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Longitudinal evaluations of substance abuse treatment: introduction to special issue

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Substance use disorders with multiple co-occurring psychiatric problems are increasingly recognized as a chronic, relapsing condition that may last for decades and require multiple episodes of care over many years before reaching a sustained state of remission (Dennis, Scott & Funk, 2003; Drummond, 1990, 1992; Edwards & Gross, 1976; Jellinek, 1960; Leshner, 1997; Leukefeld & Leukefeld, 1999; McLellan, Lewis, O'Brien, & Kleber, 2000; Muthen, Grant, & Hasin, 1993; Tims, Leukefeld, & Platt, 2001). On average, people being discharged from publicly funded substance abuse treatment will go through 3–4 cycles of relapse, treatment re-entry, and recovery over a 9-year period before achieving at least a year of sobriety while living in the community (Dennis, Scott, & Hristova, 2002). Unfortunately, there are less than a dozen long-term studies that look across multiple episodes of care (see Prendergast, Podus, Chang, & Urada, 2002). The goals of this special issue are to examine the long-term effectiveness and economic benefits of substance abuse treatment, the role of continuing and multiple episodes of care, and how these factors vary for different subpopulations and outcomes.

In the first article, Scott, Foss and Dennis (2003) found that the effect of an index episode of care is largely mediated by the initial response to treatment, participation in aftercare and 12-step support groups. Given that the majority of people go through multiple episodes of care, these findings suggest that long-term outcomes have to consider treatment dosage *across* episodes of care. Using the same data set, Grella, Scott, Foss, Joshi, and Hser (2003) found that women had more episodes of subsequent treatment and men had higher rates of incarceration during the follow-up periods. Their path analyses showed that at 6-months following intake, living with someone with a substance problem was related to higher rates of drug/alcohol use for women, but not for men. These findings suggest that relapse prevention and continuing care programs might be more effective if they focused on factors that were of higher risk for a given gender.

In the third article, Kissin, McLeod, and McKay (2003) concluded that continuous self-help participation was associated with lowest rates of substance use at follow-up, while non-

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attendance was linked to highest use, even after controlling for length of formal treatment and participants' perceived severity of their substance use problem. Results suggest that both formal substance abuse treatment and continuing care through self-help group attendance are associated with reduced use.

The next article focuses on the economic impact of treatment. Salomé, French, Scott, Foss, and Dennis (2003) demonstrate the cost of substance abuse treatment for 2862 individuals that was largely offset by reductions in other costs to society. With treatment costing an average of \$1943, they reported an average reduction in other costs to society of \$8268 and a benefit–cost ratio of 4.26 over the first 6 months. Moreover, these benefits were correlated with client demographics, severity, and resistance to continuing care (with the most resistant being more costly).

In the last article, Dennis and colleagues report findings from an experimental evaluation of recovery management checkups for people with chronic substance use disorders. Participants who received recovery management checkups were significantly more likely than those in the control group to return to treatment, to return to treatment sooner, and to spend more subsequent days in treatment; they were significantly less likely to be in need of additional treatment at 24 months. This demonstrates the importance of post-discharge recovery management checkups as a means to improve the long-term outcomes of people with chronic substance use disorders.

The special issues concludes with a commentary by Compton, Glantz, and Delany (2003) that further stresses the paradigm shift required to design treatment systems that are based on the concept that "addiction is a chronic illness". While there are medical models for the longer-term management of some other chronic conditions (e.g. asthma, cystic fibrosis, cardiovascular disease, depression, diabetes, HIV, and hypertension), in general the substance abuse, public health and medical care systems in the US are organized to address conditions with acute onset and a short time course to recovery. The authors stress the importance of understanding the longer-term cycle of relapse, treatment re-entry, and recovery and its implications for program planning and future research. This includes the need for more effective models of continuing care and early re-interventions, as well as efforts to tailor these models to subgroups that may have different needs (e.g. females with young children, homeless people, those with co-occurring disorders, or people involved in illegal activities).

If our goal is to improve practice in the substance abuse treatment systems, health service researchers and other applied evaluators need to move beyond simply evaluating stand alone interventions to examine longer-term outcomes over multiple episodes of care. We need to shift from focusing only on average outcomes or relationships to a finer grain subgroup and path analysis. As we take a longer-term perspective, it is also important to gain a better understanding of 'recovery'. Epidemiological studies of people with lifetime substance dependence suggest that 58% eventually enter sustained recovery (i.e. no symptoms for the past year)—a rate that is considerably better than the 39% average rate of recovery across all psychiatric disorders (Dawson, 1996; Kessler et al., 1994; Robins & Regier, 1991). Yet, we

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know very little about the factors that influence or even predict long-term recovery. Thus, these studies represent a beginning, but much work remains to be done.

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