VIETNAM ERA STUDY (VES), WASHINGTON UNIVERSITY. Opiates were used extensively by American servicemen deployed to Southeast Asia during the latter part of the Vietnam War. The availability of high-potency heroin increased suddenly in the spring of 1970. Drug-related hospitalizations and deaths among servicemen in Vietnam sharply increased in the following months. A concurrent U.S. drug epidemic accelerated in the late 1960s and continued through the mid-1970s, with heroin use incidence peaking in 1971. The dire prospect of large numbers of returning servicemen addicted to opiates spurred the fear that the heroin epidemic would further spread in the United States.

In June 1971 President Nixon declared the War on Drugs. Operation Golden Flow, as facetiously termed by soldiers, commenced at departure locations in Vietnam where soldiers were tested for drugs by urinalysis through the Date Eligible for Return from Overseas (DEROS) program. Soldiers whose urine was positive for narcotics (opiates, amphetamines, or barbiturates) were provided five to seven days of detoxification and treatment prior to their return to the United States. The Special Action Office for Drug Abuse Prevention (SAODAP)—what is now considered the first Drug Czar office—launched a follow-up survey in the United States with the collaboration of the Department of Defense, the Veterans Administration (VA), the National Institute of Mental Health (NIMH), and the Department of Labor. The study was conducted by Washington University School of Medicine in St. Louis, with Lee N. Robins, Ph.D., as principal investigator. The study examined how many men had actually been addicted in Vietnam, and whether those addicted would continue to use heroin or become re-addicted after their return to the United States (Robins, 1974; Robins & Helzer, 1975a).

ORIGINAL STUDY
Two groups of 500 army enlisted men were selected for the first in-person survey, a random sample of veterans returning in September 1971 (general-sample), and another random sample of men whose urines had been positive when tested at DEROS (D+ sample). A total of 898 men were interviewed in 1972 within 12 months of their return from Vietnam. The servicemen were extremely frank: 97 percent of men whose military record showed drug use reported it to the interviewer. Subsequently, a total of 571 veterans were reinterviewed in person in 1974, three years after returning home. A total of 284 nonveterans were also interviewed in 1974 to take into account the natural remission pattern from drug use of men in that age group who were eligible for draft but never served. They were selected from Selective Service registrations and individually matched to the general-sample veterans with respect to draft eligibility, draft board location, age, and education completed by the time of the veteran’s entry into service (Robins & Helzer, 1975a).

FOLLOW-UP STUDIES
After two decades of hiatus, Washington University began third and fourth surveys (VES-III & IV) in 1994, with Rumi Kato Price, Ph.D., as principal investigator (Price et al., 2001a, 2001b). The surveys were conducted in collaboration with the VA and with funding from the National Institute of Drug Abuse (NIDA) and later funding from NIMH. Of the total 1,226 veterans and nonveterans whose location information was stored from earlier surveys, 10.5 percent died by the end of 1996, when they would have been 47.5 years old on average if they had been alive (Price et al., 2001b, p. 311). The location rate was more than 93 percent for the surviving members, and 841 men were reinterviewed in 1996–1997. The main purpose of the third study, a 25-year follow-up, was to examine long-term mortality and morbidity consequences of the Vietnam War and drug abuse in middle age. The fourth follow-up, completed in 2006, focused on coping with mental health consequences of war experiences, such as post-traumatic stress disorder (PTSD) and suicidality.

The findings from the earlier 1972 and 1974 follow-ups surprised the scientific community. First, opiate use in Vietnam was much more common than the military had estimated: Almost half (43%) of the army enlisted men had used heroin or opium in Vietnam. Second, 20 percent of the general sample reported being addicted to narcotics (mostly opiates) in Vietnam, but only 12 percent of those addicted in Vietnam became re-addicted in the year after return (Robins et al., 1975b, pp. 957–959). Follow-up interviews two years later showed that this low rate of readiction
continued. During their second and third years home, addiction rates among drafted men were not significantly greater than among men who qualified for the draft but did not serve. Those who relapsed to narcotics were predominantly men who had used drugs before they entered the service (Robins & Helzer, 1975a). Noteworthy are other reports of this study group and other veterans, which show an excess of alcohol abuse (O’Brien et al., 1980) and poor social adjustment among those with a history of opiate use in Vietnam, as well as the appearance of depressive syndrome associated with combat experience (Helzer et al., 1976).

The third follow-up in 1996–1997 showed that the 25-year cumulative mortality rate since 1971 was 17.4 percent among drug-positive (D+) veterans and 7.4 percent among the remaining general-sample veterans; the nonveteran sample experienced a 2.8 percent mortality rate (Price et al., 2001b, pp. 311–313). Both in-Vietnam and post-Vietnam drug use factors were large and significant independent predictors of mortality, controlling for preservice drug use, continuity to later drug use, and demographic and other behavioral measures (Price et al., 2001b). Among the surviving members, the study found relatively stable patterns of frequent use of sedatives, stimulants, marijuana, cocaine, and opiates over the 25-year period. New relapse to opiates was extremely rare. The mean duration from initiation to the last remission ranged from 9 to 14 years. A majority intentionally attempted to quit illicit drugs; however, most did not use traditional drug treatment in their last attempts. Continued drug dependence often occurred with psychiatric disorders. Whereas 17.2 percent met the criteria for a drug dependence diagnosis since 1972, 20.7 percent met criteria for a lifetime post-traumatic stress disorder (PTSD) diagnosis, according to the Diagnostic and Statistical Manual of Mental Disorder, Fourth Edition (DSM-IV). The drug dependence rate decreased over time from 45.1 percent in 1971 to 5.9 percent in 1996; on the other hand, PTSD was stable and chronic. The rate of suicidality increased until around 1985, then hovered between seven to eight percent each year after that. Drug dependence increased the likelihood of having PTSD and suicidality during young adulthood. In later years those who were suffering from PTSD or suicidality may have used illicit drugs in part to self-medicate psychiatric symptoms (Price et al., 2004).

Less than nine percent of the then-current drug users in 1996 had been treated for their drug problems in a hospital setting during the previous five-year period. This rate was considerably lower than alcohol abuse treatment and psychiatric treatment among those with PTSD. A selected sample of veterans answered open-ended questions about their health care problems at the fourth follow-up (VES-IV) when they reached their mid-50s. The group at higher risk of suicidality in mid-life was significantly more likely to report both individually-based (such as belief in self-healing and not wanting care) and system-based (such as lack of insurance and bad experience) barriers to care and also more likely to experience negative effects of seeking care (Price et al., 2001a; Virgo et al., 2007). Thirty years after Vietnam, veterans’ health care needs still appeared undermet.

See also Addiction: Concepts and Definitions; Drug Testing Methods and Clinical Interpretations of Test Results; Opioid Dependence: Course of the Disorder Over Time; Vietnam War: Drug Use in U.S. Military.

B I B L I O G R A P H Y


LEE N. ROBINS
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**VIETNAM WAR: DRUG USE IN U.S. MILITARY.** In the spring of 1971, two members of Congress (John Murphy and Robert Steele) released an alarming report alleging that 15 percent of U.S. servicemen in Vietnam were addicted to heroin. The armed forces were attempting to cope with the drug problem by combining military discipline with “amnesty.” Anyone found using or possessing illicit drugs was subject to court martial and dishonorable discharge from the service; but drug users who voluntarily sought help might be offered “amnesty” and brief treatment. This policy apparently was having little impact, as heroin use had increased dramatically over the preceding year and a half.

Because the United States was trying to negotiate settlement of the war, military forces in Vietnam were being rapidly reduced. About 1,000 men were being sent back to the United States each day, many of them to be discharged shortly thereafter to civilian life. If the reported rate of heroin addiction among servicemen were accurate, this rapid reduction in force meant that hundreds of active heroin addicts were being sent home each week. Concerned about the social problems that could ensue from such an influx of addicts, President Richard M. Nixon charged his staff with seeking an effective response. Domestic Council staff members Jeffrey Donfeld and Egil Krogh, Jr., sought advice from Dr. Jerome H. Jaffe, then on the faculty of the University of Chicago, who had previously prepared a report for the president on the development of a national strategy for the treatment of drug dependence. Dr. Jaffe recommended a radical change in the policy for responding to the problem of drug use in the military. The suggested plan included urine testing, to detect heroin use, and treatment rather than court martial when drug use was detected. President Nixon endorsed the plan and the military responded with such remarkable rapidity that, on June 17, 1971, less than six weeks from the time it was proposed, the plan was initiated in Vietnam.

In fact, there was no way to know whether the new approach would be better than the old one, no reliable information on the actual extent of drug use and addiction, and no solid information on which to base estimates of how many servicemen would require additional treatment after discharge. To obtain information on the extent of drug use, the effectiveness of treatment, and the relapse rates it would be necessary to find and interview the servicemen at time of discharge and at various intervals after discharge.

In June 1971, President Nixon also announced the formation of the Special Action Office for Drug Abuse Prevention (SAODAP) charged with coordinating the many facets of the growing drug problem and named Dr. Jaffe as its first director. One of the first tasks of the office was to evaluate the results of the new drug policy for the military, especially as it was implemented in Vietnam. SAODAP arranged for Dr. Lee Robins, of Washington University in St. Louis, to obtain records from the Department of Defense and the Veterans Administration to conduct the study. The findings on drug use prior to and during service are summarized here.

The men sent to Vietnam had either been drafted or had enlisted. Toward the end of the war, when drug use in the United States was highest, draftees were chosen by a lottery designed to make selection less susceptible to social-class biases. This produced draftees who were a reasonably