KY 2002 SUMMARY REPORT
OF STATEWIDE FOLLOW-UP FINDINGS

Prepared for:
Kentucky Department of Mental Health and Mental Retardation
Division of Mental Health and Substance Abuse

Prepared by:
University of Kentucky
Center on Drug and Alcohol Research

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Introduction
The Kentucky Department of Mental Health and Mental Retardation Services funds substance abuse treatment through the state’s 14 regional Community Mental Health Centers (CMHCs). CMHC clinicians collect client level data as part of the intake assessment process and these data are used along with follow-up data to examine treatment outcomes. These data are part of the Kentucky Substance Abuse Treatment Outcome Study (KTOS), which collects information about client’s substance abuse, employment, physical and mental health, arrests and criminal records, and treatment history. A sample of the clients who agree to participate in follow-up interviews 12 months after treatment are asked the same questions they were asked at intake so that change can be measured after treatment. The follow-up interviews and data analysis are conducted by the University of Kentucky Center on Drug and Alcohol Research. This Summary Report includes findings about change in substance abuse and related problems for 838 clients who agreed to participate in follow-up interviews.

Demographics
In FY 2002, a total of 838 substance abuse treatment clients were contacted for a telephone interview 12 months after treatment. Of those clients, 33.2% were female and 66.8% were male (See Figure 1).

The average age was 33.4 years old. The majority of respondents (88.4%) were white with 9.8% Black respondents, and 1.8% reporting other races (Native American, Asian, Alaskan Native and other). Hispanic/Latino ethnic groups were represented by 1.9% of the respondents.

Most of the respondents lived in their own or someone else’s house or apartment (87.6%). One in ten (10.4%) lived in residential or institutional settings and 2.0% lived in a shelter or were homeless. Over one-third lived with dependent children (35.2%). Less than one in ten lived with someone with an alcohol problem (9.4%) or a drug problem (6.7%).
The mean education level was the eleventh grade. Of those respondents with less than 12 years of education, a large number reported earning a GED (32.5%).

At follow-up, 12.5% reported attending school or job training programs either full or part-time, which was a 66.7% increase from intake (7.5%).

Figure 2 shows the marital status of respondents. Over one-third (39.4%) had never been married; one-fourth (25.1%) had been married and over one-fourth (26.1%) were divorced.

**Reduction in Substance Use**

When respondents entered treatment, many were concerned about abstinence. When changes in abstinence from intake to follow-up were examined, there was an impressive rate of increase in abstinence for all substances. The greatest percent increase was in alcohol abstinence with almost a 50% increase (See Figure 3). In addition, there was almost a 30% increase in abstinence from any illegal drug and high twenty percent increases in opiate, tranquilizer, and marijuana abstinence.
When drug and alcohol abstinence comparisons were made by gender, important differences were made apparent. (See Figure 4.) Specifically, men had a greater percentage of change in alcohol abstinence (53.7%), with almost three-fourths (74.3%) reporting alcohol abstinence at follow-up. In addition, about 60% of women reported abstinence at follow-up for a 39.5% increase in abstinence among women clients.

When drug abstinence was examined, about half of women reported drug abstinence with a 34.8% increase. (See Figure 5.) However, men had a 24.3% increase in abstinence with 56.7% reporting drug abstinence at follow-up.

Another way to view the reduction in substance use is to average proportion of days substances were used among respondents who were not abstinent. Figure 6 shows alcohol use decreased from 13.1 days in the month before intake to 4.9 days at follow-up. Similarly, marijuana use decreased from 12.6 days in the month before intake to 5.2 days at follow-up.
**Treatment Services**

Over three-fourths (77.7%) of clients reported receiving outpatient therapy services in the past year. (See Figure 7.) Nearly two-thirds (30.4%) reported receiving residential treatment services. Fourteen percent of clients reported receiving detoxification services and 12.3% of clients received IOP services in the past 12 months.

![Figure 7. Specific Service Types Used in Past Year - Percentage](image)

**Self Help**

Over one-third (35.9%) of clients reported participating in recovery support services like AA or NA between intake and follow-up. While change was statistically significant for both groups, self-help clients reported more change than non-self-help clients. For example, Figure 8 shows that clients who participated in using self-help had a 74.2% reduction in alcohol use when compared to a 26.7% reduction for non-self-help participants.

![Figure 8. Percent Reduction in Days Using Substances from Intake to Follow-up](image)
**Increases in Employment**

Figure 9 shows an increase in client employment from intake to follow-up. Specifically, full-time employment increased from 29.6% at intake to 43.0% at follow-up. When all employment levels were examined, employment increased from 41.0% at intake to 55.6% at follow-up. Overall clients were paid for a significantly greater proportion of workdays at follow-up (43.0%) than at intake (33.0%).

**Improvement in Physical and Mental Health**

The percentage of clients who rated their health as "excellent" increased from 11.1% at intake to 15.4% at follow-up. Mental health ratings also changed significantly. Figure 10 shows the
percentage of clients who reported serious depression which decreased from 43.5% at intake to 36.4% at follow-up. Suicidality also decreased significantly with 14.2% of clients reporting suicidal thoughts at intake and only 8.1% at follow-up. Decreases were also reported in serious anxiety, hallucinations, and trouble controlling violent behavior.

**Reduction in Crime**

All self-reported crimes decreased for clients who participated in substance abuse treatment programs. Figure 11 shows the number of arrests by type of crime including drug charges. In the past 12 months, trafficking and possession crimes went from 186 arrests at intake to 86 arrests at follow-up. In addition, DUI arrests decreased from 220 at intake to 101 at follow-up. The percent of change from any self-reported arrests in the past 12 months was 5.6%. The percent of change from any self-reported arrests in the past 30 days was 15.4%.

Figure 12 shows the overall decrease in criminal involvement. This includes self-reported nights spent in jail, in the 30 days before treatment intake. There also was a decrease in client reported nights spent in jail from intake (23.1%) to follow-up (7.9%). In addition, there was a decrease in drug charges from 7.5% at intake to 2.0% at follow-up. Overall, there was a decrease in self-reported charges from 13.4% at intake to 5.0% at follow-up.
Figure 13 shows the decline in the number of arrests for drug related charges from baseline to follow-up in the past 12 months. Specifically, there was a 5.6% percent change in drug arrests at intake when compared to arrests at follow-up. There also was a decrease in all reported charges in the 12 months after treatment from 63.3% at intake to 30.9% at follow-up. Similarly, the number of nights spent in jail decreased by half from 66.3% at intake to 32.5% at follow-up.

Kentucky Avoided Costs

Using client self report data on arrests and estimated costs per crime, an estimate of the total crime costs can be made for the 12 months before intake and after treatment. Treatment costs for the follow-up sample was developed using state service event data and cost report information from the Kentucky Department of Mental Health. The estimate of reduced crime cost plus increase employment, minus treatment costs, can be presented as an approximation of savings for the state.

The reductions in self-reported arrests for Kentucky clients, combined with cost estimates for their crimes, plus increased earnings and consequent tax revenues, suggest an estimated cost avoidance for Kentucky citizens at a ratio of 4.03 to 1. In other words, Kentucky saved $4.03 for every dollar spent on treatment during state Fiscal Year 2002.

Conclusion

The FY 2002 follow-up findings suggest important gains for Kentucky in reducing substance use among clients in publicly funded substance abuse treatment. Treatment gains were observed for the most commonly used substances, alcohol and marijuana, as well as substances that are coming more into awareness such as prescription drug use, including both tranquilizers and opiates. The percent of clients reporting abstinence from tranquilizers 12 months after treatment was 81.9% - a 26.8% increase in abstinence. Opiate use, which is primarily a prescription drug
problem in Kentucky, also decreased significantly with 91.1% of clients reporting opiate abstinence at follow-up for a 21.3% increase since intake.

These findings also suggest the importance of self-help in the recovery process since clients who participated in self-help entered treatment with greater substance use problems and had greater improvement after treatment. Women also have greater overall change rates in drug use than men.

The reductions in arrests and increases in employment after treatment support the idea that treatment has positive economic effects for the state. These findings are similar to those of other national studies that show a range of $4.00 to $5.00 savings for every $1.00 spent on treatment.

In conclusion, clients receiving substance abuse treatment in Kentucky’s publicly funded programs reported significant reductions in substance use, improved ratings of their health and mental health, decreased criminal activity, and increased employment. These changes decreased crime costs to victims and overall costs to the citizens of Kentucky which were estimated as a saving of $4.03 for every $1.00 spent on treatment in Kentucky.

For more information on these findings, see www.cdar.uky.edu/KTOS for the complete FY 2002 Follow-up Findings Report.