How Permanent Was **Vietnam Drug Addiction?**

LEE N. ROBINS, PhD DARLENE H. DAVIS. AB DAVID N. NURCO, DSW

In 1971, drug use by U.S. servicemen in Vietnam had, by all estimates, reached epidemic proportions. A follow-up study of returning Army enlisted men was carried out in order to facilitate planning of programs for these soldiers and to gain insight concerning the natural history of drug use and abuse when drugs are readily available to young men from all types of social backgrounds. Findings on the permanence of Vietnam drug addiction are presented.

Background

During the summer and fall of 1971, drug use by United States servicemen in Vietnam had, by all estimates, reached epidemic proportions. Starting in June, 1971, the military screened urines of returning servicemen for drugs just prior to their scheduled departure from Vietnam. In September, 1971, the U.S. Department of Defense estimated that 5 percent of all urines of Army servicemen tested indicated drug use in the period immediately preceding, despite common knowledge that such testing would be done and would result, if positive, in a six or seven day delay in departure from Vietnam

At this time. American troop strength in Vietnam was being reduced rapidly-returning to the United States each month thousands of men, of whom about 40 percent were due for immediate release from military service. The Armed Forces, the Veterans Administration, and civilian drug treatment facilities were concerned that the arrival of these men might tax existing drug treatment programs. There was also concern about how drug use might affect veterans' ability to get and hold jobs, as well as their chances of becoming involved in criminal activities if they continued heroin use in the United States, where the price of heroin was many times its price in Vietnam. If the men designated as "drug positives" at DEROS (Date Eligible for Return from Overseas) were actually heroin addicts and if heroin addiction among these soldiers was as chronic and unresponsive to treatment as it had been found to be in the heroin addicts seen in the U.S. Public Health Hospitals at Lexington and Fort Worth, 1, 2, 8 there was reason for concern.

To evaluate these concerns and to learn how many men

Dr. Robins and Mrs. Davis are from the Department of Psychiatry, Washington University School of Medicine, 4940 Audubon Avenue, St. Louis, Missouri, 63110, and Dr. Nurco is consultant to the Special Action Office for Drug Abuse Prevention, Washington, D.C. 20506. This paper, presented to the Committee for Problems on Drug Dependence, Mexico City, March, 1974, is supported by Contract No. HSM-42-72-75; DA 3AC 680; DA 4 RG 008; MH-36,598, and MH-18864. would require treatment, the kinds of treatment and social services they might need, and how to identify which men needed services, the White House Special Action Office for Drug Abuse Prevention (SAODAP) asked the first author to carry out a follow-up study of Army enlisted men who returned from Vietnam to the United States. 3, 4, 5, 6, The second author was the senior assistant on the project, and the third author served as SAODAP's representative as a consultant to the project and as liaison with the supporting governmental agencies: U.S. Departments of Defense and Labor, the National Institute of Mental Health, and the Veterans Administration.

This study promised not only to answer questions relevant to planning programs for these soldiers, but also to teach us something about the natural history of drug utilization and abuse when drugs were readily available to young men from all over the United States and from all kinds of social backgrounds. The present paper on the permanence of Vietnam drug addiction comes from this larger effort,6 and is the first paper to go beyond analyses included in the official reports.

The Study

Approximately 13,760 Army enlisted men returned to the United States from Vietnam in September 1971. From this population of returnees, a simple random sample of 470 was selected as the General Sample. Within the population of 13,760, approximately 1,400 had been found to have urines positive for narcotics at time of departure. From this subpopulation who had shown positive urines at departure from Vietnam, a simple random sample of 495 was selected, the Drug Positive sample.*

^{*} While we believe that simple random samples were achieved of both general population and its subpopulation of men detected as positive at departure, there were some complications in identifying the populations from which to sample. These difficulties and their solutions are described in Appendix A of the Interim Final Report entitled "A Follow-Up of Vietnam Drug Users".3 There was an overlap of 22 between the General Sample and the Drug Positive Sample.

Between May and September 1972 (8 to 12 months after return), these men were sought for interview and a urine sample. In addition, their military records were abstracted and their names sought among Veterans Administration claim

Military records were obtained for 99 percent; a VA claims record for 22 percent. Interviews were obtained for 95 percent and, of those interviewed, 98 percent of the General Sample and 97 percent of the Drug Positives provided urine specimens. Since the rate of interview was 97 percent of the 466 surviving members of the General Sample and 95 percent of the 493 surviving members of the Drug Positive sample, and since over 90 percent of every subgroup defined by race, age, rank, or type of discharge yielded interviews, unbiased estimates of responses by both drug free and drug using veterans were virtually insured. The interview covered observations of drug use in Vietnam, opinions as to how the Army should cope with drug use, and personal histories in five time periods-before service, in service before Vietnam, in Vietnam, in service after Vietnam, and since discharge. Personal history items included drug and alcohol use, family problems, marital history, social relationships, school difficulties, job, arrests, depressive symptoms, psychiatric treatment, and disciplinary action.

Validity of the interview was measured against military records, urinalysis at interview, and VA records. The interviewer had no way of knowing ahead of time whether a subject was from the general or drug positive sample and so could not influence the validity of the subject's report of his drug use in Vietnam; nor did subjects know that their veracity could be checked. Thus it was gratifying to find that 97 percent of the drug positives admitted heroin use in Vietnam and 86 percent reported their detection as drug positive at departure. The high reliability with respect to drug use in the military makes us optimistic that reports of post-Vietnam drug use are equally valid.

When the men were interviewed between May and September of 1972, only 19 percent were still on active military duty. The remainder were civilians who had been out of the military an average of seven months. Most (75 percent) had returned to their home towns. Thus the vast majority of men who had been exposed to heroin in Vietnam had now returned to the settings from which they had left for service two to three years before. This paper will examine the extent to which those who reported addiction in Vietnam continued to use narcotics after their return.

Results

Among returnees in the general sample, 43 percent reported having used narcotics in Vietnam (Table 1). Not quite one-half (46 percent) of the men who said they used narcotics in Vietnam reported becoming addicted to them while there and 23 percent of the users had a positive urine at departure. After return from Vietnam, not only did the number of users drop dramatically, from 43 percent of the general sample to 10 percent, but the proportion who became addicted among those who used also dropped. Seven percent of those reporting having used any narcotics since they have

been back reported that they had been addicted since their return. (These self-reported addicts since return make up 1 percent of the general sample.) The low rate of readdiction among users seems to be confirmed by the urine specimens obtained at interview. At interview only 1 percent had a positive urine (7 percent of those who claimed to have used any narcotic in the 8 to 12 months since return).

TABLE 1-Narcotic Use in 3 Time Periods (Interviewed General Sample, N = 451)

				Since Return	
	% Since Return	% In Vietnam	% Before Vietnam	% Compared with Vietnam	% Compared with pre- Vietnam
Any narcotic use	10	43	11	-33 -27	-1
Any heroin use Narcotics more than weekly for a month or	7	34	2	— 27	+ 5
more Addicted to narcotics	4	27	1	-23	+3
at any period Urine positive for	1	20	*	—19	+ 1
narcotics	1	10.5	_	-9.5	

^{*&}lt;0.5%

Heroin was commonly used both in and after Vietnam, if any narcotic was used. Of all who tried any narcotic in Vietnam, 79 percent used heroin, as did 74 percent of those who took any narcotic since Vietnam. But the overall rate of narcotic use in the months since return from Vietnam had changed very little from the rate reported for men before leaving for Vietnam. Before seeing this as a simple return to pre-Vietnam practices, however, one should remember that the post-Vietnam period represents only ten months of these men's lives, whereas the pre-Vietnam period represents their whole lives prior to going to Vietnam. Since most of the men left for Vietnam when they were about 20 years of age and narcotic use seldom begins before age 16, the period at risk of using narcotics before they left for Vietnam was about four years, five times as long as the period at risk since their return.

While the overall use of narcotics after Vietnam was approximately the same as before, there was more regular use, more heroin use (as opposed to codeine), and more addiction among men after their exposure in Vietnam. Thus, post-Vietnam narcotic use was more serious than pre-Vietnam use, even if not more common. Nonetheless, heavy or addictive use was still much rarer than might have been expected, based on the high recidivism rates reported for treated civilian addicts. There have been no studies of addict populations in this country that show anything like the 95 percent remission rate after ten months, which is what a drop from 20 percent addicted while in Vietnam to 1 percent after Vietnam suggests. On the other hand, there has never been a situation in this country in which addicts make up 20 percent of a general population.

While Table 1 describes overall levels of use of narcotics since return, in Vietnam, and before Vietnam, Table 2 follows individuals through their narcotic use pattern during the three time periods. Its purpose is to explain how overall narcotic use levels remained about the same despite Vietnam. In Section A of Table 2, we note that about 85 percent of the sample had the same post-Vietnam behavior with respect to narcotics as they had had before Vietnam. Most of this stability was due

to people who had never used narcotics at all, neither before they went to Vietnam, nor in Vietnam, nor after Vietnam. These abstainers account for 55 percent of the total general sample. The group who were consistent narcotic users before, in, and after Vietnam is very small, only 3 percent. Another big subgroup, 27 percent of the sample, is made up of people who had never used narcotics before they went to Vietnam, used them in Vietnam, and then guit at the time they left. Not all of these men who used narcotics only in Vietnam quit all hard drugs after their return. Thirty-two percent used amphetamines or barbiturates. For 17 percent, these were drugs they had also used before Vietnam; for 9 percent, they were drugs first used in Vietnam; for 6 percent, they were drugs first used after Vietnam.

TABLE 2—How Narcotic Use Levels Remained the Same, Despite Vietnam

(interviewed deficial Sample, 14—451)					
%	-1%	Effect			
85	55 3 27	0			
8	7 1	_			
7	7 0	+			
	% 85	% —1% 85 55 3 27 8 7 1 7 0			

The return to pre-Vietnam narcotic use levels cannot be explained entirely by the large group who used narcotics for the first time in Vietnam and then quit before departure. The stability of the rates reflects the fact that the number who had used narcotics both before and in Vietnam but stopped before they left Vietnam is balanced by the number who used narcotics for the first time in Vietnam and continued them after leaving. This raises the possibility that Vietnam may not only have introduced some soldiers to narcotics for whom drugs will be a long term problem, but also may have hastened the dropout from use for some pre-Vietnam users, perhaps by speeding up the addiction process or by their witnessing other people's problems there. Of those who had used narcotics before Vietnam and continued using them there, 75 percent quit by the time they left. Of those who used narcotics for the first time in Vietnam, 80 percent quit on or before departure. There is remarkably little difference in rates of quitting between these two groups.

Table 3 refers to addiction to narcotics. It shows first that almost all the men addicted to narcotics in Vietnam had had no prior addiction, even though some of them had tried narcotics previously. Most of their earlier narcotic use had been a casual use of codeine cough syrups. The lower section of Table 3 restricts itself to those first addicted in Vietnam, since they constitute the great majority of Vietnam addicts. Of men in the general sample who first became addicted in Vietnam, almost two-thirds quit all narcotic use by the time they left Vietnam. One-third used occasionally after they were back in the States but did not become readdicted, and only 2 percent became readdicted after their return. Results were much the same for men first addicted in Vietnam who were detected as drug positive at the time they left, even though to be detected these men must have used narcotics right up to the time of

departure. More than 60 percent of detected addicts stopped all narcotic use as they left Vietnam and did not resume it after their return to the United States. About one-third continued to use but did not become readdicted, and only 7 percent have been addicted to narcotics since their return.

TABLE 3— Vietnam Addiction, Terminable or Interminable? (Enlisted Men Returning September, 1971)

	General Sample (451)	Men Detected as Drug Positive at DEROS (469)
Proportion of Total Sample Reporting		
First addiction in Vietnam	20%	73%
First addiction before or after Vietnam	•	2
Post-Vietnam Narcotic Use of Those First		
Addicted in Vietnam		
Total	(90)	(341)
Quit all narcotics	65	61
Use without addiction	33	32
Addiction	2	7
Of men with pre-Vietnam narcotic use	27	(106)
Quit all narcotics	59	44
Use without addiction	41	44
Addiction	0	12
Of men with no pre-Vietnam narcotic use	(63)	(235)
Quit all narcotics	67	69
Use without addiction	30	26
Addiction	3	5

^{*&}lt;.05%

Men first addicted in Vietnam were more often detected as drug positive at departure if they had had some experience with narcotics before Vietnam. The group of particular interest is those men who not only were first addicted in Vietnam but who were first introduced to narcotics there. This is the population about which there has been the most public concem. For this group of Vietnam addicts who were "narcotic virgins" at arrival in Vietnam, again we find more than twothirds, whether they were drug positive at DEROS or not, stopped all use of narcotics when they left Vietnam. Twentyeight percent used narcotics at least once since their return without becoming readdicted, and the addiction remission rate was 95 percent.

The similarity in outcomes between addicted men detected as drug positive and those in the general sample has theoretical and practical relevance. There are some social scientists who think that a necessary condition to the continuation of deviant behavior is that it be recognized as deviant, i.e., that the actor undergo stigmatization. Men who were officially detected as drug positives at DEROS were detained from departure for treatment and given an official record as drug users, clearly a stigmatizing experience. About one-half of the self-reported Vietnam narcotics addicts in the general sample never came to any official attention while in Vietnam, neither through urine screening at departure nor earlier in their Vietnam tour of duty. Since there was little difference in later addiction rates between the drug positive and general samples, stigmatization in itself apparently does not lead to a fixing of the addiction.

The two samples differed not only in stigmatization, but in treatment experience. Men who came to attention as drug positive at DEROS were forcibly detoxified, being held for five to seven days until they had at least two clean urines before being allowed to board a plane for return to the United States. Vietnam addicts who were not detected at DEROS got no treatment then, and many had had no treatment earlier in their tour either. The similarity of outcomes after Vietnam between detected and non-detected addicts suggests that the forcible detoxification may not have been necessary over the long term, since relatively few of either group had been readdicted after their return. On the other hand, detoxification did assure that men would not develop withdrawal symptoms en route, and so simplified managing the flight home. It is also possible that detoxification was responsible for the fact that men using narcotics right up to departure did not have a much higher rate of relapse after return than men who had quit sooner.

Figure 1 is based on the data in Table 3. It contrasts these data with results from a study of NARA (Narcotic Addict Rehabilitation Act) patients less than 30 years old who had had six months of treatment at Lexington and had then been released to after-care.7 This chart shows that the later narcotics experience of men first addicted in Vietnam was the direct opposite of the experience of men in the NARA program. While more than two-thirds of the addicted Vietnam veterans had no use after their return, more than two-thirds of the NARA patients were readdicted six months after their release. Among Vietnam addicts who used narcotics after

return without becoming readdicted, most were occasional users. Among NARA patients who used but were not readdicted after six months, most were using frequently, suggesting that readdiction would probably occur shortly. The small insert at the right in Figure 1 shows a subgroup among men first addicted in Vietnam with a greater liability to continue addiction, men who had had narcotic experience before they ever got to Vietnam. In this group, most did use some narcotics in the period after Vietnam and 12 percent became addicted again. Still, they more closely resembled the total group of Vietnam addicts than they did the NARA sample.

The results found for the NARA population are typical of results found for follow-ups of other addict samples drawn from public treatment facilities and prisons. 1, 2, 8 Such results underly the stereotypes on which public policy has been based: (1) that narcotic addiction is virtually permanent and recalcitrant to treatment, and (2) that casual use of heroin is rare and when it occurs is only a brief phase on the road to readdiction. It is these stereotypes that justify urging treat-

NARCOTIC USE IN THE 8-10 MONTHS POST VIET NAM BY MEN FIRST ADDICTED IN VIET NAM

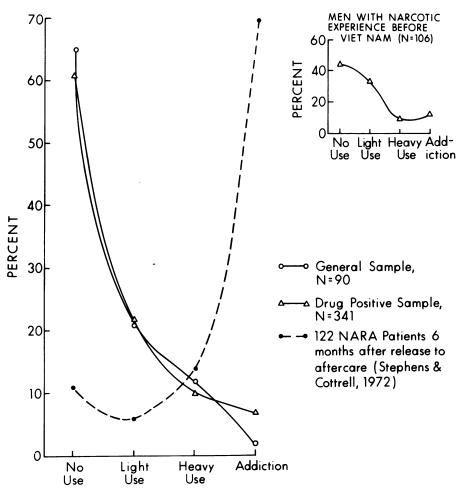


FIGURE 1-Narcotic Use in the 8-10 months Post-Vietnam by Men First Addicted in Vietnam

ment on every narcotics user, actively addicted or not, since the risks of permanent addiction are considered to be very high. Before suggesting that that policy might be revised in the light of our Vietnam findings, we need to answer two questions: (1) Was ten months back in the United States long enough to see a resumption of addiction?; (2) Had these men really been addicted in Vietnam?

The NARA patients had been released only six months and our Vietnam veterans had been back in the States an average of ten months, so they presumably had plenty of time to become readdicted if their pattern was like that of the NARA patients. However, the released NARA patients, having become addicted in the United States, had sources of supply to return to. The returning Vietnam veteran would have to find a source of narcotics in order to begin again. Our evidence suggests that the reduction in heroin was not because they could not find heroin if they wanted it. Of all those who began narcotics again after their return, use generally began within the first four months, with the median date of commencing between the second and third month. This two-month delay before recommencing did not seem to be caused by any difficulty in locating a source of supply in the United States. Those who learned a Stateside source of narcotics were asked how soon after return they had learned one. Sixty-two percent did so within the first week they were back, and 81 percent within the first month. However, this first source may have been within the military. Since almost all had been discharged within two to three months, they had to find a civilian source if they were to continue use long enough to get readdicted. With return to civilian life, opportunities to purchase narcotics seem not to have dwindled significantly. Asked in interview whether they still knew a place to get narcotics, 94 percent of those who had learned any place since their return claimed that they could still buy narcotics if they wished. Therefore, the low rate of addiction does not seem to have been a result of having been back or having been a civilian for too short a period of time to locate supplies of heroin.

The second question, whether Vietnam addicts were really addicted, was one we tried very hard to answer. When men reported use of narcotics in Vietnam, we asked them what kinds they had used, how many times they had used them, for how many months they had used them more than weekly, whether they had had withdrawal symptoms, how many times, what kinds of withdrawal symptoms they had, and how long the symptoms lasted. We found (Table 4) that virtually all who claimed to have been addicted in Vietnam had used both heroin and opium while there, that all had used a narcotic more than five times, that 80 percent had used a narcotic regularly for more than six months, that all but 2 percent reported withdrawal symptoms while in Vietnam and most experienced withdrawal several times, and that more than 80 percent reported the classic withdrawal symptoms of insomnia, flushing and sweating, runny nose, and chills. Other symptoms were less common, but none of the common symptoms of withdrawal occurred in less than 50 percent of those reporting withdrawal. If the withdrawal was unmodified by other drugs and allowed to go to its conclusion without going back onto illicit narcotics, the duration was more than two days for 97 percent of those who reported withdrawal.

TABLE 4—Were Self-Reported Vietnam Addicts Really Addicted?

	"Addicted" General Sample (91)	"Addicted" Drug Positives (349)
1. Did they use narcotics more than a few	%	%
times?		
Narcotics used 5 + times		
Heroin	97	99
"Opium joints"*	75	61
Opium	58	51
Morphine	3	7
Methadone	2	5
Codeine cough syrup	1	2
How many types of narcotics used 5 +		
times		
One	20	30
Two	75	57
Three or more	5	13
Number of months of regular (>weekly)		
use		
Less than 1 month	0	1
1 month to less than 6	17	17
6 months to less than 9	40	30
9 months plus	43	52
. Did they inject?	40	32
Ever	35	50
Usually	14	23
. Did they suffer withdrawal?	14	25
Number withdrawals in Vietnam		
	2	3
None		
Once	18	14
Twice	25	30
Three plus	55	53
Withdrawal symptoms reported (if any)	(89)	(337)
Insomnia	90	98
Flushing	88	87
Runny nose	82	90
Chills	82	87
Cramps	76	83
Diarrhea	73	73
Muscle pain	68	80
Nausea	66	55
Gooseflesh	64	79
Twitching	58	63
Length of withdrawal (if unmodified and		
complete)	(65)	(247)
Less than 48 hours	3	5
2-4 days	46	44
5-10 days	40	38
5 .5 days	40	00
11 + days	11	13

^{*} Marijuana cigarettes laced with opium.

These findings indicate that a few men who claimed they had been addicted in Vietnam probably were not physiologically dependent. The 2 percent who said they had no withdrawal, and the 3 percent who said they had had withdrawal but it had lasted less than 48 hours were either not addicted or only very mildly addicted. But the vast majority seemed to have had all of the classic symptoms of addiction. In the light of the easy availability and purity of the drugs available, there is no reason to think that this group had an especially light addiction; nor was their period of addiction particularly short. Almost all who became addicted began using narcotics in the first few months of their year's tour in Vietnam and so had six months or more in which to experience addiction.

To see whether our findings of high remission rates after Vietnam applied to true addicts, we looked at the post-Vietnam narcotic use of men who had been unequivocally addicted in Vietnam, i.e., men with all the following signs: they were still using narcotics at departure; they had had serious, long-lasting withdrawal symptoms following frequent use for more than a month; and considered themselves addicted. Of this group, only 9 percent reported readdiction in the 8 to 12 months since their return to the United States, and 57 percent said they had not used narcotics at all since they came back.

One explanation suggested for the low relapse rate of

Vietnam addicts was an aversion to the injection procedure necessary to use heroin in the United States. Due to the purity and cheapness of heroin in Vietnam, it was possible to be an addict without injecting. However, 35 percent of the Vietnam addicts did inject at least some of the time. If aversion to injection was the chief protection against relapse, those who had injected in Vietnam should show relapse rates similar to the NARA patients. To test this hypothesis, we looked at those self-reported addicts who not only had all the symptoms of dependency and were still using at DEROS, but who had also injected narcotics while in Vietnam (Table 5). The risk of readdiction among addicts familir with injection was greater than among addicts who never injected (16 percent vs. 7 percent), but it was still nowhere near the relapse rate for the NARA patients. (These unequivocally addicted injectors have the highest risk of readdiction of any group of Vietnam addicts we have yet identified.) Even among these needle-using Vietnam addicts, whose use continued right up to departure, almost half (46 percent) used no narcotics at all after they returned to the United States.

TABLE 5—The Use of the Needle in Vietnam as a Predictor of Continuing Use in Men Detected as Drug Positive at DEROS

	Dependent Dependent, Not			
	and	Never	Dependent	
	Injected	Injected	in	
	in Vietnam	in Vietnam	Vietnam	
	(81)	(275)	(113)	
Post Vietnam Narcotic Use				
Addicted	16%	7%	3%	
Regular use, denies				
addiction	15	9	3	
Occasional use	23	20	8	
No use	46	64	86	
	100%	100%	100%	
If Used At All After Vietnam .	(44)	(98)	(15)	
Addicted	30%	18%	20%	
Regular use, denies				
addiction	27	25	20	
Occasional use	43	57	60	

Discussion

Having found that rather low readdiction rates apply to men who had really been addicted in Vietnam and who had been back in the United States long enough to become readdicted if they wished to or were driven to it by unbearable craving, we need to rethink public policy with respect to forced treatment. When only a small proportion is likely to become readdicted, should treatment be forced on all, particularly without evidence that the treatment is effective? (A report of our unsuccessful attempt to find evidence for the effectiveness of Army treatment is included in the Final Report.6 For most, Army treatment was brief detoxification with minor tranquilizers. For men detained longer, group therapy was often offered.) Of course, those who feel they need treatment should have access to the best that we have to offer them, but at least for Vietnam veterans there seems no reason to proceed as though anyone found using heroin is in immediate and serious danger of lifelong addiction unless put into treatment.

Most addicted Vietnam soldiers either gave up their nar-

cotic use voluntarily shortly before their departure or did not revert to use after brief forced detoxification subsequent to their discovery as users at departure. At this point, we do not know whether their high remission rate at 8 to 12 months after return will be long-lasting. To learn this, we are planning to reinterview these veterans after they have been home three years. It would also be important to know whether this high remission rate—whether or not it continues—is characteristic only of military personnel or only of those military personnel whose addiction began in a setting as different from the United States as Vietnam. It is possible that this pattern of temporary addiction with recovery to abstention or casual use may also be common in civilian addicts who have not come to official attention. So far, long-term studies of civilians have been confined to treated samples. We may guess that the wider use of narcotics in the last few years has probably involved some young people whose use of heroin did not mean that they were willing to commit themselves to life within the drug culture, and that spontaneous remission may thus be increasingly common among civilians. Since we now know that remissions of many month's duration do occur in the vast majority of at least some types of addicts, intervention policies should be tailored to the probability of spontaneous remission for the particular persons addicted. Learning these probabilities for civilian addict groups with various identifiable characteristics requires follow-up studies of civilian addicts identified by epidemiological studies of general populations. We can no longer justify applying policies to every narcotics user that are based only on information about the careers of those addicts whose appearance in treatment facilities as volunteers or in lieu of prison sentences shows an inability to terminate their addiction on their own.

References

- Hunt, G.H. and Odoroff, M.E. Follow-up Study of Narcotic Drug Addicts after Hospitalization. Public Health Rep. 77: 41-54, 1962
- 2. O'Donnell, J.A. Narcotic Addicts in Kentucky. Public Health Service Publication No. 1881, U.S. Govt. Printing Office, Washington, D.C., 1969
- Robins, L.N. A Follow-Up of Vietnam Drug Users. Special Action Office Monograph, Series A, Number 1, Washington, D.C., April, 1973
- Robins, L.N., Davis, D.H. and Goodwin, D.W. Drug Use by Army Enlisted Men in Vietnam: A Follow-up on Their Return Home. Am. J. Epidemiol. April, 1974
- Robins, L.N. Vietnam Veterans' Drug Use. J. Drug Issues, Winter, 1974
- Robins, L.N. The Vietnam Drug-User Returns, Final Report. Special Action Office Monograph, Series A, Number 2, Washington, D.C., May, 1974
- Stephens, R. and Cottrell, E. A Follow-up Study of 200 Narcotic Addicts Committed for Treatment under the Narcotic Addict Rehabilitation Act (NARA). Brit. J. Addict. 67: 45-53, 1972
- Vaillant, G.E. Twelve Year Follow-up of New York Narcotic Addicts. Am. J. Psychiatry 122: 727-737, 1966