were inundated with stench from raw sewage. Sewage capable of carrying cholera was also present in the drinking water. Therefore, if you can eliminate the stench by cleaning up the sewer system, cholera will quickly become yesterday's news. This fact was very slowly realized especially since there was heated debate on whether the disease was contagious.

The meaning of contagious as far as the medical community was concerned meant that it was spreadable through person to person contact. Since cholera made its way through Asia and Europe before reaching England, it was fervently studied in St. Petersburg, Russia, in an attempt to discover its nature. A writer for the *Medico-Chirurgical Review*, a medical journal, wrote,

. . . whether the disease be epidemic, contagious or both united, it will be prudent, during the ensuing Winter to collect all our information, and array if possible, all our resources of science and art -of hygiene and therapoeia, preparatory to the Summer of 1832. <7>

This excerpt specifically states that the medical community was unsure of cholera's transmission yet knew it could arrive in England, no doubt from witnessing its progress through the continent. In this period of uncertainty both doctor and commoner entertained their own notions about cholera. A merchant writing to the *Times* challenged the government's quarantine policy on excluding luggage, bedding, and the apparel of passengers arriving on ships. The apprehension of this merchant was somewhat mitigated by Dr. Thomas Walker who had studied the disease in Moscow. Walker gave an account, "That persons had put on the clothes of patients, who were very ill or who had died of cholera, had lain in their beds or even alongside corpses, had bathed in the same water and none of those persons had taken ill." <8> To be entirely certain, Walker wished to

experiment on condemned felons who induced by a pardon, would have been subjected to the clothes and bedding of deceased cholera patients. Such an experiment never took place on the grounds that there was great objection to capital punishment.

Walker never did go so far as to say that it was impossible for cholera to be contagious, yet he noticed that "depressing passions," poor living conditions, bad air, and drunkenness greatly favored the spread of the disease. One doctor, however, violently opposed the contagionist theory and with biting words expressed his opinion of those who did support contagion,

A party of men, determined from the consideration of a certain sort of evidence, to consider the disease highly contagious, were equally determined to hold up all of a contrary opinion as fools or knaves. It is indeed astonishing with what tenacity poor and sterile minds will cling to opinions hastily embraced. <9>

One factor that all members of the medical community did agree upon was the necessity to establish localized boards of health to aid in cholera detection as well as prevention. The establishment of boards did meet opposition in some towns where cholera was not considered a threat especially since a board was an added cost to the community as well as a violation of laissez- faire principles.

Through acts of Parliament, in conjunction with the medical community, limited autonomy was granted to cities, towns, and districts threatened by cholera to form their own regulations and boards of health. The localized boards would then in turn report cholera outbreaks as well as their progress in prevention to a Central Board of Health. The formation of these boards was greatly supported. A correspondent of the *Times* wrote,

Committees of the most active inhabitants should be appointed at those meetings to direct and superintend the cleansing of streets and alleys of their respective parishes. Collections of manure and sweepings at warfs [sic], public lay stalls and markets, should be constantly removed, ... at the same time the poor would be benefited by employment at a period when there is but little demand for their services. <10>

This correspondent continued to implore that swift and vigorous action take place whenever the first indication of cholera appeared. Dr. Alexander Smith further invoked the boards to ensure the health of the poor by ensuring them with "a wholesome diet, with a due portion of good beer." <11> It is impossible to know just how integral the boards were in controlling the disease, however, towns which did not have established boards and were afflicted with the disease had no immediate plan of action. Charles Greville, who later became a noted writer, pointed out one account of a case occurring in Rotherhithe: "We sent instantly down to inspect the district and organize a Board of Health. A meeting was convened, and promises given that all things needful should be done, but as they met at a public house they all got drunk and did nothing." <12> From this encounter Greville quickly realized that the effectiveness of health boards varied greatly throughout the nation.

The chief reason why some towns did not develop health boards was either due to the fact that cholera never made its way to these places or more importantly, these areas had natural defenses preventing the transmission of the disease. To the medical community these defenses were slow to be realized. It is certainly apparent that Dr. Smith was baffled by cholera's infected areas:

. . . cholera makes its attacks in situations so different from each other, that there is often no point of local resemblance; and one time it appears many hundred miles away from the sea, of another on its very shores; sometimes on low marshy ground, often on dry lands; and narrow strips of country have suffered from its ravages, while both sides of these tracts have been exempt. <13>

In 1832 a man by the name of Robert Baker noticed that areas of cities that had paved streets and drainage facilities had relatively few reports of cholera. Other areas, however, where drainage was nonexistent, had over five times the amount of cholera cases when compared to their well-drained neighbors. A correspondent of the *Times* illustrates exactly how bad the drainage system was in one part of London:

. . . the main sewer, from Coventry-street to Pantonstreet, is more than two feet above the level of the basement floor, consequently the houses on both sides of the street are below the drainage. <14>

This statement enables the reader to imagine houses in which the basements were permanently flooded with sewage water. It was up to the city to rectify such problems. In the meantime, all anyone could do who was infected with cholera was visit their local doctor to be "cured."

One of the first forms of treatment for cholera was the practice of blood-letting. Many times this practice was simply ill-fated in that many patients, being so dehydrated from the disease that their blood became localized in the core of their body. One physician, a Dr. Kennedy, wrote the *Times* stating,

The character of venesection has been libelled in a peculiar manner. At an early period, during the process of this singular malady, the blood deserts the superficial vessels of the body, for the deep seated and internal parts even before the period has arrived in which loss of blood could be injurious, ... not a drop of that fluid can in general be procured, after the opening of both veins and arteries. In 99 cases out of 100, where patients are said to have died despite blood-letting, no blood flowed from the incised veins, or that it came away in drops, or in a small broken stream rarely exceeding a few ounces in quantity. <15>

Kennedy continued by stating that patients who were bled and gave up blood freely and were then followed with "proper auxiliaries" had usually recovered. From this statement it is likely that the patients who gave up blood freely never had cholera since the disease dehydrates its host. The auxiliaries Kennedy mentioned could have been a combination of extremely exotic ingredients, but almost all had an amount of opium and alcohol. Dr.

Smith highly favored the practice of blood-letting, and from his own account appears to have been more successful than Dr. Kennedy. However, Smith left it up to the physician to decide whether a patient was suitable to be bled. Smith gave an account of treating a patient in the throes of spasms. He stated that blood should be drawn until the spasms subside which excites the action of the liver and allays the irritability of the body. Smith continued by stating that in some cases it is absolutely necessary to abstract blood when "Nature and the powerful stimulants which have been employed to excite these efforts, bring on a reaction in the system which endangers the safety of the brain." <16> Smith advised the strictest caution in that "the reviving constitution will not bear much depletion," and that it was most beneficial to abstract blood directly from the head. One bit of information Smith had failed to provide is how to determine when the brain is endangered. Again it seems to have been up to the physician to make that decision. Even more fascinating than these bleeding treatments were the concoctions that both doctor and commoner prescribed for the cholera-stricken patient.

It is the remedies of this time which are of the most interest, if not the most entertaining. One of the first suspected cases of cholera in England was that of Robert Jordan. His doctor found him "seized with spasms in the arms and legs, sunk eyes, contracted countenance, and tongue colder than natural but moist and covered with a whitish fur." <17> The physician administered brandy and laudanum, a solution of opium in alcohol, in conjunction with calomel and opium. To the doctor's surprise, this treatment failed to produce any "permanent beneficial effect." The alcohol would naturally have just caused further dehydration, and the opium if it was allowed to circulate through the system at best would help ease the pain of the patient. However, many more "remedies" were proposed during this time period. One man under the pseudonym, Constant Reader, wrote the *Times* to inform the public that he felt music was an antidote for cholera. He observed that musicians with the exception of very few cases, had escaped this "dreadful scourge" and that those who either play instruments or listen to music frequently "with any degree of eminence escaped altogether." <18> This "musical remedy" was printed in the *Times* only as a joke for its readers, however other accounts which are even more ludicrous were printed with complete seriousness.

One account told of a cartman named Snowball, who falling ill with the first symptoms of cholera, was quickly immersed in his wife's cauldron which she was previously preparing to scald a pig. After this primary treatment, he was quickly restored to health with a liberal allowance of brandy. Reprinted from the *Bengal Chronicle* the *Times* supplied its readers with this potion-like remedy which was composed of: "one ounce cinnamon water, one grain ipecacuanha, 35 drops tincture of opium, one drashm spirits of lavender, and two tincture spirits of rhubarb." <19> This concoction guaranteed quick results, exactly what kind of results they failed to mention.

A writer for the *Medico-Chirurgical Review* advocates one of the more shocking procedures for the treatment of the cholera patient. The writer is at first in accord with previous remedies mentioned so far where use of alcohol and hot water is concerned. At the end of the article, however, the writer adds a new twist stating, "The injection of 50 or 100 drops of Batley's sedative, or common laudanum, in a small quantity of gruel into the

rectum might prove to be beneficial." <20> Other Methods were developed that were not as vulgar and would be more acceptable to a twentieth-century mentality. Smith advocated the use of "diluted oxygen" or nitrous oxide to help counteract the foul air in the lungs. This of course was of no success, but it was a bit more on track when compared to his other associates who were previously mentioned.

Others employed chlorine to disinfect water supplies, but this was discovered to be ineffective in controlling cholera. Instead it was felt the only true means the individual had against cholera was cleanliness and ventilation. <21> A major breakthrough was made by a man named Robert Koch who reasoned that cholera perishes while stagnant in water pipes. Koch wrote,

One could only imagine that they [*V. cholerae*] like other bacteria, occasionally adhere to solid objects, e.g. to the inside of a pipe system, which will be the case particularly if the movement of the water is slowed down temporarily or permanently. Generally speaking, the unequal movement of the water in a piped system must exert a considerable influence on the transport of the cholera bacteria and for this reason alone one pipeline may bring many and another few of the organisms to the corresponding houses. <22>

This could never be brought into practice because the pressure of halting water flow would cause metal pipes to fracture and wooden pipes to burst completely. One man, a Dr. Thomas Latta, applied another doctor's theory, Dr. O'Shaughnessy, and had incredible results. The procedure was described in the *Times*:

[O'Shaughnessy] was struck with the remarkable deficiency in the serum of the blood remaining in the body of the cholera patient. This suggested to him the practice of throwing into the blood vessels a quantity of water, with salt and albumen (the white of an egg) sufficient to supply the deficiency in the blood of these materials. <23>

The correspondent illustrated the benefits of this salt water infusion by depicting a patient dying of cholera and instead of dying from having 40lbs. of salt pumped into his system over 24 hours, was restored to perfect health. A patient undergoing this treatment has his body warmed, his thirst relieved, and falls into a quiet sleep. This indeed was the best remedy for cholera at that time in that it restored the electrolytes which were flushed out of the body by the infection. It was not a definitive cure however. Although it did restore a few to perfect health, most only experienced temporary relief from their symptoms. After treating a patient with this new method Latta wrote, "I had not been gone long, ere the vomiting and purging recurring, soon reduced [the patient] to her former state of debility." <24> Latta also felt that even if his remedy did cure the cholera, the weakened condition of the patient left him open to other fatal organic infections or that the damage to the internal organs caused by cholera was so extensive that the patient died.

As the summer months of 1832 ended the epidemic was greatly reduced to only a handful of cases by the year's end. Cholera recurred again, however, in 1849. This epidemic was greatly intensified by the larger population and subsequent pollution caused by it. The epidemic was of such a proportion that strict sewer reconstruction and sanitation laws

were enacted. The epidemic of 1831-2 is still significant because it demonstrates what lengths a society will go to protect itself from a disease in which it hardly knows anything about. A common thread which exists in our own society as our medical community struggles to explore the mechanisms of the AIDS virus.

Notes

1 Wohl, *Endangered Lives: Public Health in Victorian Britain*. London: J.M. Dent and Sons Ltd., 1983, p. 118.

2 Ibid., p. 87.

3 Smith, Periscope Section VII *Medico-Chirurgical Review*, 1, Oct. 1831, p. 463.

4 *The Times*, 15, Dec, 1831, 6a.

5 Condell *The Times*, 7, Mar., 1832, 3e.

6 Wohl, *Endangered Lives: Public Health in Victorian Britain*. London: J.M. Dent and Sons Ltd., 1983, p. 88.

7 *Medico-Chirurgical Review*, 1, Oct., 1831, p. 447.

8 Walker, *The Times*, 2, Jul., 1831, 5e.

9 *Medico-Chirurgical Review*, 1, Apr., 1831, p. 58

10 *The Times*, 24, Oct., 1831, 2f. London Cholera Epidemic

11 Smith, *Medico-Chirurgical Review*, 1, Oct., 1831, p. 464.

12 Durey, Michael. *The Return of the Plague: British Society and the Cholera 1831-2*. Dublin: Humanities Press, 1979, p.80.

13 Smith, *Medico-Chirurgical Review*, I, Oct., 1831, p.464.

14 *The Times*, 25, Oct., 1831, 3a

15 Kennedy, *The Times*, 24, Oct. 1831, 2f

16 Smith, *Medico-Chirurgical Review*, I, Apr., 1831, p.464

17 *The Times*, 2, Dec., 1831, 3b.

18 *The Times*, 5, Jan., 1832, 2e.

19 *The Times*, 27, Jun., 1832, Sb.

20 *Medico-Chirurgical Review*. I, Oct., 1831, p.448

21 *The Times*, 5, Apr., 1832 3e.

22 Durey, *Ibid*, p.60.

23 *The Times*, 4, Jun., 1832, If. 24 Wakely, ed., *The Lancet*. London: Mills, Jowett, and Mills, 1832, p. 275. 40.

[Back to the 1993-4 Table of Contents](#)