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## Problems of Drug Dependence 1980

Proceedings of the  
42nd Annual Scientific Meeting

Committee on Problems  
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## The Effects of Law Enforcement Activity on a Population of Opiate Abusers

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This study examined the effect of police action against heroin pushers on clients of methadone programs in metropolitan Denver. On November 10, 1979, twenty suspected drug dealers and buyers were arrested and another twenty were under investigation in a vice squad operation in metropolitan Denver. The operation involved an undercover agent who mingled with addicts and bought opiates over an extended period from dealers, who were later arrested within a 48-hour period. Newspaper reports indicated that most of those arrested had been selling heroin in the vicinity of the outpatient clinic operated by Addiction Research and Treatment Services (ARTS) of the University of Colorado School of Medicine. Although linked to the clinic by the press, only two of those arrested were known to clinic personnel. In this study we examined the patterns of opiate use of the clients enrolled in that clinic as reflected by the presence of opiate metabolites in their urine samples collected before and after the drug bust. The clinical course of a sample of clients who abused opiates before, but not after the bust was examined. In addition, urine data from the other two methadone programs in the city were examined.

Metropolitan Denver has a population of 1.5 million and is approximately 500 miles from any population center of similar size. Drugs confiscated in arrests in Denver are analyzed at the Denver police laboratory. Less than 10% of the drugs analyzed there are opiates. Approximately half are heroin and half are pharmaceuticals diverted from legal trade by robbery, fraud, or deceit. The quality of confiscated heroin has been declining during the past three years and is currently running from 1/2 to 1 1/2% per sample. The cost of a single balloon or bag of heroin is currently \$25.00. Drugs confiscated outside of Denver are analyzed at the Colorado Bureau of Investigation laboratory. Opiates, primarily pharmaceuticals, form only a small proportion of the samples analyzed.

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An average of 347 people were receiving methadone at the three Denver clinics during the nine months covered in this study. ARTS, the largest of the three and the one linked to those arrested, averages 221 clients, of whom approximately 62% are treated with methadone. The remainder either abuse non-opiates or are drug free. Approximately 53% are Anglo, 28% Hispanic, and 16% black. The remainder are Native American or Oriental. The median age is 29, with a range of 20 to 60 years. Approximately 70% are males. The average dose of methadone is 34 mg.

Urine specimens are required once in every seven days from most of the clients who receive methadone or currently abuse non-opiates. Clients who have had no dirty urines for six months are only required to give urine specimens once each month. Additional specimens may be required at the discretion of the client's counselor. Urine specimens from the Denver methadone programs are analyzed at the Colorado Department of Health laboratory. They are routinely screened for the presence of morphine, dilaudid, codeine, demerol, oxycodone, and hydrocodone using a combined EMIT (Enzyme Multiple Immunoassay Technique, The CIVA Co.) and thin layer chromatography procedure developed at that laboratory (Wislocki et al. 1974).

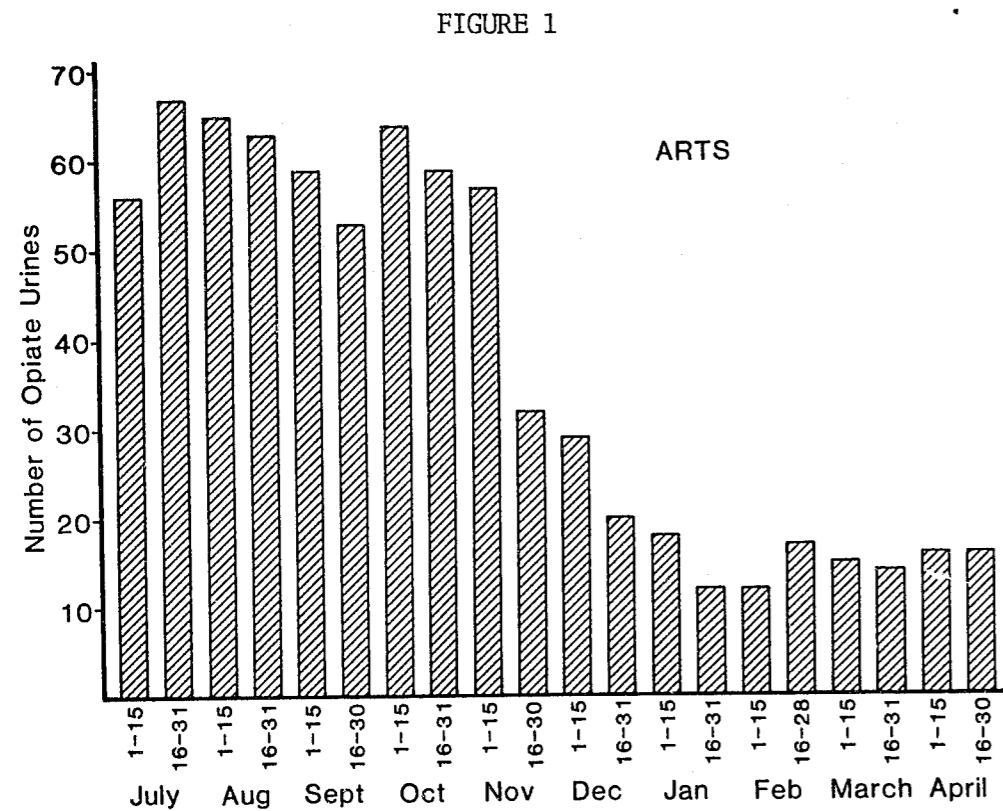


Figure 1. Number of opiate urine specimens collected at the ARTS clinic in 15-day periods before and after the November 10th police operation

The dramatic decrease in the number of urine samples with detected opiates collected at the ARTS clinic following the November drug bust is shown in Figure 1. The number of urines with detected opiates in the 18 weeks following the police operation was less than 1/3 that of the preceding 18 weeks. It is interesting to note that the highest point after the bust is lower than the lowest point before the bust. The percentage of methadone clients responsible for opiate urines is shown in Figure 2. It is clear in these two graphs that fewer clients were using opiates after the drug bust and those who were using, were using less often.

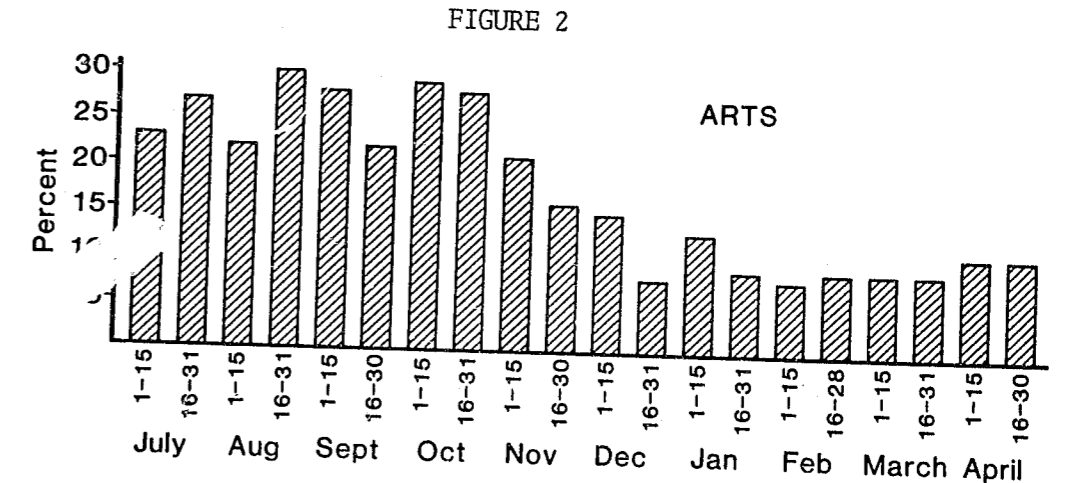


Figure 2. Percentage of clients responsible for opiate urines collected at the ARTS clinic shown in 15-day periods

The impact of the police action against drug dealers was clearly reflected by the decrease in opiate urine samples collected at the ARTS clinic. We hypothesized that the client population of another clinic which was not mentioned in the newspapers in connection with the drug bust, but which is within one half mile of the ARTS clinic, would have been similarly affected, but that the third clinic, located four miles west, would not have been affected. We assumed that demonstrating this difference would provide even stronger evidence of the efficacy of local law enforcement against pushers in a setting such as Denver's. An interservice agreement to allow examination of the urine data slips from the other two clinics was negotiated with those clinics through the good offices of the Colorado Department of Health, Alcohol and Drug Abuse Division. Copies of the urine data slips contain only numbers and are filed at the state health laboratory. There was no way in which an urinalysis report could be associated with a name or other individual identification by the researcher, so there was no possibility of a breach of confidentiality. The agreement was cleared by the Division of Methadone Monitoring of the U.S. Public Health Service.

The population of the eastside clinic, near ARTS, is similar in composition to that of the ARTS clinic. Approximately 42% are

Anglo, 23% are black, and 32% are Hispanic. At the clinic on the west side of Denver 61% are Anglo, 4% are black, and 48% are Hispanic. The average methadone dose at both clinics is approximately 35 mg. Most clients are in the 20 - 35 year age range and 66% are males.

To our surprise, urine data from both of the other clinics showed the same steep decrease in detected opiates following the November police action. The combined data from all three clinics reflects the opiate drug use of essentially all of the opiate abusers in treatment in metropolitan Denver. The number of opiate urines collected in Denver 18 weeks before and 18 weeks after the November 10th police operation is presented in Figure 3. The percentage of methadone clients responsible for the opiate urines in the same period is shown in Figure 4. Again it is clear that, for the city as a whole, fewer clients were using opiates and those who were, were using them less often.

FIGURE 3

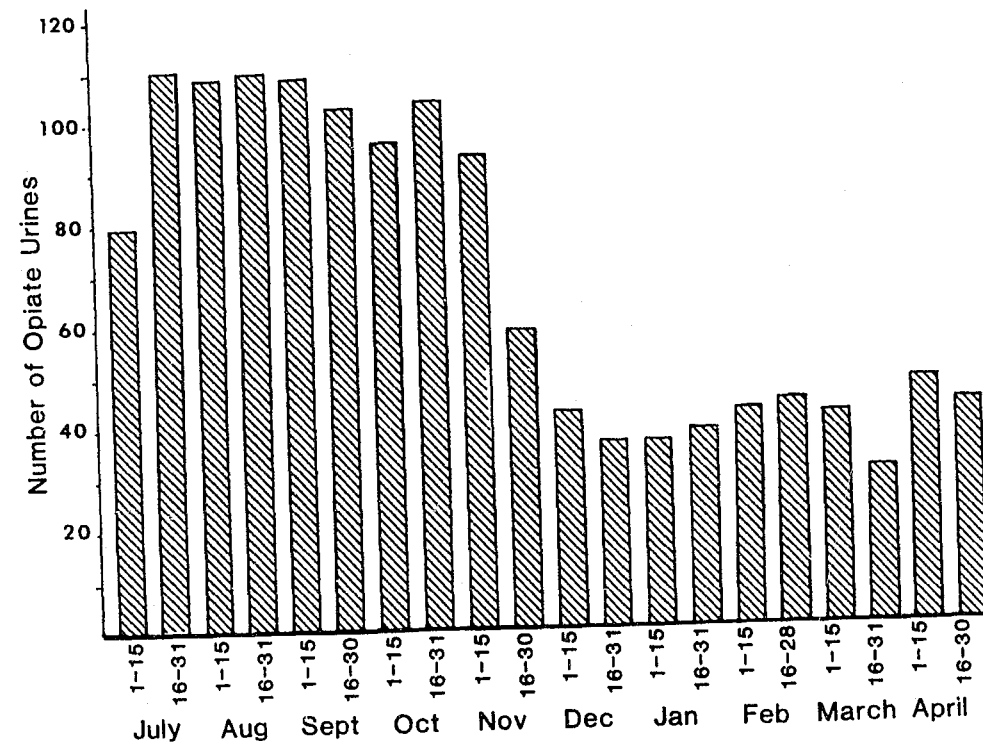


Figure 3. Number of urine specimens with opiates collected from the opiate abusers in methadone treatment programs in Denver before and after the November 10th police operation

FIGURE 4

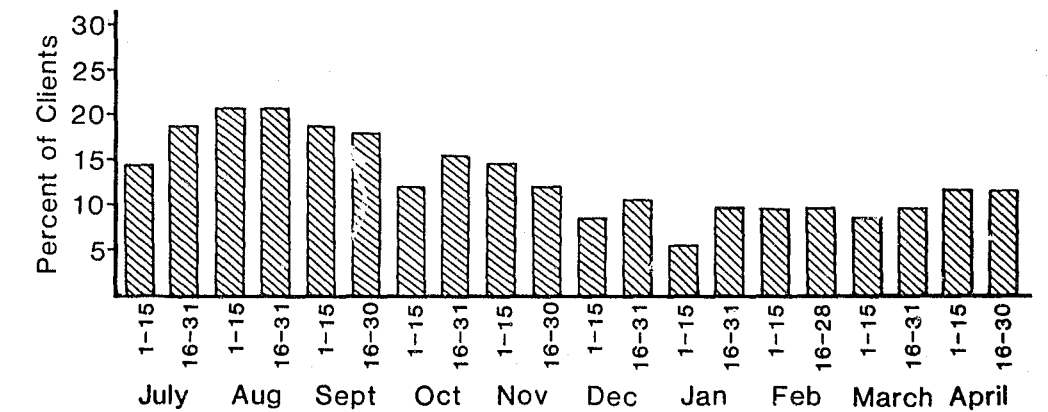


Figure 4. Percentage of clients in methadone programs in Denver responsible for opiate urines before and after the November 10th police operation

The urine data from the three clinics present a graphic example of the effect of heroin supply interdiction by the Denver police, but we were also interested in the clinical impact on individual clients. A sample of clients was drawn from the ARTS clinic using the arbitrary criteria of opiate use in November with a minimum of two opiate urines in the preceding four months and two or less in the succeeding four months. Clinical records of the 21 clients who met these criteria were reviewed and their counselors interviewed. One of the 21 was deleted because the opiates he used had been prescribed for suitable medical reasons and verified. Of the remaining 20, four have successfully completed detoxification from methadone. One of these has left treatment and is reported by friends still in treatment to be doing well. The second maintains contact with the clinic and is doing well. Another developed a serious drinking problem, but is still receiving counseling and is described as improved. The fourth expressed concern about his drinking, but left treatment anyway. Six have shown improvement and are still in treatment. Of these, three requested increases in their methadone doses shortly after November 10th. Three clients, who were on high doses of methadone (50 - 60 mg.) and had been using heroin frequently, transferred to clinics on the east coast. Seven clients were discharged as treatment failures. One of the seven was jailed for obtaining narcotics by fraud while on probation on the same charge. The rest simply left the program while on moderate doses (20 - 30 mg.) of methadone. Nineteen of the 20 subjects had illegal non-opiate drugs detected in their urine samples after November 10th.

A striking aspect of the clinical information is that clinic personnel were unaware of the radical change in opiate use before these data were compiled, and there is no mention of the bust or its effect on individual clients in the 21 surveyed charts, with the exception of the two who were arrested. Even in those two

cases the change in the patterns of drug use was not noted. Anecdotal reports from the other two clinics in Denver indicated that the counselors there were also unaware of the change, and some counselors thought that opiate use might have been increasing in the first four months of 1980.

There are several possible reasons for the counselors' unawareness of the pattern of opiate use within the clinics. The heroin available in Denver is of poor quality and has been in short supply in recent years. The majority of clients using illegal opiates were not using them on a daily basis, so cutting off the the supply did not have a drastic effect on their lives. Most of the clients who were using heroin also abused other drugs, particularly benzodiazepines, which probably lessened the impact of the reduced heroin supply and obscured the change in opiate use from the counselors' views. The determining factor may have been that the urinalysis data come to the counselors in batches several times each week and are difficult to comprehend in this fragmented form.

The majority of the clients in this population have significant emotional, interpersonal, and employment problems, which tend to be the focus of clinical intervention. This emphasis is based on the assumption that resolving these issues will enable clients to alter their drug use successively during the course of treatment. On the other hand, drug use impedes clients' progress in improving their life situations. It may well be that greater emphasis on reducing drug use concomitant to resolving emotional, social, and employment problems would be a more effective approach. Urinalyses are the best evidence of clients' drug use available to the drug counselor. They provide a valid and reliable check on the clients' reports of their drug use and can be used in conjunction with the clinical interview to clarify the pattern and circumstances of clients' drug use. Clarification can, in turn, facilitate the development of strategies to help the client avoid drug use in the future.

Supply interdiction is an expensive operation for the police, entailing, as it does, months of undercover work and the expenditure of cash for drug purchases by agents. But the success of such action in reducing the quantity of drugs available to abusers in a situation of relative isolation like Denver's is clearly demonstrated by the data presented here. Hopefully, recognition of the efficacy of law enforcement efforts will lead to more rigorous action against non-opiate dealers as well as heroin dealers in the future.

#### REFERENCES

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