



Antisocial personality disorder predicts methamphetamine treatment outcomes in homeless, substance-dependent men who have sex with men

Jesse B. Fletcher, Ph.D. ^{a,*}, Cathy J. Reback, Ph.D. ^{a,b}

^a Friends Research Institute, Inc

^b UCLA Integrated Substance Abuse Programs, Semel Institute for Neuroscience and Human Behavior, University of California at Los Angeles, CA, USA

ARTICLE INFO

Article history:

Received 30 July 2012

Received in revised form 26 February 2013

Accepted 5 March 2013

Keywords:

Antisocial personality disorder

Substance use

Contingency management

Homeless

MSM

ABSTRACT

One-hundred-thirty-one homeless, substance-dependent MSM were enrolled in a randomized controlled trial to assess the efficacy of a contingency management (CM) intervention for reducing substance use and increasing healthy behavior. Participants were randomized into conditions that either provided additional rewards for substance abstinence and/or health-promoting/prosocial behaviors ("CM-full"; $n = 64$) or for study compliance and attendance only ("CM-lite"; $n = 67$). The purpose of this secondary analysis was to determine the affect of ASPD status on two primary study outcomes: methamphetamine abstinence, and engagement in prosocial/health-promoting behavior. Analyses revealed that individuals with ASPD provided more methamphetamine-negative urine samples (37.5%) than participants without ASPD (30.6%). When controlling for participant sociodemographics and condition assignment, the magnitude of this predicted difference increases to 10% and reached statistical significance ($p < .05$). On average, participants with ASPD earned fewer vouchers for health-promoting/prosocial behaviors than participants without ASPD (\$10.21 [$SD = \7.02] versus \$18.38 [$SD = \13.60]; $p < .01$). Participants with ASPD displayed superior methamphetamine abstinence outcomes regardless of CM schedule; even with potentially unlimited positive reinforcement, individuals with ASPD displayed suboptimal outcomes in achieving health-promoting/prosocial behaviors.

© 2013 Elsevier Inc. All rights reserved.

1. Introduction

1.1. Antisocial personality disorder and substance abuse

Antisocial personality disorder (ASPD) is an Axis-II personality disorder present in approximately 0.6% of the United States population (Lenzenweger, Lane, Loranger, & Kessler, 2007) characterized by near-constant pursuit of personal gratification and the pervasive disregard for the rights of others, often manifesting as the eschewal of social norms, deceit, aggression, and lack of empathy/remorse (American Psychiatric Association, 2000). ASPD often first manifests itself as an aggressive childhood behavior (Schaeffer, Petras, Ialongo, Poduska, & Kellam, 2003), an antecedent occurrence also common to drug abuse disorders (Petras et al., 2008). Previous studies have demonstrated that a diagnosed psychiatric illness increases risk for a comorbid substance use disorder, and ASPD comes with one of the highest such increases in risk (Compton, Conway, Stinson, Collier, and Grant, 2005; Mueser et al., 2006).

Diagnosis of ASPD is associated with use of alcohol and illegal drugs (Trull, Jahng, Tomko, Wood, & Sher, 2010), with nearly half of all substance abusers meeting the criteria for diagnosis with ASPD (Messina, Farabee, & Rawson, 2003; Messina, Wish, Hoffman, & Nemes, 2001). ASPD the most common comorbid personality disorder among substance abusers (Craig, 2000; Fridell, Hesse, & Billsten, 2006; Verheul, 2001), and people with ASPD have more current and lifetime substance use than people without ASPD (Mueser et al., 2006). Additionally, diagnosis of ASPD is associated with heavier methamphetamine use among users (Lecomte et al., 2010), and among individuals who do seek treatment for their substance abuse, individuals with ASPD are more likely to recidivate into heavy drug use after treatment (Fridell, Hesse, & Billsten, 2006).

1.2. ASPD and substance abuse treatment

Disease characteristics associated with ASPD (including lack of motivation, disruptiveness, impulsivity, and general disregard for others) may all contribute to lower rates of engagement, retention, and poorer outcomes for individuals undergoing substance abuse treatment (Grella, Joshi, & Hser, 2003). Some evidence suggests that ASPD complicates treatment for substance use disorders (Woody, McClellan, Luborsky, & Obrien, 1985) but the effect of a diagnosis of

* Corresponding author. 1419 N. La Brea Avenue, Los Angeles, CA 90028, USA. Tel.: +1 323 463 1601; fax: +1 323 463 0126.

E-mail addresses: jfletcher@friendsresearch.org (J.B. Fletcher), reback@friendsresearch.org (C.J. Reback).

ASPD on treatment effectiveness is controversial (Fridell, Hesse, & Johnson, 2006). While some research has shown no effect of ASPD diagnosis on treatment/intervention outcomes (Alterman, Rutherford, Cacciola, McKay, & Woody, 1996; Darke, Hall, & Swift, 1994; Gill, Nolimal, & Crowley, 1992; Hernandez-Avila et al., 2000; Messina, Wish, Hoffman, & Nemes, 2002), other studies have shown negative effects (Avants et al., 1999; Cacciola, Alterman, Rutherford, & Snider, 1995; Grella et al., 2003; Kosten, Kosten, & Rounsaville, 1989; Martinez-Raga, Marshall, Keaney, Ball, & Strang, 2002; Wolwer, Burtscheidt, Redner, Schwarz, & Gaebel, 2001) and one study demonstrated a positive effect (Messina et al., 2003). The efficacy of a substance abuse treatment/intervention for individuals with ASPD is likely linked to the kind of substance abuse treatment modality or intervention being applied. ASPD is often accompanied by constant striving for personal gratification (Evans & Sullivan, 1990), causing some to suggest that treatments/interventions based on incentives for participation and adherence may produce superior results among those diagnosed with the disorder (Messina et al., 2003; Vaillant, 1975).

1.3. Contingency management interventions

Contingency management (CM) provides positive reinforcement for targeted operant behaviors, including substance abstinence, thereby providing an incentive for positive behavior change in study participants. CM-based substance abuse interventions for participants with ASPD have shown encouraging results. Some studies have found that participants with ASPD respond equally well to such interventions as those without the condition (Brooner, Kidorf, King, & Stoller, 1998; Silverman et al., 1998) and others have found the participants with ASPD actually respond better to substance use interventions relying on CM (Messina et al., 2003).

Concerns of poor treatment/intervention response are common in studies of the homeless (Brecht, Greenwell, & Anglin, 2005), of substance users (Palmer, et al., 2009), and of those with comorbid psychiatric and substance abuse problems (BootsMiller et al., 1998). CM has been efficacious in such impacted populations, improving study retention, participation, and/or reducing substance use among the homeless (Burns, Lehman, Milby, Wallace, & Schumacher, 2010; Tracy et al., 2007), psychiatric inpatients (Bellack, Bennett, Gearon, Brown, & Yang, 2006; Corrigan & Liberman, 1994), substance abusers (Dutra et al., 2008; Prendergast, Podus, Finney, Greenwell, & Roll, 2006), and homeless, substance-dependent MSM (Reback et al., 2010). CM has shown efficacy for reducing the use of alcohol (Barnett, Tidey, Murphy, Swift, & Colby, 2011), marijuana (Carroll et al., 2006), cocaine (Petry & Alessi, 2010), and methamphetamine (Lee & Rawson, 2008; Roll et al., 2006).

1.4. Methamphetamine use, homelessness, and HIV among MSM

Mental health, substance use, homelessness, and sexual minority status (e.g., men who have sex with men) often share reciprocal and reinforcing relationships with one another. Methamphetamine use among MSM is associated with homelessness (Freeman et al., 2011), increased risk for HIV infection (Shoptaw & Reback, 2006), and the transmission of multidrug-resistant strains of HIV (Markowitz et al., 2005; Urbina & Jones, 2004). Methamphetamine use has been shown to produce a wide range of psychiatric symptoms in users, including increases in psychotic-like symptoms and depression (Zweben et al., 2004) that can create additional obstacles to substance abstinence and/or stable housing. Sexual minority status shares known associations with homelessness (Walls, Hancock, & Wisneski, 2007), higher risks for substance abuse (Hughes, McCabe, Wilsnack, West, & Boyd, 2010), and psychological morbidity (Frisell, Lichtenstein, Rahman, & Långström, 2010). Among MSM, methamphetamine use has been shown to negatively affect symptoms of psychological health, with methamphetamine-dependent MSM showing higher neuroticism,

lower openness, lower agreeability, and lower conscientiousness (Solomon, Kiang, Halkitis, Moeller, and Pappas, 2010) than non-methamphetamine using MSM. Homelessness is in turn associated with psychological morbidity and substance abuse (Fazel, Khosla, Doll, & Geddes, 2008), and ASPD in specific increases the risk for substance abuse (Craig, 2000; Fridell, Hesse, & Billsten, 2006; Grant et al., 2004; Verheul, 2001), homelessness (Mueser et al., 2006), and HIV risk behaviors in substance-using populations (Fridell, Hesse, & Johnson, 2006; Gill et al., 1992). CM interventions have shown efficacy in populations possessing one or more of these health risks and may be particularly effective in populations where many of these same cofactors intersect.

The purpose of this secondary analysis was to assess the effect of ASPD status on the efficacy of a CM intervention providing positive reinforcement to reduce substance use and increase health-promoting/prosocial behaviors among homeless, primarily methamphetamine-dependent MSM. It was hypothesized that participants diagnosed with ASPD at baseline would produce superior methamphetamine abstinence outcomes, and inferior health-promoting/prosocial behavior outcomes, when compared to participants without ASPD. The hypothesis predicting superior methamphetamine abstinence outcomes for participants with ASPD was derived from the findings of a prior study (Messina et al., 2003) which showed that participants with ASPD provided superior stimulant abstinence outcomes during a similar CM intervention. The hypothesis predicting inferior health-promoting/prosocial behavior outcomes for participants with ASPD was logically derived, and based on the nature of the disorder itself, the titular element of which is to eschew prosocial behaviors.

2. Materials and methods

2.1. Participants

Participants were recruited from a low-intensity, community-based health/risk reduction HIV prevention program serving homeless, substance-using MSM in the Hollywood/West Hollywood area of Los Angeles County. Eligibility requirements included: (a) male (b) active participants in HIV prevention program, (c) at least 18 years of age, (d) substance dependent (*Structured Clinical Interview for DSM-IV [SCID]-verified*), (e) non-treatment seeking, (f) homeless, and (g) self-reported sex with a man in the previous 12 months. Individuals were excluded if they did not meet these criteria, were unable to understand the consent forms, or were determined to require a more intense intervention due to a serious psychiatric condition (including those assessed as being in a current manic or psychotic episode).

Of the 131 study participants, 45 (34.4%) were diagnosed with ASPD at baseline, a rate commensurate with prior studies of substance-dependent populations. Participants' average age was 36.4 years ($SD = 8.7$). Most participants were Caucasian/white (53.4%), followed by African American/black (22.9%) and Latino/Hispanic (16.8%). Among the participants who met criteria for ASPD, these relative proportions were reversed, as there were more Latino/Hispanic than African American/black participants who met criteria for an ASPD diagnosis. Participants with and without ASPD did show significant differences in terms of educational attainment, with ASPD participants having on average one less year of formal education (11.9 [$SD = 2.0$] versus 12.9 [$SD = 2.8$]; $p < .05$). Full-time employment over the previous 3 years was uncommon among all participants (12.2%). There was no significant difference in the distribution of ASPD diagnoses across CM conditions (Table 1).

2.2. Procedure

Participants were recruited from April 2005 through February 2008 via flyers posted at the research institute's community site and

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات