

SECTION SIX

IMPLICATIONS OF STUDY FINDINGS ON SUBSTANCE ABUSE TREATMENT

The FY 2005 KTOS Follow-up findings include important information for treatment providers and policy makers. The findings suggest that substance abuse treatment outcomes in Kentucky are very similar to outcomes reported in other research studies (Hubbard, Craddock, Flynn, Anderson, & Etheridge, 1997; Swearingen, Moyer, & Finney, 2004). Likewise, findings are similar for this year and the FY 2002 through FY 2004 findings. In fact, this report, combined with the five preceding ones, suggests a steady pattern in treatment effectiveness in Kentucky. While this report suggests that only a small amount of state money was spent on the treatment of mental health conditions among the follow-up sample, there were significant reductions in depression, anxiety, suicidal thinking, and suicidal attempts at follow-up.

Consistent with previous years' findings and anecdotal information from clinicians, the substances that appear to be used by the majority of clients in substance abuse treatment are alcohol, marijuana, tranquilizers, and opiates. While there is considerable discussion about rising methamphetamine use in Kentucky, this sample does not provide evidence of an increase in reported stimulant use of any kind. By contrast, the use of tranquilizers and opiates was consistently reported by more clients than those who reported cocaine use. These data suggest that the prescription drugs are a major part of the overall substance abuse problem in Kentucky.

The reductions in substance use, along with increased employment and reduced criminal activity suggest that the gains from treatment are positive for Kentucky. Each of the areas showing improvement was related to estimated cost reductions to Kentucky, thus offsetting the cost of treatment.

Abstinence Findings

As with previous years, this year's findings show that many clients entered treatment already reporting abstinence for certain substances. For these clients, maintaining abstinence is the treatment goal and the follow-up data suggest that many attained that goal. Many clients in this sample entered treatment on a criminal justice or DUI referral (61.3%) and may have already begun abstinence in the few days before entering treatment largely in response to the criminal justice system and possible monitoring. For those clients, an important treatment goal is to maintain abstinence for a longer period of time. In addition to these clients, many others who reported substance use in the past 30 days at intake reported abstinence 12 months after treatment.

Substance-specific Change

The FY 2005 KTOS findings suggest that there are major differences in rates of increased abstinence or decrease in days of use by type of substance. For example, there was a 43.4% increase in the number of clients reporting alcohol abstinence, but less than half that rate of change for opiate abstinence (16.5%). In addition, the percent of change in the number of clients reporting tranquilizer abstinence (18.4%) was more than half the rate of change for alcohol abstinence. In examining the reduction in the number of days of substance use in the past 30 days, alcohol use was reduced by 46.7%, marijuana use by 74.1% and opiate use by 83.7%. These data suggest there may be differences in achieving abstinence for certain substances. It is unclear whether a generic "addiction treatment" is practiced in community treatment or if interventions target specific substances. However, these findings suggest that treatment might need to use more targeted interventions for specific substances, or for specific use patterns. The prominence of prescription drug abuse among Kentucky clients suggests a need to focus heavily on this use

pattern. Other conditions that may predispose certain forms of substance use may need to be explored such as chronic pain and other medical problems.

Mental Health Problems

This study presents evidence that fewer clients experienced mental health problems 12 months after treatment. In fact, there were significant reductions in the number who reported depression, anxiety, and suicidal thinking and attempts.

Gender Differences

While this study did not use statistical approaches to examine the significance of differences in change between males and females, it is evident that there are major gender differences. These differences will be examined in future reports to help understand the implications for treatment.

Avoided Cost of Treatment

The tax-paying public is always concerned about the use of state and federal funds to support social programs. In response to this concern, this study examines the cost of state funded treatment in light of reductions in costs to the public resulting from crime and unemployment. The reductions in arrests translate into savings of over \$10 million and, when adding in the tax revenues from increased employment, there is a benefit to cost ratio of 5 to 1. That is, for every \$1.00 spent on treatment, there is a \$5.01 cost offset in crime, incarceration, and unemployment. This finding suggests that the public investment in treatment results in positive gains for society as well as for the clients in treatment.

Client Satisfaction

In the follow-up interview, clients were asked questions about their satisfaction with treatment. The results of the satisfaction questions suggest that clients have a positive view of their treatment experiences. The Questions were adapted from the KENTUCKY CONSUMER SATISFACTION INVENTORY© (Howard & Clark, -with permission). (See Appendix I)

Summary of Treatment Implications

In summary, the report findings provide information that may help shape treatment planning for clients with severe substance abuse problems. These findings suggest that clients benefit from treatment and that society benefits as well. Treatment should focus more intently on mental health problems that co-occur with substance abuse, because while fewer clients reported mental health problems at follow-up, many still did. There is a continuing need for more attention to co-occurring disorders.

SECTION SEVEN

STUDY LIMITATIONS

This report presents information on 941 clients who received substance abuse treatment during state fiscal year 2005 in Kentucky publicly-funded treatment programs. There are several areas of limitation to the findings presented in this report. First, both the intake data and the follow-up data are self-reported. While self-reports have been shown to be valid in comparison to urinalyses (Rutherford, Cacciola, Alterman, McKay, & Cook, 2000) reliance on self-reports in this study may be an important limitation. Second, unlike many outcome studies, this study does not focus on a single treatment modality or a set of pre-selected treatment modalities such as residential treatment, or any one approach like social skills training. Likewise, this treatment outcome study is not a clinical trial that tests the efficacy of interventions. The KTOS project examines treatment outcomes from everyday clinical practice among the 14 Community Mental Health Centers and their affiliates that provide state and SAPT Block Grant funded services. It includes clients who have participated in many different treatment modalities including both residential and outpatient. Third, clinicians have varying interview skills and this might impact the reliability of the data they collected for the baseline. Finally, avoided cost estimates are an approximation of savings for Kentucky and are based on national cost estimate models.

Validity of Self-reports

While there can be reason to question the validity and reliability of self-reports of substance use, recent research has supported earlier findings about the reliability and accuracy of substance users' reports (Del Boca & Noll, 2000; Rutherford, et al., 2000). Earlier studies found that the context of the interview influences reliability (Babor, Stephens, & Marlatt, 1987) and generally self-reports even at the beginning of treatment as well as during treatment have been shown to be reliable (Rutherford et al., 2000). Concerns about deception in self-reports is most likely at baseline where information is being collected by a clinician whom clients may see as affiliated with the courts, probation or parole systems. Distortion at follow-up, when the interviewer is unknown to the client may be less likely. Overall, studies have reported little evidence to support the idea that social undesirability of substance abuse behaviors is a major contributing factor to under-reporting (Bradburn, 1983). In addition, it is important to understand the reliance on self-reports in health research as well as in substance abuse studies. For example, research on other chronic health problems such as diabetes, chronic headache, obesity, hypertension and heart disease often depends on self-reported diet, exercise, medication compliance, and weight reduction efforts (Holroyd, O'Donnell, Stensland, Lipchik, Cordingly, & Carlson, 2001; Mokdad, Bowman, Ford, Vinicor, Marks, & Koplan, 2001; Pereira, Jacobs, Van Horn, Slattery, Kartashov, & Ludwig, 2002). While there are concerns about the validity of self-reports, research in the fields of health, mental health, and substance abuse uses self-report to collect information about daily behaviors.

No Single Treatment Modality

Another study limitation is that many different modalities and clinical approaches are included as well as dual diagnosis treatment approaches that can include medication and psychiatric care along with substance abuse counseling. Most treatment outcome studies using follow-up data examine a specific type of treatment with controls over length of stay and specific interventions used. This statewide study examines clients who have received many different types of treatment with greatly varied lengths of stay in treatment. Thus, important differences in treatment modalities that could influence treatment outcomes may be undetectable in this study. However, the benefit of conducting a statewide study of treatment in these "real world" settings is that they more accurately reflect what actually occurs in this state's treatment programs than a more

controlled treatment efficacy study.

Clinicians as Data Collectors

This study relies on clinicians for intake data collection, including locator information from consenting clients. The intake data are collected by clinicians with varying levels of training and skill with structured interviewing. Consequently, reliability for substance use and other questions may pose another limitation. Also, clinicians may have limited awareness of the importance of collecting accurate locator information, which can affect follow-up contact rates and, consequently, the sample representativeness. In FY2005, all clinicians used the PDA-based version for the baseline data collection and this has meant an improvement in data quality.

Limitations in Cost Benefit Ratio Estimates

The benefit cost ratio estimates presented in this report have several limitations. First, the arrest data were self-reports. While the literature suggests that client self-reports can be valid (Del Boca & Noll, 2000; Rutherford et al., 2000) the validity of self-reports is unknown in this study. Second, there are also limitations on access to third-party data such as paid unemployment benefits, welfare, corrections, and law enforcement, which were not used in this study. Third, national rather than specific state costs estimates were used, except for the jail costs, which were developed for Kentucky. Finally, there are potential avoided costs to society that were not included that might affect cost savings estimates. However, data presented here are an appropriate approximation of savings that result from Kentucky state-funded substance abuse treatment.

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