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Who benefits from extended continuing care for cocaine dependence?

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HIGHLIGHTS

- Patients in a controlled environment before treatment benefited from extended care.
- Trend for poor social support to predict greater benefit from extended care.
- Women may benefit more than men from extended care.
- Substance use early in treatment predicts greater benefits from extended care.

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ABSTRACT

The goal of this study was to determine which cocaine dependent patients engaged in an intensive outpatient program (IOP) were most likely to benefit from extended continuing care (24 months). Participants (N = 321) were randomized to: IOP treatment as usual (TAU), TAU plus Telephone Monitoring and Counseling (TMC), or TAU plus TMC plus incentives for session attendance (TMC+). Potential moderators examined were gender, stay in a controlled environment prior to IOP, number of prior drug treatments, and seven measures of progress toward IOP goals. Outcomes were: (1) abstinence from all drugs and heavy alcohol use, and (2) cocaine urine toxicology. Follow-ups were conducted at 3, 6, 9, 12, 18, and 24 months post-baseline. Results indicated that there were significant effects favoring TMC+ over TAU on the cocaine urine toxicology outcome for participants in a controlled environment prior to IOP and for those with no days of depression early in IOP. Trends were obtained favoring TMC over TAU for those in a controlled environment (cocaine urine toxicology outcome) or with high family/social problem severity (abstinence composite outcome), and TMC+ over TAU for those with high family/social problem severity or high self-efficacy (cocaine urine toxicology outcome). None of the other potential moderator effects examined reached the level of a trend. These results generally do not suggest that patients with greater problem severity or poorer performance early in treatment on the measures considered in this report will benefit to a greater degree from extended continuing care.

1. Introduction

Continuing care interventions that extend initial, acute episodes of care are often recommended for individuals receiving treatment for substance use disorders. The provision of continuing care is seen as important because substance use disorders are often chronic, at least in some individuals (Dennis & Scott, 2007; Hser, Longshore, & Anglin, 2007; McLellan, Lewis, O'Brien, & Kleber, 2000). Controlled studies have provided evidence of the effectiveness of continuing care, particularly with interventions that feature longer durations and active efforts to deliver care (McKay, 2009; McKay et al., 2010; Scott & Dennis, 2009).

It does not appear, however, that all patients with substance use disorders benefit to the same degree from continuing care interventions. In a study of Recovery Management Checkups, which provided monitoring and linkage back to treatment over four years, the intervention was more effective for participants with earlier onset of substance use disorders and higher scores on a measure of criminal and violent behaviors (Dennis & Scott, 2012). Positive effects on drinking outcomes in a study of a behavioral marital therapy continuing care intervention persisted for an additional 12 months in alcoholics with more severe drinking and marital problems at the start of treatment (O'Farrell, Choquette, & Cutter, 1998).

In our own work, patients' initial response to treatment has been a good indicator of continuing care needs. Patients who continued to

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use cocaine during a 4-week intensive outpatient program (IOP) had worse outcomes over 24 months than those who were cocaine abstinent during IOP, but benefited to a greater degree from individualized relapse prevention relative to standard group continuing care (McKay et al., 1999). In a second study, patients who made poor progress toward achieving the primary goals of a 4-week IOP had worse substance use outcomes over 24 months than those who achieved IOP goals, but benefited to a greater degree from more intensive clinic-based continuing care relative to a less intensive telephone intervention. Conversely, those who achieved IOP goals did better in the telephone condition (McKay, Lynch, Shepard, & Pettinati, 2005). In a third study, patients who were less committed to change or had less social support for recovery by the fourth week of IOP benefited from extended telephone-based continuing care relative to IOP only, whereas patients who had made more progress in these areas did not. Women and those with prior treatment experiences also benefited from telephone continuing care, whereas men and those with no prior treatments did not (McKay et al., 2011).

We recently conducted a study that evaluated the effectiveness of two extended continuing care interventions that combined telephone and clinic-based sessions provided over 24 months. The participants were patients enrolled in publicly-funded IOPs; all were cocaine dependent and the majority were also alcohol dependent. One of the two continuing care interventions provided incentives for each session completed in the first year, whereas the other did not. Findings from this study indicated that there were no significant main effects for any of the continuing care group comparisons. However, patients who used any cocaine or alcohol in the week prior to IOP or during the first three weeks of IOP had significantly better substance use outcomes over 24 months if they were randomized to extended continuing care (McKay et al., 2013). Conversely, there were no treatment effects in patients who were cocaine and alcohol abstinent during this period. Incentivizing continuing care attendance increased the number of sessions received, but did not further improve outcomes (McKay et al., 2013; Van Horn et al., 2011).

The goal of the this article was to determine if the factors found to predict response to telephone continuing care in our prior study (McKay et al., 2011) – gender, readiness to change, social support for recovery, and prior treatments for substance use disorders – would also moderate outcomes in the cocaine study described above (McKay et al., 2013). In addition, other measures of progress toward IOP goals – commitment to abstinence, self-efficacy, days with depression, overall psychiatric severity, and family/social problem severity – were also examined to determine if scores on these measures moderated response to continuing care. Finally, the potential moderating effects of whether the patient had been in a controlled environment immediately prior to IOP were also considered.

Specifically, we hypothesized that larger treatment effects favoring extended continuing care would be found in women, and in participants who had more prior drug treatments or had been in a controlled environment prior to IOP, as these factors were indicators of greater addiction severity. Participants who had made poorer progress toward the goals of IOP, as indicated by lower readiness to change, poorer social support for recovery, lack of a commitment to abstinence, low self-efficacy, more days of depression, and higher psychiatric symptom severity at the end of IOP, were also expected to derive greater benefit from extended continuing care.

2. Method

2.1. Participants

The participants were 321 adults enrolled in two publicly funded IOPs in Philadelphia who met the criteria for lifetime DSM-IV cocaine dependence (SCID; First, Spitzer, Gibbon, & Williams, 1996) and had used cocaine in the 6 months prior to entering treatment. The other criteria for eligibility were a willingness to participate in research and be randomly assigned to a treatment condition; completion of two weeks of IOP; no psychiatric or medical condition that precluded outpatient treatment (i.e., severe dementia, current hallucinations); between the ages of 18 and 65; and no regular IV heroin use within the past 12 months. Additional inclusion criteria are described elsewhere (McKay et al., 2013).

The participants were on average 43.2 (sd = 7.4) years old and had 11.6 (sd = 1.8) years of education. The majority of participants were male (76%) and African American (89%). The participants used cocaine on an average of 42.2% (sd = 30.7) of the days in the six months prior to baseline, and drank alcohol on 32.0% (sd = 32.8) of the days. They averaged 4.5 (sd = 5.6) prior treatments for drug problems.

2.2. Intensive outpatient treatment

The IOP programs provided approximately 9 h of group-based treatment per week, and patients could typically attend for up to 3–4 months (McKay et al., 2010). Patients who completed the IOP at these programs were typically offered 2 months of standard outpatient treatment (i.e., one group counseling session per week) for a total of up to 6 months of treatment.

2.3. Continuing care treatment conditions

2.3.1. Telephone monitoring and counseling (TMC)

Participants had a face-to-face session to orient them to the protocol, and then received brief telephone calls for up to 24 months. These 20 min calls were offered weekly for the first 8 weeks, every other week for the next 44 weeks, once per month for 6 months, and every other month for the final 6 months. Each call began with a structured 13-item assessment of current substance use, HIV risk behaviors, IOP attendance, risk factors for relapse, and protective factors, which was referred to as the progress assessment. CBT-based counseling was linked to the results of the progress assessment and also addressed any anticipated risky situations. Potential coping strategies and behaviors were identified and briefly rehearsed during the remainder of the session. Participants could complete some of the sessions in person, rather than over the telephone, if they had difficulty in getting private access to a telephone or preferred to attend the session at the clinic. The intervention is fully described elsewhere (McKay et al., 2010, 2013).

2.3.2. Telephone monitoring and counseling plus incentives (TMC +)

This intervention was the same as TMC, with the addition of incentives for attending sessions. Participants received a $10 gift coupon for each regularly scheduled or step care session attended in the first year, and bonus $10 gift coupons every time 3 consecutively scheduled sessions were completed. The coupons were for department stores and a local grocery store chain (McKay et al., 2013).

2.3.3. Therapists

Seven therapists delivered both TMC and TMC+. All therapists had prior experience with providing outpatient treatment for substance use disorders, and four had provided telephone-based continuing care in a prior study (McKay et al., 2010). Five of the therapists had MA-level degrees in psychology or social work, one had a BA, and one had a Ph.D. in clinical psychology.

2.3.4. Adherence to treatment protocols

The TMC and TMC+ sessions were audiotaped to facilitate supervision and monitor adherence to the protocol as described in the manuals. Individual supervision was provided weekly by the study clinical coordinator, and one group supervision session was also held per week. Any deviations from the treatment protocol identified by the clinical coordinator were immediately addressed in the weekly supervision meetings.