

Quarantine and the Problem of AIDS

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Men take diseases, one of another.
Therefore let men take heed of their company.
(*Henry IV, Part II*)

IN ANCIENT TIMES CITIZENS NOTED THAT occasionally a disease that had appeared in a distant locale was then sweeping toward them from neighboring villages, or that after a ship from a foreign land reached shore with ill persons aboard, people residing in the port city would take ill. Such temporal sequences cannot be ignored and, if the illness is a serious one, fears escalate as the illness comes closer. Knowing the cause of an illness or its mode of transmission provides some rational approach to interrupting the spread of the disease. Prior to the nineteenth century, however, those were unknowns, and so civil authorities were left with whatever means seemed reasonable in the wisdom of the time to fight the spread of diseases. Protective measures were based upon what we would now consider erroneous explanations for contagion. From this era of scant knowledge comes the origin of the familiar word we use to designate attempts to isolate the sick or contagious from the healthy. "Quarantine" comes from the Italian word for "forty days," one of the arbitrary periods during which ships coming from areas of apparently contagious disease, such as plague, were held at a distance from the people of a seaport (Gerlitt 1940).

That this form of defensive isolation has come to be known as quarantine does not limit its application to ships any more than the more familiar use of the word a few decades back would limit it to

households containing a case of scarlet fever. The concept of quarantine is far broader than its modern applicability to a well-understood communicable disease. Quarantine is a marking off, the creation of a boundary to ward off a feared biological contaminant lest it penetrate a healthy population.

The essential characteristic of quarantine is the making of a boundary to separate the contaminating from the uncontaminated. To consider only quarantine of infectious disease or diseases with short periods of illness and characterized by, say, fever would be to overlook the deeper emotional and broader aggressive character of quarantine. Evidence of this elemental fear of contagion spans the spectrum of defense against yellow fever in the eighteenth century to the growing fear of the AIDS epidemic in the late twentieth century, including other manifestations in between. The assumptions and psychology of quarantine are evident in restrictions against groups who were thought liable to degrade racial purity if allowed to immigrate into a “racially healthy” nation. The multiple determinants of quarantine can be seen in a much earlier age also. The social history of leprosy is an enduring and dramatic example of boundaries being drawn around those with a lengthy illness that was highly feared and believed contagious.

Leprosy

The bacillus responsible for leprosy was not discovered until 1874, only the second bacterial pathogen to be described. In preceding centuries leprosy had often been confused with other skin diseases, but the end result of leprosy—loss of nerve conduction and bodily disfigurement—was frequent enough to ensure continuous alarm about physical signs which might foretell the gradual and, for all practical purposes, irreversible wasting of the body by leprosy infection. Leprosy was dreaded first of all because it was frequently assumed to be incurable and eventually fatal. Second, it was thought to be contagious—somehow. The strict rules established over the millennia to quarantine lepers revealed that people commonly believed that it could be transmitted through touching a leper or coming into contact with his breath. Medical care often falls into the simple sequence: diagnosis, then treatment. With regard to leprosy the sequence became: diagnosis, then separation.

Leviticus, the third book of Moses, contains detailed rules for the diagnosis of leprosy. Once the diagnosis is made, the following is commanded by the Lord:

The leper who has the disease shall wear torn clothes and let the hair of his head hang loose, and he shall cover his upper lip and cry, "Unclean, unclean." He shall remain unclean as long as he has the disease; he is unclean; he shall dwell alone in a habitation outside the camp (Lev. 13:45–46, RSV).

We often associate leprosy with Europe's Middle Ages and indeed leprosy was a widespread problem then. It is estimated that thousands of individual or group asylums called leprosaria existed in the thirteenth century (Rosen 1940). The Christian church had reaffirmed the Mosaic concern with diagnosis and separation. The Third Lateran Council (1179) mandated living provisions for lepers and elaborate rituals were decreed for the ceremony of separation. The common image of the medieval leper is of a forlorn individual coldly isolated and seeking sustenance through begging. It has not been uncommon to believe that the loathsome disease was seen then as God's punishment for sin, particularly venereal transgressions. This belief did exist at that time and the linkage of leprosy with sexual promiscuity, either as a cause or a consequence of the disease, is interesting in light of attitudes toward AIDS now. But medieval society also took a larger and more humane view of leprosy. The Church, the chief instrument for dealing with disease and sin during this era, devised religious ceremonies which had the effect of enlisting the leper's cooperation in his or her isolation. The ritual centered on the leper and presented separation from the remainder of society as a mutually wise decision. Sometimes the leper was encouraged to regard the disease as the sufferings of purgatory here on earth; leprosy was a sign that the leper would pass directly into heaven without the intervening punishment other mortals must endure in order to attain a purified form. Buttressing this concept were the Crusaders returning to Europe with leprosy apparently acquired in the Holy Land. A link between sin and the disease in these cases was unthinkable.

The ritual varied from one diocese to another and over the course of time—for leprosy was a problem that, unlike its victims, would not go away. Fundamentally, the ritual was a service for the dead,

for the leper in effect was declared dead to his society and the communion of the healthy. A priest would conduct the leper to church where the leper would hear Mass kneeling under a black cloth suspended over his head. After Mass, he would be led again by the priest preceded by a cross-bearer to another site in the church where comforting selections from the Bible would be read to the leper. As the leper left the church, he was sprinkled by the priest with holy water. The whole procedure was similar to that of conducting a dead body to the church, the saying of a requiem mass, and the passage from the church to the cemetery. Indeed, some rituals specified that dirt be scattered over the head of the leper or onto his feet while, in some dioceses, he would be standing in a freshly dug grave. When at last the leper had concluded his role in these elaborate ceremonies, he separated himself from society while the priest admonished him:

I forbid you ever to enter the church or monastery, fair, mill, marketplace, or company of persons. I forbid you ever to leave your house without your leper's costume, in order that one may recognize you and that you never go barefoot. I forbid you to wash your hands or anything about you in the stream or in the fountain and to ever drink; and if you wish water to drink, fetch it in your cask or porringer. I forbid you to touch anything you bargain for or buy, until it is yours. I forbid you to enter a tavern. If you want wine, whether you buy it or someone gives it to you, have it put in your cask. I forbid you to live with any woman other than your own. I forbid you, if you go on the road and you meet some person who speaks to you, to fail to put yourself downwind before you answer. I forbid you to go in a narrow lane, so that should you meet any person, he should not be able to catch the affliction from you. I forbid you, if you go along any thoroughfare, to ever touch a well or the cord unless you have put on your gloves. I forbid you ever to touch children or to give them anything. I forbid you to eat or drink from any dishes other than your own. I forbid you drinking or eating in company, unless with lepers (Brody 1974).

The priest might follow these uncompromising orders with a comforting message. At Reims the ritual included this expression:

This separation is only corporeal; as for the spirit, which is uppermost, you will always be as much as you ever were and will have part and portion of all the prayers of our mother Holy Church, as if every day you were a spectator at the divine service with others.

And concerning your small necessities, people of means will provide them, and God will never forsake you. Only take care and have patience. God be with you (Brody 1974).

Lepers took a prominent role in the diagnosis of leprosy. One or more lepers might be on the committee responsible for these fateful examinations. Within the asylums lepers took care of one another. Religious orders sometimes acted as caretakers of the sick and of the farm which might be associated with the lepers' enclosure, but such a formal mixture of lepers with the healthy was limited.

In the course of the long period during which lepers were feared and segregated, there surfaced indications that not only was it difficult to control lepers who remained unpersuaded that they should be isolated, but also that the placement of large numbers of lepers in quarantined farms required a degree of social organization and resources lacking in many parts of Europe. Prodded by the widespread fear of leprosy, however, church and state institutions perpetuated the practice of quarantine for lepers. Although the quarantine ideally was softened by religious rituals as described above, such benign practices were balanced by other instances of brutality in some places and by programs of extermination operated by Henry II of England and Philip V of France. Eventually leprosy became the metaphor for heresy, moral turpitude, and unnatural and excessive lust. Leprosy resisted one wave of attempted cure after another—alchemical, miraculous, penance, whatever stirred hope—while contorted bodies suffering its late stages continued to evoke dread and promote quarantine.

Leprosy can be contrasted with diseases whose courses are dangerous but short such as plague, yellow fever, and cholera. The isolation of ships coming from lands where plague was present was the classic example of quarantine. During the Black Death of the fourteenth century when a sizable fraction of Europe's population perished through a rapidly spreading, quickly fatal infection, attempts were made both to establish quarantine, on the one hand, for habitations still spared or, on the other, to isolate the sick. Physicians and others with a need to visit the diseased wore apparel which entirely enclosed the body: gloves, shoes, headgear, and a gown with provision for a cache under the nose for holding strong-smelling herbs to purify the air breathed in. Clearly, quarantine and such elaborate personal encasements carry an assumption that diseases are contagious, but the means of

contagion remained unclear. The breath, putrefying organic matter—even the patient's gaze was suspected. With no certainty about what was the target of control, the citizenry's anxiety could quickly shift from one possibility to another, even to groups of people as when Jews were suspected of poisoning wells and deliberately spreading plague as hostile acts toward the majority Christian society. Frustration over their society's failure to halt a terrifying contagion led to destructive, irrational outbursts.

Yellow Fever

The New World did not offer immunity to epidemics. North American port cities were subject to an occasional but nevertheless disastrous onslaught of yellow fever, a viral infection now known to be transmitted by mosquitoes. Cholera spread fear and death through several waves of infection, particularly during the nineteenth century. Cholera was later discovered to be caused by a bacterium and spread through food and water contaminated by human waste. For many years, though, both of these diseases confounded physicians and citizens alike. Observers divided roughly into two camps, contagionists and anticontagionists, which had considerable bearing on the issue of quarantine. Although writers on epidemic disease during the eighteenth and nineteenth centuries did not always maintain a pure belief in one or the other alternative, the differences can be simply stated. Contagionists took what appears to have been the common-sense position of most people through the ages, that a disease was transmitted from one person to another. Anticontagionists, on the other hand, believed that both yellow fever and cholera were caused by many individuals coming into contact with the products of putrefaction as a result of hot weather or the inadequate cleansing of streets, homes, and businesses (Ackerknecht 1948).

These two views postulated strikingly dissimilar conclusions not only for the origin of epidemic diseases but also for their control. When yellow fever struck Philadelphia in 1793—then capital of the United States—government officials fled, many people died, and an acrimonious controversy ensued over the origin of the ailment. Contagionists, who were in the majority at the College of Physicians, argued that the disease had been brought into the city by a ship from the West Indies. Under this line of reasoning, quarantine of suspect

ships was a wise precaution to protect Philadelphia's citizens. Dr. Benjamin Rush professed the opposing view. He argued that the epidemic was caused by summer weather and the spoilage of a shipment of coffee near the wharf. He went on to say that it was actually only the intensification of fever which normally "prevails every year in our city, from vegetable putrefaction" (Rush 1815a). This latter view was quite in keeping with Rush's assertion that all diseases were essentially the same disruption of the body's function. From the point of view of Philadelphians, however, Rush's position was a condemnation of the city itself, while the contagionists' explanation merely called for greater vigilance, with the help of quarantine, against danger from the outside such as ships from the West Indies and visitors to the city of Philadelphia.

From the prospect of the twentieth century, the contagionist-anticontagionist controversy seems paradoxical. The contagionists correctly assumed that a specific infectious agent had to be transmitted to a person in order to elicit a specific disease. It was the anticontagionists, however, who championed sanitary measures such as clean streets and efficient elimination of human waste which we now consider essential to a healthy community. Only later in the nineteenth century would the role of inadequate waste disposal and breeding grounds for mosquitoes be seen to be links in the epidemic chain. Rush denounced the contagionists for advocating quarantines, "that faith in their efficacy, which has led to the neglect of domestic cleanliness." Further, he claimed, "From this influence, the commerce, agriculture, and manufacturing of our country have suffered for many years" (Rush 1815b). The social effects of quarantine were equally to be regretted:

A belief in the contagious nature of yellow fever, which is so solemnly enforced by the execution of quarantine laws, has demoralized our citizens. It has, in many instances, extinguished friendship, annihilated religion, and violated the sacraments of nature, by resisting even the loud and vehement cries of filial and parental blood.

Rush maintained that yellow fever "is propagated by means of an impure atmosphere, at all times, and in all places." Don't quarantine, he admonished, but rather drain the marshes and clean the streets. His plea to reject the contagionists' solution might have been written today in response to conditions found with AIDS patients:

A red or a yellow eye shall no longer be the signal to desert a friend or a brother to perish alone in a garret or a barn, nor to expel the stranger from our houses, to seek asylum in a public hospital, to avoid dying in the street (Rush 1815c).

Benjamin Rush responded to the fear which created, and cruelty which sometimes accompanied, imposition of quarantine. Those consequences now seem all the more regrettable with the additional knowledge that isolation of yellow fever patients had no public health value. The history of medicine, however, is filled with useless and even harmful remedies applied with confidence to the trusting patient. Rush was one of many anticontagionists who believed that not only did a quarantine not help, but, furthermore, those who advocated it were themselves obstacles to clean, airy, and sanitary cities. Cholera epidemics in the United States of the nineteenth century are illustrations of this controversy over the value of quarantine.

Cholera

By 1832, when the first cholera epidemic struck the United States, enlightened physicians were much more in Rush's camp than in that of the contagionists. In fact, anticontagionism had become a mark of the educated physician while the populace continued to hold the unsophisticated view that diseases such as cholera were transmittable from one person to another. Over the objections of physicians, cities did declare quarantines. The president of New York City's Special Medical Council, Dr. Alexander H. Stephens, privately characterized the quarantine he was supposed to help enforce as a "useless embarrassment to commerce." Politically, however, not to have enforced quarantines would have been "suicidal," according to historian Charles Rosenberg. Still, cities which did not impose a quarantine had a commercial advantage over those which turned away or detained ships seeking to enter their ports. Agitation within a city would increase if potential victims could not flee to a countryside believed more safe.

New York expended the most funds and took the most dramatic steps to prevent or curb the cholera epidemic in 1832. Great powers were conferred on the Board of Health which consisted of the mayor, recorder, and Board of Aldermen. During an epidemic of pestilential

disease, the board could regulate all commerce, impose a quarantine on individuals, and “exercise all such other powers . . . as in their good judgment the circumstances of the case and the public good shall require” (Rosenberg 1962). Slum dwellers were evacuated in spite of lawsuits brought by angry landlords. After great difficulties had been overcome, buildings were secured for cholera hospitals. Enormous efforts were expended to clean the streets and other areas where filth accumulated. Provision for quarantine of passengers and goods from infected ports was put in place in the fall of 1831 and, after word was received in June 1832 that cholera had spread from Europe to Canada, the mayor established quarantine rules to the effect that no ship could come within 300 yards of the city or any vehicle within a mile and a half without express permission of the Board of Health.

In spite of these measures, the first cases appeared in New York City in late June and the epidemic was upon the city for the remainder of the summer. The Board of Health received great criticism for its efforts. The job of cleaning the city had been too much to accomplish in such a short time, the cholera hospitals were overcrowded, and it was not easy to find caretakers for the sick and dying. The public had demanded protection, and the response of government at the state and local level was quick and authoritarian. The natural response of the populace was to cordon off the healthy or confine the sick; a show of support for boundaries overwhelmed the medical experts’ assurances that the disease was not contagious and that quarantine was an expensive and useless instrument with which to combat cholera.

Cholera was associated with the poor and immoral. The Special Medical Council stated about two weeks into the epidemic that the disease was “confined to the imprudent, the intemperate and to those who injure themselves by taking improper medicines.” The highest incidence of cholera occurred in the red-light district, a location which the *New York Evening Post* reported to be populated by the vilest brutes whose breath would contaminate and infect the atmosphere with disease “be the air pure from Heaven” (Rosenberg 1962). The cholera onslaught arrived in the 1830s in the midst of the emotionally charged atmosphere of an active temperance movement in which moralizing was common. Advice for resisting the disease frequently included warnings against ardent spirits. One of the most prominent of early American psychiatrists, Dr. Amariah Brigham (1832), advocated that

boards of health be given “the power to *change the habits of the sensual, the vicious, the intemperate.*” The link between illness and morality has maintained a long and strong tradition. When an epidemic illness hits hardest at the lowest social classes or other fringe groups, it provides that grain of sand on which the pearl of moralism can form. Such was the case with a disease which more recently elicited alarmed calls for isolation: tuberculosis.

Tuberculosis

Tuberculosis is similar to leprosy in that it often is a long-term illness which permits the sufferer to remain ambulatory, perhaps for years while potentially infectious. The victim might recover, but the high mortality rate for the illness makes the diagnosis a very serious matter. By the nineteenth century, tuberculosis became one of the most frequent causes of death in the Western World. If the cause and contagiousness of cholera were disputed until a bacterium was proved to be responsible in 1883, it is not surprising that tuberculosis, a more obscure and chronic infection, also caused debate. The general opinion during the last century was that some people harbored a hereditary tendency toward tuberculosis which was exacerbated by poor sanitation and living conditions. The value of quarantine under these circumstances seemed doubtful. Tuberculosis is an example of a disease which evoked quarantine concepts once the cause was established to be a bacterium. Robert Koch accomplished this discovery in 1882.

Ten years after Koch's astounding announcement that the cause of tuberculosis had been found, the first tuberculosis association in the United States was formed in Pennsylvania. From this early effort to combine lay and professional support to battle one disease grew many other associations and eventually the National Tuberculosis Association, now the American Lung Association. The goal of the society was the prevention of tuberculosis by, first of all, “promulgating the doctrine of the contagiousness of the disease” (Rosen 1958). At about the same time, the New York City Health Department initiated steps toward mandatory reporting of tuberculosis cases. Beginning in 1894 institutions were required to submit such reports and three years later physicians

were similarly obligated. Opposition among physicians to this requirement was substantial. Some argued that compelling them to report cases of tuberculosis implied a lack of faith in the practitioners' abilities to take care of their patients. Others resented what they considered to be state interference in the patient/physician relationship, while still others believed that the disease was hereditary regardless of what might be seen under a microscope (Fox 1975). Eventually, however, reporting of tuberculosis cases became mandatory throughout the nation.

Identification of tubercular patients led to requirements that the disease be properly treated. No antibiotic effective against the tubercle bacillus was found until the 1940s, so treatment for the illness shifted from a relatively benign open-air regimen in cold climates, such as at Saranac Lake under the direction of Dr. Edward Trudeau, to a later, more drastic vogue for collapse of one lung and resection of part of the rib cage. A general consensus that patients needed extended periods of bed rest and everyone else needed to have the infected isolated from the healthy led to the construction of tuberculosis sanatoria by state and local governments. The federal government built hospitals for Native Americans who gave evidence of being particularly susceptible to the disease.

We have all but forgotten the terror tuberculosis aroused earlier in this century. The death rate from tuberculosis in 1900 exceeded today's death rate from cancer and accidents combined. As its contagiousness became more widely acknowledged, medical experts increasingly advocated early detection and treatment. Some potential patients, however, tried to evade diagnosis not only to avoid the bad news, but also because being reported as a tubercular would make it difficult or even impossible to obtain insurance or to keep a job. Public health officials seeking authority to bring into treatment anyone who in their view was irresponsible, supported laws which were passed at the state level to permit enforced treatment of the "careless consumptive" and to prohibit the discharge of a patient without approval of the medical staff.

Reports of involuntary treatment laws in Connecticut suggest that they were used infrequently and may have served more as a threat to obtain cooperation of a patient. One reason appears to have been simply the expense of caring for a patient against his or her will, but

it is unclear how many patients or potential patients were affected by the threat to invoke this stringent public health law. The health officer of New Britain, Connecticut, estimated he had invoked it "ten to fifteen times" in the period of 1920 to 1945 (Connecticut Public Health and Safety Committee 1945).

Gradually, the prevalence along with the fear of tuberculosis have declined until both are not now even memories for many Americans. The disgrace of having a disease which was often associated with unhealthy habits, not to mention the isolation from family and neighbors, has faded along with the many hospitals which once were strung across the nation for the care of the tubercular. It is clear, though, that by the time the disease reached its height, public health control measures had overcome many obstacles: the chest x-ray and the tuberculin skin test became so routine as seldom to evoke even a comment from the patient.

Quarantine measures were also applied to other communicable diseases as their pathogens became identified. Efforts to quarantine sick persons and their households were dropped, however, when, in the light of new knowledge, it became apparent that such measures were ineffective. The infectious period of an illness, it was discovered, may occur prior to the onset of obvious symptoms, and the problem of enforcing quarantine has always proved extremely difficult. Just as quarantine appeared to have no remarkable effect on the control of cholera in nineteenth-century America, so did the closing of schools, when infectious diseases such as scarlet fever and diphtheria occurred in the twentieth century, have little benefit and many costs (Hoyne 1941). A similar ineffectiveness was demonstrated during World War I when soldiers with venereal diseases were held in special enclosures (Brandt 1985). Still, it should be borne in mind that quarantine has been most popular when the fear or prevalence of a serious disease has been highest. The fear of a disease, as the history of quarantine indicates, arises not just from a reflection of the physiological effects of a pathogen, but from a consideration of the kind of person and habits which are thought to cause or predispose one to the disease. Likewise, quarantine is a response not only to the actual mode of transmission, but also to a popular demand to establish a boundary between the kind of person so diseased and the respectable people who hope to remain healthy.

Quarantine and the Disease of Immigration

Creating boundaries between groups to prevent entry of undesirable biological characteristics, an essential element in the concept of quarantine, can be seen in the philosophy underlying some of the immigration laws of the United States. Immigration laws have traditionally sought to prevent entry of anyone who would create a public burden. The philosophy of immigration laws early in this century, however, carried the notion of quarantine much farther than to restrict entry of the diseased or disabled. Hereditarian theories of race and racial superiority were buttressed by the discoveries of Mendelian genetics and reports of animal breeding experiments, all of which combined to create the eugenics movement. Those Americans alarmed by the influx of immigration from southern and eastern Europe late in the nineteenth century found in what was then modern genetics a scientific support for their long-standing fear: undesirable races would pollute the Anglo-Saxon germ plasm if allowed to enter the United States and intermarry. There were many exponents of this theory, which so closely resembled a simple view of the germ causation of disease: if a germ entered the body, a specific disease would be caused. Neither the environment, nor educational efforts, nor biological variability of the individual infected by the germ were important. This racial theory surely demanded a defense line around the racially pure just as any quarantine drew the line against that biological contaminant, the cholera germ.

The ideas calling for a racial quarantine are summed up in Madison Grant's *The Passing of the Great Race* (1916), a pessimistic account of undesirable immigration run amok, and of the glory of the Nordic race gradually fading into oblivion. Using eugenics theory to impart a "scientific" admixture to his own fears, Grant warned that intermarriage between two races "gives us a race reverting to the more ancient, generalized and lower type." Accordingly, racial disease could only be prevented by excluding carriers of biological contamination, the central concept of quarantine. This outlook triumphed in the Immigration Act of 1924 which drastically limited the influx of Europeans a person like Madison Grant would have found undesirable. It was so successful that a year after enactment the commissioner of immigration at Ellis Island reported that now almost all immigrants looked exactly like Americans (Higham 1963).

Drugs and Feared Minorities

The quarantine model can also be found in American reaction to the use of dangerous substances by feared minority groups. The United States had an almost unrestricted market in such drugs as morphine, opium, cocaine, and heroin during the nineteenth century and the first decade of this century. The use of these drugs became widespread and in the years around World War I opposition to both their recreational and their excessive use reached a peak of concern. Stringent laws enacted at the federal level assisted a variety of partial and conflicting state statutes attempting to control the use of narcotics. Examination of the campaigns which led to these laws reveals the important role of ascribing certain drugs to specific feared groups. Smoking opium was linked to Chinese immigrants, cocaine to southern blacks, heroin to an urban, violent, and criminal underclass. In the 1930s a similar specific assignment was made of marijuana to Mexican immigrants who had come to the agricultural regions of the nation during the booming 1920s. In the crusade to control dangerous drugs, the emotional energy released by associating drugs with feared groups helped pass legislation prescribing severe penalties. The contrast with drugs which might be addicting and dangerous but commonly used by the middle class, such as barbiturates, illustrates the intense emotions which can be evoked by appealing to the kind of fears which supported the immigration laws of the 1920s (Musto 1973).

By the 1960s, a time of renewed addiction problems in the United States, just being an addict would make a person subject to involuntary confinement for therapeutic purposes. The Supreme Court declared that a state "in the interest of the general health or welfare of its inhabitants . . . might establish a program of compulsory treatment for those addicted to narcotics. Such a program of treatment might require periods of involuntary confinement."¹ Justice William O. Douglas in his concurring opinion went as far as to add that confinement might be justified "for the protection of society" and not just for the treatment of the addict. California and New York established sites where addicts could be committed for treatment. In 1966 the federal government made provision for civil commitment through the Narcotic

¹*Robinson v. California*, 370 U.S. 660 (1962).

Addict Rehabilitation Act. All of these programs for massive detention of addicts failed legislators' expectations: detention proved expensive and the rehabilitation rate was quite low (Drug Abuse Council 1980). For our purpose in considering the possibility of employing quarantine as a response to the AIDS epidemic, it is worth noting that a group which no longer was identified chiefly with an ethnic group but which had one feared trait in common—addiction—could be seen as worthy of confinement for the protection of society by such a champion of personal liberties as Justice Douglas. We have the advantage of knowing that the programs supported by such sentiment proved impracticable.

The role of drugs in feared minority groups is similar to that of a virus in an otherwise fairly healthy group. Eliminate the virus and the group can not only function much more efficiently, but also will cease being a source of infection to the remainder of society. In a way, the fear of drug contagion is a little more optimistic than the hereditarian pessimism that ascribed to some ethnic groups an unalterable inferiority. Remove the drug or discourage its use by punishment and the person and the group will be more easily assimilable and certainly less dangerous. Even so, there were those who said the Chinese, for example, had a racial weakness for opiates but, broadly speaking, the dangerous drug's tangible reality encouraged the hope that its removal would bring a threatening group into a more tractable state.

Cocaine was said to be the cause of southern blacks' hostile attacks upon whites early in this century. Cocaine made the marksmanship of users better than usual, while alcohol happily made the aim worse. Officers in one police department traded in their guns for larger calibers because a mere .32 caliber revolver could not stop a cocaine-crazed black.

The smoking of opium by Chinese was used as an argument against allowing any immigration of that nationality. Reportedly, it was the means Chinese men used to seduce white females. Heroin, on the other hand, supposedly bolstered the courage of underworld figures before a robbery. Champions of the strictest and most punishing antinarcotics laws, such as Captain Richmond Pearson Hobson, called narcotics a racial poison. Hobson warned that the United States was under bombardment by the rest of the world which sought to undermine American values and government through addicting narcotics. Each continent sent its wicked poison: Africa, hashish; Asia, opium; South America, cocaine; Europe, heroin. Captain Hobson was a keen student

of racial degeneration and the parallel here with undesirable races who wished to invade the United States is clear. The solution was to establish a boundary no foreign contaminant could pass (Musto 1973).

Defending a quarantine boundary is helped by a clear distinction between the feared aggressors and those requiring protection. The leper had a prescribed costume and warning signal. Immigrants often had a different aspect than settled citizenry, while within a city, the poor could be distinguished from the middle and upper classes. In the question of narcotics, Chinese, blacks, and Chicanos stood out from the mainstream of society which wished to control better their discontent and hostility by stopping their use of a dangerous drug, if not to expel both the group and the drug from the nation altogether. The convenience of locating a contaminant among a group already held in low esteem and easily distinguishable from the majority of the population should not be underestimated.

When such a group is quarantined, lasting psychological damage may follow. Some insight into the emotional sequelae of quarantining those testing positive for AIDS antibodies (but otherwise unaffected by the illness) may be gathered from studies of Americans of Japanese ancestry who were sent to relocation centers simply because of their lineage. About 120,000 persons, men, women, and children living in western states, were abruptly taken from their homes and settled in government camps for several years on the grounds that they presented a security risk to the United States. In recent years deep regret for this action has been expressed in Congress and by many citizens aware of what happened under the stress of war. Studies conducted on the former detainees reveal a number of reactions including denial, loss of faith in legal protections, turning aggression inward with consequent feelings of guilt, shame, and inferiority, and identification with the aggressor (U.S. Commission on Wartime Relocation and Internment of Civilians 1982). We should try to learn from that era of fear and consider the effects of quarantine on the targets of that fear and at the same time question the efficacy of the quarantine procedure itself.

Acquired Immune Deficiency Syndrome

In light of the history of the quarantine model in its various ramifications, the position of the AIDS victim and society's response to the disease

can be better appreciated. The large majority of AIDS patients in the United States is found within two groups, male homosexuals and intravenous drug users. The disease itself is caused by a virus which is transmitted through being injected into the body by means of a needle or during sexual activity including intercourse. The disease itself occurs in an uncertain fraction of those who have been exposed to the virus. So far, the mortality rate for AIDS has been nearly 100 percent, although the patient may live a year or two after the diagnosis has been made and may be able to live mostly in the community and not in a hospital.

The question is whether AIDS will be seen to have those characteristics which have aroused healthy citizens to call for a quarantine. It is, indeed, a serious disease with, so far, no cure. In this regard, AIDS patients share with lepers of the Middle Ages the sense of an irrevocable death sentence. The groups with which AIDS is most closely associated in this country have traditionally been held in low esteem by the general population, and have been discriminated against in jobs, housing, and everyday social contact. The disease is generally transmitted among drug addicts and homosexuals by means which have been or are still outlawed in the United States. In this regard, AIDS shares with other contagious diseases of the past an association with minorities considered sexually deviant and promiscuous. Like tuberculars and lepers, AIDS patients may have recurrent crises between which life might continue outside the hospital, at home or, at least, in the community. During this time, the patient remains infectious and therefore a source of apprehension. Recalcitrant patients who do not follow recommendations for "safe sex" evoke memories of "careless consumptives" whose presence motivated the passage of special laws permitting their involuntary isolation. Like tuberculous patients, AIDS patients have difficulty obtaining insurance and, like members of any rejected minority linked to a serious communicable illness, the group may be treated as if they all have the most dangerous form of the disease when any one of them applies for employment or housing. In this way, AIDS sufferers share an ascription similar to the widespread association of specific drugs to specific feared minorities. In sum, AIDS patients do have reason to be concerned over the possibility of quarantine or isolation. Are there any countervailing forces?

The first restraint against a rush for quarantine measures to isolate AIDS victims is the extensive experience showing that sustained, effective quarantine for large numbers of persons has not been successful.

Great efforts to control the individual behavior of drug addicts have obviously been thwarted or drug users would not be now spreading AIDS by injecting substances into their veins. Further, the spread of AIDS has not been found to be through casual contact and there is reason to believe that only a fraction of those with AIDS antibodies will develop a serious illness. If, however, longer experience with patients positive for AIDS antibodies reveals a higher incidence of illness in later years, or that AIDS is spreading from groups now chiefly associated with it, i.e., intravenous drug users, male homosexuals, and recipients of blood infected with the AIDS virus, the general population will in all likelihood become highly anxious.

The United States has a long history of distrust of physicians and the medical establishment. The government has also had difficulty regaining its credibility about dangerous drugs after so many excessive warnings, particularly about marijuana, in the 1960s. When authorities make announcements about AIDS their comments rest on considerable public skepticism. This circumstance must be borne in mind by those trying to provide reassurance, for if their reassurance is found later to have been overstated, the public confidence needed to contain destructive emotions will be compromised.

Strong reactions to the threat of AIDS will more likely result in restrictions on individuals if the disease continues to spread and to affect many more unsuspecting citizens. Passions can be mobilized politically and could result in a program to mark or isolate persons testing positive for AIDS antibodies. Quarantine does not have to be shown effective in order to be attempted. The cholera epidemic in New York City in 1832 led to politically mandated quarantine in spite of the almost unanimous opinion of leading physicians that quarantine was a useless expenditure of time and funds. The history of quarantine does not remove the threat of its employment in the instance of AIDS, although history does suggest that an attempt to quarantine large numbers of persons will be unsuccessful.

Perhaps the most helpful counter to unenlightened outrage is public awareness of the enormous effort underway to understand and treat AIDS. This effort includes evidence of the growing success of educational programs among the groups most affected by AIDS.

If the AIDS problem does persist without effective treatment for some years, one can speculate that society or the groups most involved

may develop ritual forms to signify the isolation and eventually fatal outcome imposed upon the diseased. It would appear that such ceremonies for leprous persons helped both the healthy but vulnerable and the afflicted to accept their condition. Of course, the lack of a single religious authority in the modern world may mean that whatever ritual is developed may take on a more civic character.

If other diseases, say, multiple sclerosis and some cancers, are found to be preceded by a lengthy, asymptomatic viral infection, we may see the establishment of a new class of patients in circumstances common to AIDS victims now: a test may reveal the possibility of a fatal outcome years in the future. What are these people to do in the meantime? How will they handle the stress such a diagnosis creates? Our society may become motivated to create a sympathetic ritual or lifestyle not only to sustain but also to acknowledge these citizens. AIDS may be the model for ways to help both the well and the sick deal with such conditions produced by medical advances in etiology and diagnosis, but not in curative therapy.

In conclusion, the application of quarantine efforts to AIDS patients is a possibility depending on such factors as time until an effective vaccine or treatment is available, the spread to larger or more varied segments of the population, and the faith of the public in official pronouncements regarding the illness. AIDS possesses most of the qualities which in the past have motivated efforts for quarantine—association with feared social subgroups, transmission through means the public has deemed unlawful or distasteful, the potential for spread outside these rejected groups to the public at large, and a lengthy period of infectiousness outside hospital confinement. There is no assurance that quarantine will not be attempted. Reminders of its past ineffectiveness, accurate reporting of information on AIDS, and an understanding of the irrational fears which may prompt quarantine are good defenses against it.

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