



Substance Abuse Treatment and Arrests: Analyses from Washington State

Washington State
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and Social Research

Bill Luchansky, Ph.D.
Lijian He, Ph.D.
Dario Longhi, Ph.D.

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Brief Summary

This fact sheet used administrative data (treatment records from the Division of Alcohol and Substance Abuse linked with arrest records from the Washington State Patrol), to examine the criminal justice involvement of persons before and after receipt of publicly funded substance abuse treatment. 10,284 persons were studied.

Major Results

There were three prominent findings in this study.

- **A reduction in the number of clients arrested following treatment.**

There was a 21% decline* after treatment in the number of persons being arrested (felony or gross misdemeanor). This is true even though the persons included here are a mix of treatment completers, dropouts, and those staying in treatment a very short time.

- **A reduction in the number of arrests for felony offenses following treatment.**

There was a 33% decline in the number of arrests for felony offenses in the year after treatment, when compared with the year before.

- **Reduced risk of felony arrests for clients that complete treatment and for those with longer stays.**

Completion: Completing an episode of treatment was associated with a 21% reduction in the probability of a felony related arrest in the 18 month following treatment discharge (compared with not completing treatment).

Length of Treatment: Having a treatment episode lasting 90 days or longer was associated with a 32% reduction in the probability of felony arrests in the 18 months following treatment discharge (compared with having a shorter treatment episode).

Reduced risk, regardless of prior criminal justice involvement:

Regardless of whether clients had multiple arrests, one arrest or no arrests prior to treatment, completing treatment and staying in treatment longer were associated with reduced risks for felony arrests.

* 39% before compared to 31% after.

Statistical Controls: Reductions in the probability of arrest were estimated using a statistical model that controlled for the impact of personal characteristics, arrests prior to treatment and employment prior to treatment.

Background

The association between substance abuse and crime has been well documented (Amaro 1999). In 1996, Wickizer et al. (1999) found that alcohol and drug-related crime cost \$541 million, a 39% increase over costs in 1990. Nationally, Harwood (et al. 1984) estimated that crime accounts for almost forty per cent of the total economic cost of drug abuse in the United States.

Research has shown that publicly funded treatment for substance abuse can have beneficial effects on both substance use and criminal behavior (Hubbard et al. 1989). However, much of that research was based on self-reported data. The results in the present report were based on administrative records of arrest kept by the Washington State Patrol (WSP).

This Report

Our study population was 10,284 clients between the ages of 18 and 64, who began and ended an episode of publicly funded treatment in 1995. These treatment records were obtained from the Washington State Division of Alcohol and Substance Abuse (DASA).

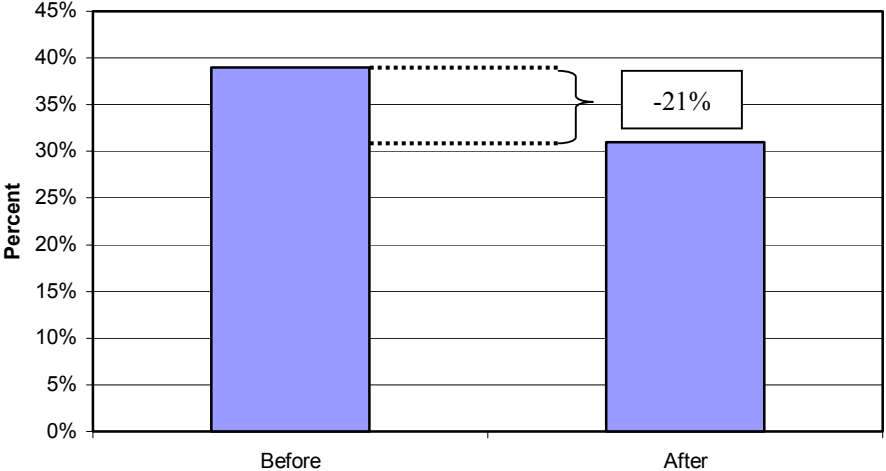
Arrest records came from the Washington State Identification System (WASIS), which is maintained by the Washington State Patrol (WSP). In Washington, all adults and juveniles, arrested for offenses classified as felonies or gross misdemeanors, are to be fingerprinted, and the fingerprints are to be submitted to WSP within 72 hours. Fingerprint and offense data, along with demographic information, are then entered into the WASIS database.

Arrests for felony offenses were the focus of most analyses, as opposed to arrests for lesser crimes. Felonies have been deemed more serious by the legislature and involve more punitive sanctions. They are more costly than other crimes, both to the criminal justice system and to victims, and for that reason were the focus of most analyses.

Results

What percent of clients were arrested for any offense (either a felony or gross misdemeanor) in the year before and after treatment?

Fig. 1: Percent of clients arrested for any offense (felony or gross misdemeanor) in the year before entering treatment and in the year after leaving treatment.



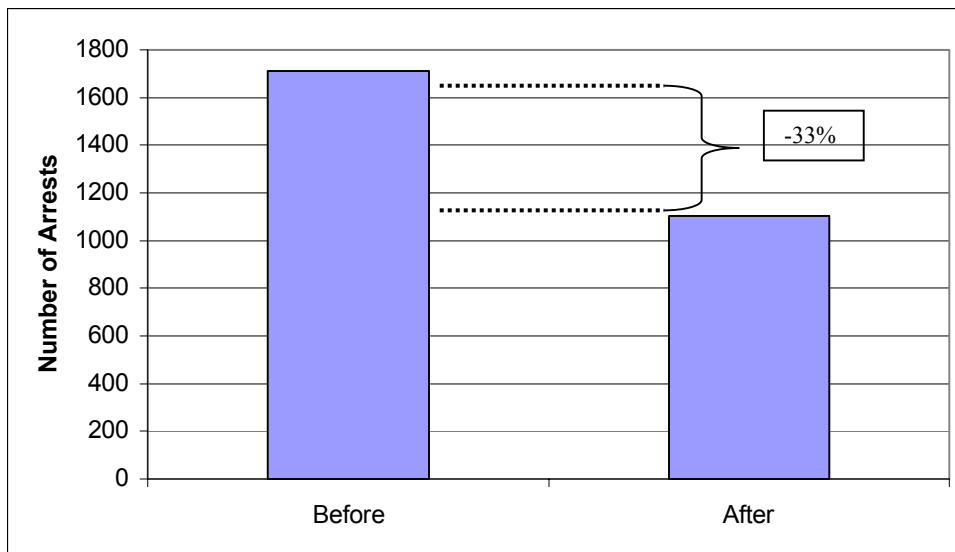
Main Points

- In the year prior to entering treatment, 39% were arrested for either a felony or gross misdemeanor.
- In the year after discharge, 31% were arrested for either a felony or gross misdemeanor. This represents a relative 21% decline in the number of these arrests.

Note: Since we cannot compare this decline to a comparison group of similar persons who did not get treatment, this decline cannot strictly be attributed to treatment.

How many arrests for felony offenses were there in the year after treatment, compared to the year before?

Figure 2: The Number of Felony Arrests in the Year Before and One Year After Treatment



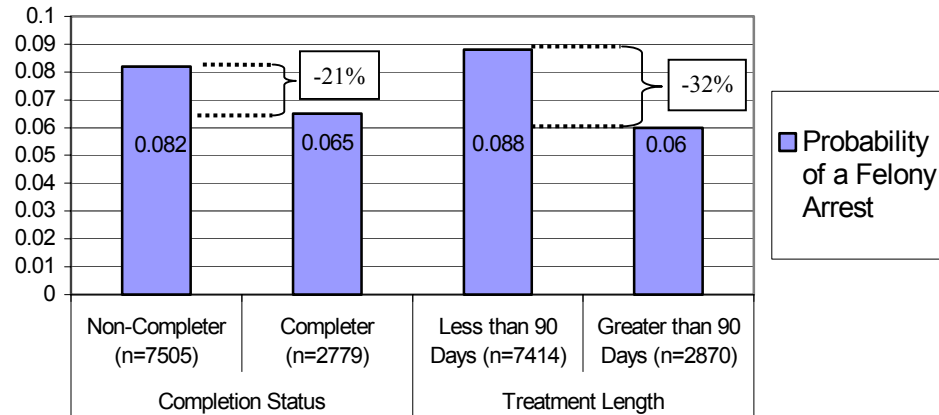
Main Points

- In the year before treatment, clients in the study population had 1710 arrests for felony offenses.
- In the year after treatment, clients in the study population had 1141 arrests for felony offenses, a decline of 33% when compared to the year before.

Note: Since we cannot compare this decline to a comparison group of similar persons who did not get treatment, this decline cannot strictly be attributed to treatment.

In the 18 months after treatment, were there differences in felony arrests among clients with different treatment experiences?

Fig. 3: Statistically Adjusted Probability of a Felony Arrest by Completion Status and Length of Treatment*



* Statistically adjusted probabilities were obtained from a logistic regression model which controlled for the impact of differences between groups in measured background characteristics of clients and their experiences prior to treatment, including prior arrests and treatment.

Main Points

Two primary treatment variables, completion of treatment and length of stay, were both associated with felony arrests

- The probability of an arrest for a felony offense was 21% lower for clients completing treatment, when compared to clients that did not complete.
- For clients whose treatment episode was greater than 90 days, the probability of a felony arrest was 32% less than clients with shorter treatment episodes.
- Regardless of whether clients had multiple arrests, one arrest or no arrests prior to treatment, completing treatment and staying in treatment longer were associated with reduced risks for felony arrests.

Conclusion

The analyses presented here were designed to address a key issue: whether treatment can reduce the impact of substance abuse on the criminal justice system. For all clients, arrest rates fell after treatment when compared to before, and completers and those in treatment 90 days or more were less likely to be arrested for a felony than non-completers or those spending less than 90 days in treatment.

Technical Note

Statistical model used for statistical adjustment of probabilities of felony arrests:

Table 1: Logistic Regression Analysis Predicting Felony Arrests in the Eighteen Months Following Discharge from Treatment

Treatment Variables	Parameter Estimate	Std. Error	P-Value	Odds Ratios
Completed Treatment Episode	-0.2507	0.0832	0.0026	0.778
Length > 90 Days	-0.4195	0.0882	<.0001	0.657
Had Treatment in the Year Prior	0.1332	0.0823	0.1057	1.142
Inpatient Treatment Only (compared to Outpatient Only)	0.0734	0.083	0.3762	1.076
Both Inpatient and Outpatient in TX Episode (compared to Outpatient Only)	0.313	0.0904	0.0005	1.368
Client Characteristics				
Age 18-29 (compared to age > 45)	0.4833	0.1591	0.0024	1.621
Age 30-45 (compared to age > 45)	0.2684	0.1591	0.0915	1.308
Male	0.5395	0.0756	<.0001	1.715
White (compared to non-White)	-0.4651	0.0684	<.0001	0.628
Married	-0.1695	0.1063	0.1108	0.844
Employed in the Year before Treatment	-0.2555	0.0671	0.0001	0.775
Mental Health Problem	-0.0348	0.1085	0.7488	0.966
Hard Drug User (heroin, cocaine, amphetamines v. alcohol and marijuana)	0.9118	0.0681	<.0001	2.489
Arrested in Prior Year	1.3125	0.0693	<.0001	3.715
Intercept	-3.3152	0.178	<.0001	

Association of Predicted Probabilities and Observed Responses:
Percent Concordant Pairs: 74.4% (10,615,680 pairs)

Technical Note

Because the groups being compared were naturally occurring, and not based on random assignment, they could have differed on characteristics that were not measured. Group differences in unmeasured characteristics might have had an effect on the results of the statistical model, to the extent that they were independent of demographic and other characteristics already accounted for.

References

Amaro, H. 1999. "An Expensive Policy: The Impact of Inadequate Funding for Substance Abuse Treatment." *American Journal of Public Health*, May, Vol. 89, No. 5; 657-659.

Hubbard, R, M Marsden, V Rachal, H Harwood, E Cavanaugh, and H Ginzburg 1989. *Drug Abuse Treatment: A National Study of Effectiveness*. University of North Carolina Press.

Wickizer, T. 1999. *The Economic Costs of Drug and Alcohol Abuse in Washington State, 1996*. Olympia, WA: Department of Social and Health Services

For questions or comments on this report contact:

Dario Longhi, DSHS Research and Data Analysis at (360) 902-0734 or longhde@dshs.wa.gov

Bill Luchansky, NWCSR, Inc. at (360) 570-7532 or bill.luchansky@nwcsr.com

Toni Krupski, DSHS Division of Alcohol and Substance Abuse at (360) 438-8206 or krupstk@dshs.wa.gov

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3700 Rainier Avenue South, Suite A, Seattle, Washington 98144

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