

# PART 1 OF 4







These World War Two images show that malaria has historically threatened military operations, and in some cases killed more personnel than combat. The military services have often used morbid humor to shock personnel into taking protection measures. The tactic remains commonplace today—though not with human skulls. (Courtesy of the National Museum of Health and Medicine and the National Library of Medicine)

The battle between man and the pathogenic organisms with which he shares this planet has been a seesaw affair. Finding himself for years essentially defenseless against a disease, man has sometimes, by dint of hard work and a bit of luck, slowly turned the tide. With apparent victory in his grasp, his complacency has more often than not been abruptly interrupted by a vicious counter-thrust from the enemy and he has found himself in battle newly joined.

— Colonel Marshall McCabe, 1966.

The year 2020 brought with it the powerful reminder that pathogens can dictate human life. 2020 demonstrated the ease with which diseases spread, the value of preparation in the face of pandemics, and the importance of applying even the simplest countermeasures. Though not well-remembered, disease presented challenges during the Vietnam War as well. Moreover, the war's afflictions were not limited to South Vietnam. Service members brought afflictions home to the United States. Owing to the war's voracious demands for physicians and new ways of thinking in medicine, the United States' military and civilian healthcare systems were transformed as a result.

## MALARIA

Prior to the Vietnam War, scientists believed they had developed adequate control for malaria. They speculated the disease no longer posed a threat to field armies or even world health.

In 1960, U.S. military and civilian personnel stationed in Korea were placed on weekly C-P (chloroquine-primaquine) tablets in a large-scale field trial involving more than 50,000 adults. The results were so successful that C-P tablets became the standard Army regimen by 1962. Scientists believed chloroquine-primaquine was a miracle drug. The malarial parasite ultimately proved resilient.

As the U.S. increased its troop presence in South Vietnam, isolated cases emerged world-wide indicating a certain strain of malaria had grown resistant to drugs. The continued and routine use of drugs like chloroquine-primaquine spurred drug-resistant mutations within the malaria parasite. By December 1965, the overall malaria rate in South Vietnam reached a peak of 98.4 cases per 1,000 individuals per year. Certain units operating in the Ia Drang valley experienced rates up to 600 cases per 1,000 individuals per year. Malaria rendered at least two maneuver battalions ineffective.

Medical science scrambled to catch up. Owing to the eventual development of new compounds such as amino alcohols and quinazolines, U.S. medicine once again effectively combatted the disease.

Malaria's role in the Vietnam War reinforced the importance of establishing permanent federal scientific research programs for diseases where there was no adequate civilian research. Just as in war, so was the case with malaria; there was no room for complacency. Indeed, in its postwar analysis, the U.S. military concluded "the ability of the malarial parasite to repeatedly meet the challenge of manmade chemical assault demands continued skepticism toward any claim to the development of a 'final chapter' in the history of malaria."

## **RABIES**

South Vietnam's domesticated animals were not routinely immunized for rabies. When the United States deployed personnel to South Vietnam in greater numbers, the risks increased exponentially. In 1969 alone U.S. personnel reported 2,967 animal exposures to include licks, scratches, or bites. As a result, 1,628 individuals were vaccinated. 76 were administered an immune serum—a treatment given as a last resort when there is no time for vaccination.



In the United States, pets routinely receive rabies vaccinations. This was not the case in South Vietnam. The United States prepared for the disease and successfully executed a plan of action to minimize its effects. When testing for rabies, scientists remove the brain from the animal's skull. Preserved brains of suspected rabies cases were received for testing in watertight, metal containers that were refrigerated with ice and insulated with sawdust. (Courtesy of the National Museum of Health and Medicine)

South Vietnam's animal population was beyond the control of the U.S. military; therefore, the United States relied upon information and preparation prior to deployment to prepare and execute a course of action. The U.S. obtained and followed the World Health Organization's recommendations on at-risk animal populations and the use of serum following exposure. In South Vietnam, post-exposure treatments were a large part of the rabies program, and pre-exposure immunizations were administered to veterinary personnel who regularly handled animals. Reporting animal bites was mandatory, and these wounds were then treated with immunizations. As a result, within the entirety of the U.S. Army, only one rabies death occurred by war's end.

### SKIN DISEASE

In 1968, the U.S. Army conducted the "Paddy Review," so named because U.S. Army units frequently operated in rice paddies. To the U.S. Army's surprise, the review found that a significant number of U.S. Army units lacked strength sufficient to conduct military operations because many of their personnel were permanently attending sick call from debilitating foot and leg ailments. The culprits were fungus, bacteria, and oversaturated skin. Muddy paddy water had severely weakened the U.S. Army.

Though the U.S. Army recognized that foot disease posed a serious medical threat in wet regions in South Vietnam, the service had underestimated its danger. In 1969, for instance, reports found that skin disease accounted for an average of 47 percent of the total combat man-days lost in certain units.



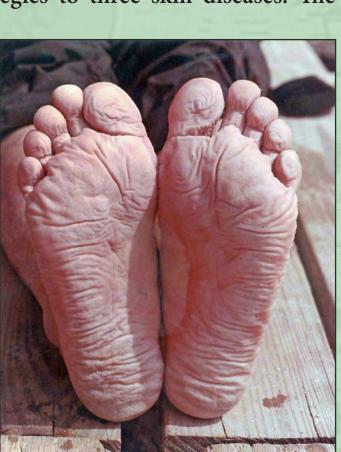
South Vietnam's tropical climate acted as an incubator for bacteria on the skin. When the skin was punctured, surface bacteria made its way into the blood stream. Skin disease became so detrimental to military operations that many United States Army units added a weekly dermatological sick call to assess casualties. Often the simplest solutions, such as antibiotic creams and changes of clothes, were the most effective. (Courtesy of the U.S. Army Office of Medical History)

The Army immediately launched a medical investigation in three areas; the nature of the diseases' cause; the actual manpower lost; and effective control measures. The service quickly determined two important facts: First, only infantry soldiers developed incapacitating diseases on their feet and lower legs. Second, skin disease was nearly impossible to avoid when operating in South Vietnam's wet terrain.

The service looked for solutions in medicine, changes to equipment, and, to whatever degree possible, limiting interactions with saturated environments. The Army launched Operation SAFE STEP and, as part of its approach, conducted controlled experiments on the perimeter of Dong Tam Base. Volunteers tested six experimental boot models, four experimental boot socks, and three different types of protective ointments and lotions. As a result of Operation SAFE STEP, the Army developed mitigation strategies to three skin diseases. The

Army issued improved socks and footwear and developed regulations to prevent and treat skin disease.

Fungal infections caused red, inflamed, and itchy skin. When personnel scratched it, often their skin cracked and bled. Bacteria spread into the broken skin and caused secondary infection. In answer, the Army prescribed a topical antibiotic. With the other two skin diseases, "Immersion Foot" and "Pyoderma Bacterial Skin Infections," the Army found these resulted from continuous underwater exposure in the former, and bacteria's rapid growth and spread in the tropical climate's heat and moisture in the latter. In these cases medicine was of limited use. The Army recommended limiting combat actions to less than 48 hours—except in cases of extreme emergencies—and 24-hour periods of drying out.



Immersion foot was caused by prolonged exposure to rice paddy water and mud in tropical environments. It caused the feet's soles to become soggy with deep wrinkles. Frequently, the top layer of skin peeled off when rubbed at friction points in the boot, which made it painful to walk. The Army's solution was to limit exposure to reduce risk. In October 1968, the Army issued a directive to limit combat operations to 48 hours, followed by a 24-hour drying out period. (Courtesy of the U.S. Army Office of Medical History)



# PART 2 OF 4



Medical students eat with surgical masks covering their noses. Along with hundreds of other students at the school, they wore masks to curtail the spread of Hong Kong Flu. (Courtesy of Getty Images)

Human illness does not respect international boundaries. In this era of rapid transportation it is possible to transmit communicable diseases rapidly over wide areas and into different countries. A person infected with such a disease may leave one country and enter another while his disease is still in the incubation period and consequently unrecognizable only to become infectious to others.

— Industrial College of the Armed Services Committee Report, 1947

The Severe Acute Respiratory Syndrome Coronavirus of 2020 caused roughly 500,000 deaths worldwide in six months following outbreak. The pandemic made clear that the world's sophisticated transportation systems were the highways upon which disease spread.

In 1968, at the height of the Vietnam War, U.S. troops returning to California unknowingly introduced the Hong Kong Flu to the west coast of the United States. From there the disease spread east to every state in the Nation. Over the course of two years, this new flu strain killed 100,000 Americans, and more than one million worldwide.

## HONG KONG FLU

The Hong Kong Flu was named after its origin city. The virus is type A (H3N2), and it is believed to be a "reassortment" of the 1918 (H1N1) and 1957 (H1N2) influenzas. Reassortments occur when similar viruses mix their genetic materials through hosts (like humans) to create new viruses.

Though the sickness was reported among U.S. troops stationed in Southeast Asia, the flu's effects were rarely dire. The duration of illness varied between one and fourteen days. Most were sick three to four days. On average, only 2.6 days were lost to illness. Ultimately, the U.S. military found the disease nonlethal to its personnel. No more than 1.5 percent were sick at any given time.

The Hong Kong Flu was far more dangerous to the homefront. Following its arrival in September 1968, the flu quickly made its way east. Peak infections occurred from December to January 1968-1969, as is often the case with the flu. Hospital admissions began increasing in December 1968, and by early 1969, 74 percent of pneumonia patients showed signs of the virus. A second, less severe wave of illness occurred in the United States late in the following season (1969–1970). Of the two, the first wave was by far the deadliest. Over these two seasons, 70 percent of excess pneumonia and influenza deaths in the United States occurred during the first season. The rapid national deployment of a vaccine greatly reduced the Hong Kong Flu's lethality the following year.

The Hong Kong Flu also presented one of the first opportunities to assess the effect of antiviral drugs during a flu pandemic. In 1966, the Food and Drug Administration approved Amantadine, an antiviral



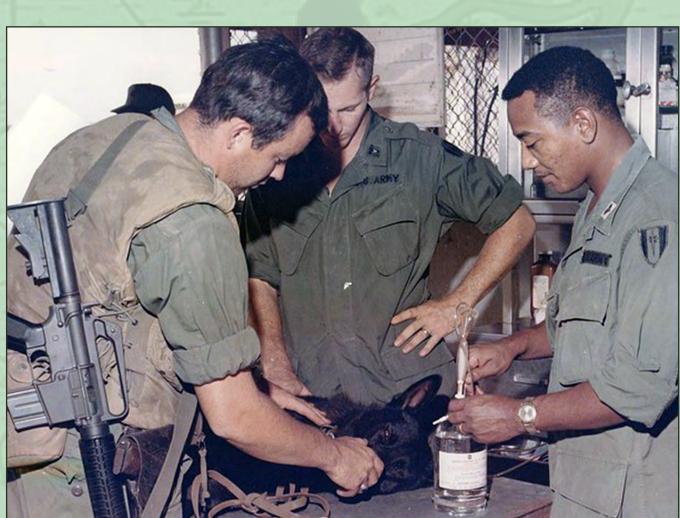
A firefighter receives a flu shot made available to city workers to avoid contracting the Hong Kong Flu. Medical advancements in the 1960s, to include the advent of antiviral medications and the expansion of influenza vaccines, limited the flu's duration and deadliness. (Courtesy of USA Today)

shown to be effective against the previous flu strain, which caused an epidemic in 1957. Studies showed that Amantadine inhibited infections of type A influenza viruses by slowing or outright blocking the disease's entry into cells. It took health experts time to warm to the drug as initial drug trials were conducted on small test groups. Overall, the results in slowing the Hong Kong Flu were mixed. Nevertheless, antivirals remained promising for future use. However, over time flu strains became resistant to the drug. As a result, Amantadine is no longer used to treat type A viruses.

### **EHRLICHIOSIS**

The Hong Kong Flu was not the only disease outbreak the United States faced in 1968. That year a pathogen emerged among military working dogs in South Vietnam. German Shepherds were particularly vulnerable. The disease was a tickborne bacteria (rickettsiae) called ehrlichiosis—also referred to as tropical canine pancytopenia. This was an epizootic disease—an epidemic limited to animals.

In 1968, there were more than 1,000 scout, sentry, and tracker dogs in South Vietnam. The disease caused nosebleeds in its initial stages and quickly progressed from there. It destroyed the military dogs' red and white blood cells, and platelets. The animals experienced lethargy, anemia, and eventually perished from infection or blood disorders. More than 140 canines died from it in 1969 alone. By war's end, ehrlichiosis had killed 200 to 300 dogs.



Ehrlichiosis killed 200 to 300 military working dogs. The disease also caused a constant drain on veterinary resources from 1968 to 1972. The disease occupied much in the way of veterinary service care. It also demanded valuable time, resources, and personnel in veterinary research at the Walter Reed Army Institute of Research. (Courtesy of the U.S. Army Office of Medical History)

The slowdown in death rate was primarily due to the reduction of working dogs in South Vietnam and veterinary research. Initial drug trials saw promising results in administering the antibiotic, tetracycline, for a period of two weeks. The drug made such a strong impression that the U.S. Army's Vietnam Staff Veterinarian cited the antibiotic as a potential reason for the decline in ehrlichiosis. Tetracyclene came into widespread commercial use in 1978.

## CONCLUSION

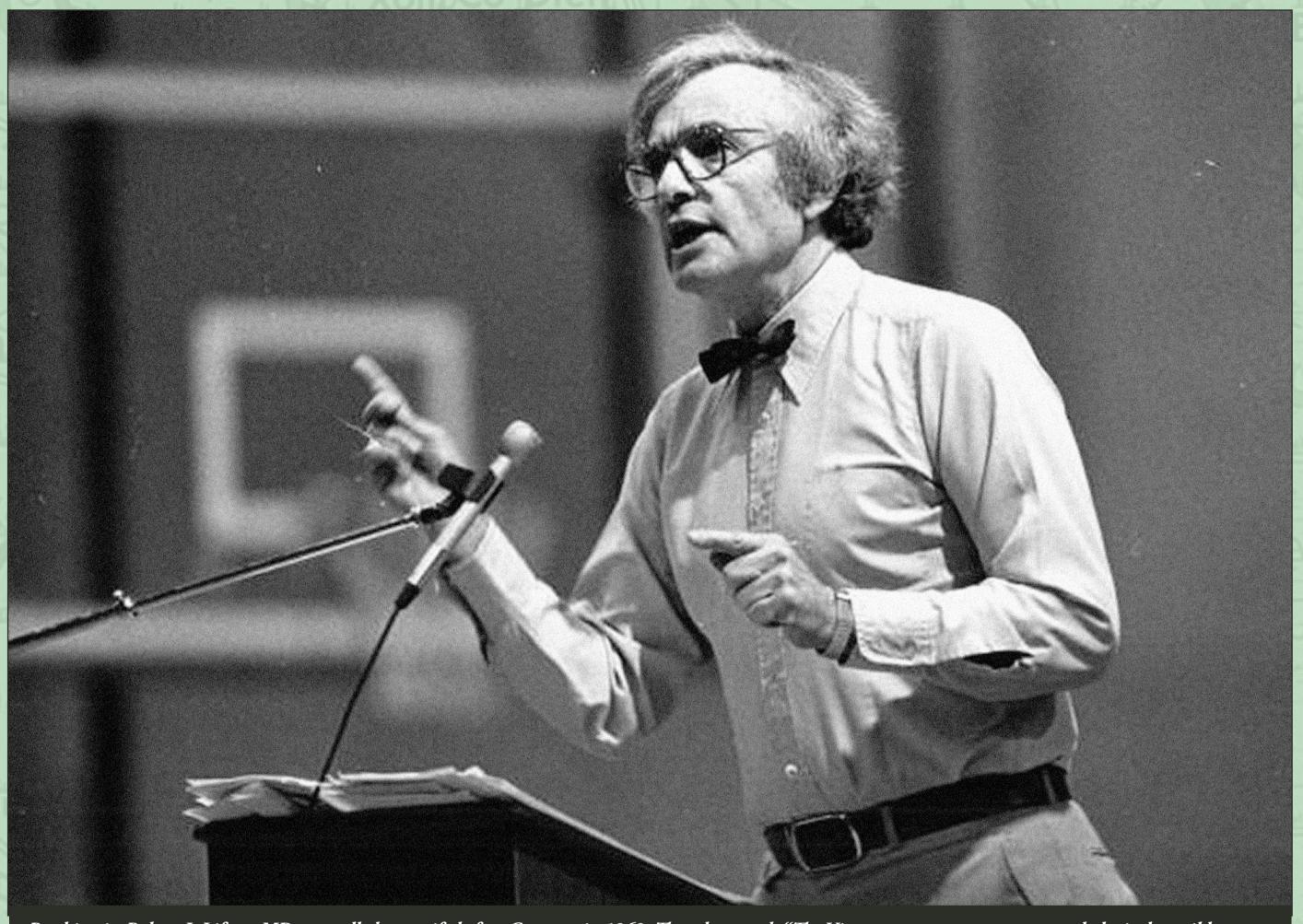
The pandemic of 2020 and the quickness with which it spread proved just how small and interconnected the world has become. It also illustrated the complications that arise when species from different environments are suddenly thrust together. Such was also the case in the Vietnam War. When the U.S. introduced the German Shepherd and other European dog breeds into Southeast Asia, they inadvertently created an incubator for a disease that not only threatened the dog's mission, but its life. Moreover, the disease initially limited the United States' response. The U.S. military was unable to send sick canines back to the U.S. for fear of spreading the infection to domesticated animals within the Nation.

The U.S. could not, however, contain the Hong Kong Flu under the same measures. Like the Severe Acute Respiratory Syndrome Coronavirus, the Hong Kong Flu has a lengthy incubation period that when combined with rapid international transport home, made near inevitable the disease's landfall. Once within the States, the virus quickly spread, where it threatened the Nation's vulnerable young and elderly populations, and created one of the worst flu seasons the U.S. experienced in years. H3N2 remains a seasonal flu in the United States to this day.





# PART 3 OF 4



Psychiatrist Robert J. Lifton, MD was called to testify before Congress in 1969. There he stated, "The Vietnam veteran serves as a psychological crucible of the entire country's doubts and misgivings about the war." Lifton believed war's trauma did not end when personnel returned home to civilian life. (Courtesy of the State Library and Archives of Florida)

There is a great difference between incidence of psychiatric disturbance during the war and what happens to young men after the war.

- Robert Jay Lifton, MD, 1969

Though Americans tend to think of their military and civilian worlds as separate, in truth, they are interconnected in subtle and complex ways, to include medicine. The Vietnam War left indelible legacies on U.S. military and civilian medical systems, and exchanges between the two propelled the specialization of medicine forward. This included scientific understanding and treatment of mental health. In the years following the war, Post-Traumatic Stress Disorder (PTSD) became one of the war's signature legacies.

More broadly, efforts to address doctor shortages in the U.S. military spurred the creation of medical specialties. Exchanges between military and civilian medicine greatly benefited both. They occurred under what was called "The Berry Plan."



Frank Berry, MD, author of the "Berry Plan." More than 47,000 physicians served in the U.S. military under the Berry plan, and U.S. civilian and military medical specialization flourished as result. (Courtesy of the Office of the Secretary of Defense Historical Office)

## BERRY PLAN

The Berry Plan was first conceived in the early 1950s by Dr. Frank Berry, then Assistant Secretary of Defense, Health and Medical, to address shortages of physicians in the military services. Rather than draft the physicians needed, Berry proposed a plan to incentivize physicians to volunteer for a reserve commission at a mutually acceptable time for the service and physician.

Under Berry's proposed rubric, young physicians began in civilian wards and then rotated into military service for further education and training. The exchange connected civilian and military medicine in ways mutually beneficial to both

because physicians benefited from knowledge and experience gained from civilian and military medicine. The U.S. military services predicted their future personnel requirements, and, through the Berry Plan, took medical school graduates to fulfill their needs. As the Vietnam War escalated in 1965, demand for physicians increased.

For the doctors themselves, Berry's plan offered the following: First, those who desired to join the military were able to join the service of their choosing immediately following internship. Second, those serving

in their civilian residencies were allowed to return to them following their military service. Third, doctors could choose full training in a medical specialty of their choice. Many physicians used the Berry Plan to complete their residency and their obligation to the military simultaneously.

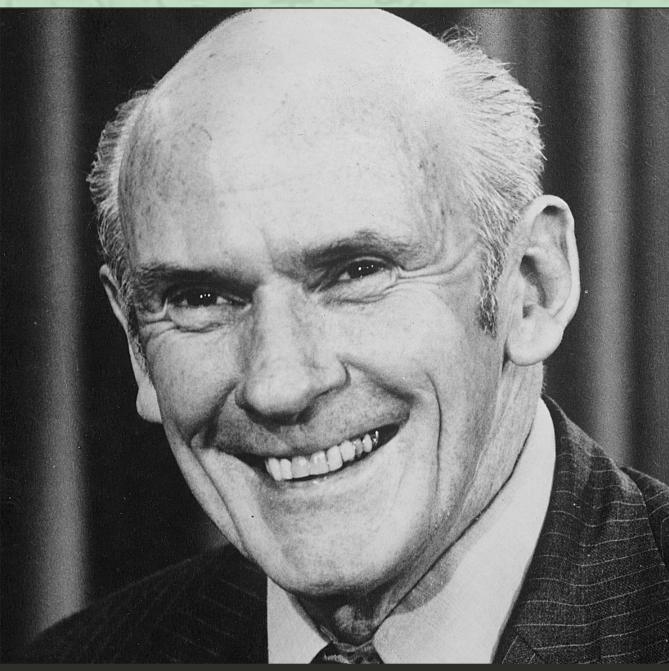
The Berry Plan incentivized specialization. Physician specialists were afforded greater military ranks, and with those ranks, higher pay. Berry Plan participants typically chose medical specialties that kept them out of harm's way. By the 1970s, nearly all Berry Plan participants were fully trained specialists. According to the Navy Surgeon General, Vice Admiral D.L. Custis, the 1970s brought in some of "the military services' most talented officers." Many rose to become service or department chiefs in military hospitals, where they trained interns, residents, and fellows.

## POST-TRAUMATIC STRESS DISORDER

Vietnam veterans had many stigmas attached to them. Media depictions portrayed them as moody and disaffected outsiders. Even before the war ended, some Americans colloquially used the term "Vietnam Syndrome" to publicly diagnose veterans. For some, the clinical term that replaced Vietnam Syndrome, Post-Traumatic Stress Disorder (PTSD), is heavily laden with meaning.

PTSD marked a major shift in mental healthcare. It served as a pivot point from previous clinical understandings and diagnoses of stress, anxiety, and trauma. The term came about following clinical mental health investigations into Vietnam veterans, and first appeared in the third volume of the Diagnostic and Statistical Manual of Mental Disorders (DSM III) in 1980.

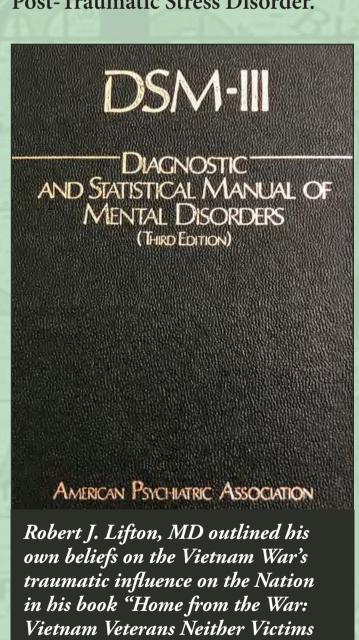
When the American Psychiatric Association released the first edition of the Diagnostic and Statistical Manual of Mental Disorders in 1952, the work used the term "gross stress reaction" to encompass all descriptions of psychological stress previously applied to World Wars I and II, such as "shell-shock," "battle fatigue," "combat fatigue," "combat exhaustion," and "combat stress reaction." "Gross stress reaction" was diagnosed "in situations in which the individual has been exposed to severe physical demands or extreme emotional stress, such as in combat or in civilian catastrophe (fire, earthquake, explosion, etc.)." The manual went on to state "in many instances this diagnosis applies to previously more or less 'normal' persons who have experienced intolerable stress." The treatment removed the person from the stressor for a brief time and provided them comfort and support. The presumption was this would return the person to normalcy. This meant removing personnel from



Senator Alan Cranston began his political career as an ardent proponent for veterans' rights. He was instrumental in bringing Robert J. Lifton, MD and his research to the public eye. Cranston served as the Chair of the Veterans Affairs Committee from 1977 to 1981, where he championed federal assistance programs in education, mental healthcare, and housing for veterans. He served in Congress from 1968 to 1992. (Courtesy of the Library of Congress)

the battlefield and providing them bed rest, food, and clean showers for a few days. Presumably, Service members then returned to their units in a fit mental state.

In 1968, at the height of the Vietnam War, the American Psychiatric Association released the second volume of the DSM, which removed the term "gross stress reaction" and replaced it with "transient situational disorder." The DSM II's clinical diagnosis stated that "fear associated with military combat and manifested by trembling, running and hiding" was a "transient situational disorder," an acute and treatable maladjustment to adult life. This assumption proved to be incorrect, paving the way for Post-Traumatic Stress Disorder.



traumatic influence on the Nation in his book "Home from the War: Vietnam Veterans Neither Victims nor Executioners." Post-Traumatic Stress Disorder's inclusion in the third edition of the Diagnostic and Statistical Manual of Mental Disorders was the end result of his work with psychiatrists, veterans, and the U.S. Congress. (Courtesy of the University of Hawaii Library System, West Oahu)

As the Vietnam War wound to a close, psychiatrist Robert J. Lifton (himself a veteran of the Korean War) and his team of mental health specialists conducted sessions with Vietnam veterans to talk about their war and postwar experiences. Lifton and his team concluded that veterans' anxiety, stress, and trauma did not disappear following their return to civilian life. Lifton argued that removing the individual from the stressor was not enough and that anxiety, stress, and trauma were not limited to military service. Because the effects of trauma could linger, continued psychological treatment was required. These conclusions led to the introduction of Post-Traumatic Stress Disorder into the third volume of the Diagnostic and Statistical Manual of Mental Disorders, which dramatically reshaped Service member, veteran, and civilian mental healthcare in the United States.

## CONCLUSION

Post-Traumatic Stress Disorder and the Berry Plan are evidence that the Vietnam War drove into being new scientific medical understandings. The war brought greater education, knowledge, legitimization, and specialization among physicians to the benefit of military and civilian medicine alike. More than 42,000 physicians participated in the Berry Plan from 1954 to 1974, and they, along with their colleagues who served during the Vietnam War, returned to the U.S. to take up residence in hospitals, medical research centers, and private practices throughout the Nation. These physicians directly contributed to the growth of medical specialties, and, over time, their proliferation has become essential to advancing military and civilian medical science. Today, many of these specialties operate at the forefront of the 2020 pandemic and include virology, epidemiology, pathology, serology, and immunology, among many hundreds of others.



# PART 4 OF 4



37th President of the United States Richard Nixon briefs the press on a bi-partisan Congressional leadership meeting on drug abuse in June 1971. President Nixon is flanked by Jerome H. Jaffe, John Ehrlichman, and Egil Krogh. Jerome Jaffe served as the head of Nixon's drug office. He instituted policies and procedures requiring returning U.S. military personnel to be drug free. (Courtesy of the Richard Nixon Presidential Library and Museum)

America's public enemy number one in the United States is drug abuse. In order to fight and defeat this enemy, it is necessary to wage a new, all-out offensive. This will be a worldwide offensive dealing with the problems of sources of supply, as well as Americans who may be stationed abroad, wherever they are in the world.

- President Richard Nixon, 1971

Diseases were not the only afflictions in Vietnam; when U.S. personnel arrived in increasing numbers in 1965, they provided a ready source of income to Southeast Asia drug merchants from Thailand, Burma, Laos, and Vietnam who were accustomed to planting, harvesting, processing, transporting, and marketing drugs—to include heroin, an opioid. By the late 1960s, the United States military feared the casual use of soft and hard drugs within the ranks threatened its mission. In response, the military immediately instituted procedures, regulations, and programs to combat rising drug use. They aimed to find users, eliminate them from the ranks, and, where possible, cure drug addiction to restore combat power.

# DRUG USE IN UNITED STATES AND SOUTH VIETNAM

Illicit drug use was a significant cultural phenomenon in 1960s and 1970s America and was indicative of the social and cultural transformation underway in the Nation. Drug use was common among youth, who, as part of the countercultural movement, rejected the social norms of previous generations; yet these values never took hold among the U.S. political elite. In the months leading up to and following his inauguration in 1969, President Richard Nixon harkened to what he referred to as the "silent majority" of Americans that quietly held traditional values—to include the sharp rejection of drug culture. President Nixon and the silent majority believed drug use signaled the erosion of American values. At a press conference on June 17, 1971, Nixon declared drug abuse "public enemy number one."

U.S. military efforts to identify users had already begun prior to Nixon's announcement. In the late 1960s, the military established a drug treatment program at the 98th Medical Detachment in Nha Trang. To identify users, the military established urinalysis clinics and called upon its junior leaders to closely examine their personnel. Though these urinalysis programs heavily taxed medical laboratory personnel and resources, they were exceptionally effective at identifying users.

Initially, the U.S. military took the stance of "zero tolerance" to push users into psychiatric care, its legal system, and out of military service. For instance, the Army deployed Regulation 635-212 to drum users out on the grounds that they were unfit to serve. Yet, as time wore on, the military services increasingly found their legal and mental healthcare systems clogged and overwhelmed. The services began to change course, and increasingly sent abusers for hospital care and treatment (that often also included psychiatric care). The military enacted rehabilitation programs to grant users a second chance. These programs were commonly known as "Amnesty."

As early as 1969, the U.S. military began testing the efficacy of Amnesty programs. Whether the user was found through urinalysis screening or voluntarily admitted, Amnesty provided them the "assistance to overcome [their] need for the drug." The goal was "to have every individual return to [the U.S.] in a drug-free condition." The Amnesty program stated it was "a humane and compassionate approach to the drug user who exhibits sincere desire to stop using drugs." This was "the essence of the exemption program."



The U.S. military wasted little time in establishing urine collection stations throughout South Vietnam. All commands instituted involuntary screening and expanded testing for amphetamine and barbiturates, as well as heroin. Clean urine became a requirement to travel back to the United States. In its efforts to cure users before they came home, the Nixon administration's methods were not unlike the quarantine procedures governments use to slow the spread of disease. (Courtesy of the Defense Health Agency)

By 1971, however, drug use was still prevalent. Though statistics vary on the degree to which U.S. military personnel represented "true addicts,"—a term applied to persons who were physically and psychologically addicted—roughly 20 percent of U.S. Service members in South Vietnam admitted using drugs. Some studies and reports placed the percentage much higher. Drugs were plentiful, cheaper, and purer than their counterparts in the United States. Heroin that went for \$100 in the U.S. frequently cost less than \$15 in South Vietnam. One observer noted, "Fourteen year-old girls were selling heroin at roadside stands on the main highway from Saigon to the U.S. Army base at Long-Binh; Saigon street peddlers stuffed vials of 95 percent pure heroin into the pockets of [personnel] as they strolled through downtown."



A contemporary take on a "Groovy Bus," a colorfully painted vehicle typically associated with the 1960s and 1970s counterculture. The counterculture was made up of many social, cultural, and political movements that rejected U.S. mores, norms, and laws, to include longestablished prejudices against drug use. (Courtesy of James Stave)



The U.S. military had at its disposal three types of urinalysis tests, which were able to identify users for about three days following their last usage. Urine screening tied down significant resources. For their part, U.S. military personnel dubbed the requirement "Operation Golden Flow." (Courtesy of the Defense Health Agency)

# ASSESSMENT OF DRUG USE PREVENTION EFFECTIVENESS

The U.S. military conducted an internal assessment of its alcohol and drug education and prevention programs in 1973. The review found that, in the short term, the military failed to discourage alcohol and drug abuse among its youngest personnel, who were lower grade enlisted Service members, where abuse was at its worst. The report argued that programs placed too much importance on "personal feelings, motivations, and behavior by presenting facts alone." The military had failed to recognize that "some young soldiers belong to a youth or drug sub-culture which legitimizes drug use; they use drugs because they enjoy them," while "other young soldiers use drugs out of boredom or to relieve their personal problems." Success, the report argued, depended upon persuasively addressing these two groups. Adjustments needed to be made.

## CONCLUSION

The U.S. military was unprepared for drug use in South Vietnam. Though its mitigation efforts saw some successes, ultimately, the end of the war and the creation of the all-volunteer force were the principle reasons drug use in the military sharply declined. By removing the Service member from an environment where drugs were plentiful and cheap, and shifting the U.S. military toward volunteerism—and the benefits afforded to volunteers—the branches of service were able to exert greater control over personnel and the environment in which they operated. With these changes in effect, the U.S. military crafted lessons learned from the Vietnam War that sharply curtailed drug use in its general population, and even insulated the institution from further national and worldwide drug outbreaks, to include, most recently, the opioid epidemic.

# LEGACIES

During the Vietnam War, United States military personnel and citizens alike faced afflictions. Many of their remedies would seem familiar to those who experienced the Severe Acute Respiratory Syndrome Coronavirus of 2020. Military personnel and citizens limited their exposure to pathogens, enacted simple yet effective measures to control the spread of disease, vaccinated to build immunity among the population, and reframed how they defined mental health. The Vietnam War left indelible legacies on the United States. One of the war's most important is a frequently forgotten reminder that, in dictating human events, the affliction gets a vote.