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A randomized clinical trial of motivational enhancement therapy for alcohol problems in partner violent men☆

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ABSTRACT

This study examined the efficacy of brief alcohol intervention in the context of community-based treatment for partner violence. In a randomized clinical trial, 228 partner-violent men with hazardous or problem drinking were recruited at three Intimate Partner Violence (IPV) treatment agencies and randomly assigned to receive one of two 4-session alcohol interventions: Motivational Enhancement Therapy (MET: $N = 110$) or Alcohol Education (AE: $N = 118$). After completing alcohol intervention, participants received standard agency counseling services for IPV. Participants completed assessments of alcohol use, drug use, and IPV at pre-treatment, post-alcohol intervention, and quarterly follow-ups for 12 months. At the end of the 4-session alcohol intervention, MET participants displayed greater acknowledgment of problems with alcohol than AE participants (*Partial* $\eta^2 = 0.039$, $p = 0.006$). Significant changes from baseline across treatment conditions (at $p < 0.001$) were observed for percent days of alcohol abstinence [95% empirical CI for Partial $\eta^2 = 0.226, 0.296$], heavy drinking [0.292, 0.349], illicit drug use [0.096, 0.156] and partner violence [0.282, 0.334]. No significant condition differences (treatment by time interactions) were found for alcohol abstinence [95% empirical CI for Partial $\eta^2 = 0.007, 0.036$], heavy drinking [0.016, 0.055], illicit drug use [0.005, 0.035] or partner violence [0.001, 0.004]. Results encourage continued use of brief alcohol interventions in community IPV services, but do not provide evidence of a unique benefit of MET in reducing alcohol use in this population.

1. Introduction

Intimate partner violence (IPV) is a widespread social problem with substantial negative effects on the physical and mental health of survivors (Campbell, 2002; Okuda et al., 2011). Although counseling interventions for partner violent individuals have only modest efficacy in reducing violence (Babcock, Green, & Robie, 2004; Eckhardt et al., 2013), approaches that address motivation to change have been shown to enhance treatment engagement and promote violence reduction (Alexander, Morris, Tracy, & Frye, 2010; Crane & Eckhardt, 2013; Musser, Semiatin, Taft, & Murphy, 2008; Scott, King, McGinn, & Hosseini, 2011).

Psychosocial intervention for IPV offenders is often complicated by co-occurring problems with alcohol and other drugs. About half of partners of men in treatment for IPV report that alcohol is a contributing factor in the violence (Ting, Jordan-Green, Murphy, & Pitts, 2009). Partner violent men who screen positive for substance use problems, in contrast to those who do not, have significantly lower rates of treatment initiation and treatment completion, are less compliant with cognitive behavioral therapy task assignments, and provide lower ratings of the working alliance and group cohesion during treatment (Ting et al., 2009). With respect to treatment outcome, one large-scale study found that IPV re-assault prevalence was 3 times higher among men who were drunk at least once during a quarterly follow-up in contrast to men who rarely or never drank, and 16 times higher for men who were drunk nearly every day (Jones & Gondolf, 2001). Research on alcohol dependent populations has shown that remission of problem drinking is associated with substantial reductions in IPV (Murphy & Ting, 2010;

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O'Farrell, Murphy, Stephan, Fals-Stewart, & Murphy, 2004).

The current study was designed to address the need for substance use intervention services for partner violent men by conducting a randomized clinical trial to evaluate the efficacy of Motivational Enhancement Therapy (MET), a brief, empirically-supported intervention for alcohol problems. Participants were recruited from three community agencies offering IPV intervention services. We targeted partner violent men who screened positive for alcohol problems, reported unhealthy patterns of alcohol consumption, and/or reported perpetrating IPV while under the influence of alcohol. The 4-session MET intervention was modeled closely after the Project MATCH protocol (Miller, Zweben, DiClemente, & Rychtarik, 1992), with two notable adaptations. First, we provided additional assessment feedback on relationship functioning and its links to alcohol consumption. Second, rather than delivering the 4 MET sessions over a 12-week interval, we attempted to deliver the MET sessions over 4 consecutive weeks to facilitate progress into standard IPV services. MET was compared to an equal intensity, 4-session alcohol education (AE) control condition in which participants watched videos about alcohol effects and alcohol recovery and received referrals to community treatment resources. Both interventions were delivered in a randomized design prior to the initiation of standard agency services for IPV. In contrast to those receiving AE, we hypothesized that those in the MET condition would display higher readiness to change alcohol consumption at the end of the brief alcohol intervention, and greater reductions from baseline through 12-month follow-up in alcohol consumption, heavy drinking, other drug use, and intimate partner violence.

2. Method

2.1. Participants

Participants were recruited, assessed, and treated at one of three comprehensive domestic violence agencies in the Baltimore-Washington area between July 2004 and June 2008. Agency staff conducted an initial screening of all male intake cases during the initial program assessment. Clients were referred for brief alcohol intervention if they displayed any of the following indicators of hazardous drinking: a) any report of physical partner assault perpetration while under the influence of alcohol in the past year; b) a score of 8 or more on the Alcohol Use Disorders Identification Test (AUDIT; Babor, de la Fuente, Saunders, & Grant, 1992); c) four or more binge drinking episodes (defined as 6 or more standard drinks on one occasion) in the past year; or d) average consumption of 15 or more standard drinks per week on a modified quantity-frequency index. Additional inclusion criteria for the current study were as follows: 1) minimum age 18; 2) if serious alcohol withdrawal symptoms are present, indicated by a score above 8 on the Clinical Institute Withdrawal Assessment for Alcohol, Revised (CIWA-Ar; Sullivan, Sykora, Schneiderman, Naranjo, & Sellers, 1989), participant has completed medically supervised alcohol detoxification or been medically cleared for services; 3) participant displays no psychotic symptoms on the psychotic screen of the Structured Clinical Interview for DSM-IV (SCID; First, Spitzer, Gibbon, & Williams, 1996); and 4) participant is not actively suicidal as assessed by the SCID depression module. Clients referred for brief alcohol intervention were invited to meet with a research staff member, who provided them with information about the trial, assessed them for study eligibility, and obtained informed consent from those who were eligible and interested in participating.

A total of 228 participants met criteria for study inclusion, provided informed consent for study participation, and were randomized to treatment. The achieved sample was somewhat smaller than the initial target sample size of 275 which was selected to detect experimental effects in the small-to-medium range of magnitude (Cohen, 1988). The original plan was to recruit all participants from one treatment program, but two additional sites were added during the trial in order to increase recruitment. Participants were compensated $30 US for each completed assessment. Study procedures were approved by institutional review at UMBC.

2.2. Measures

Screening for study eligibility was conducted by agency staff during routine program intake using the following indicators: 1) the 10-item AUDIT core (Babor et al., 1992; Bohn, Babor, & Krantzler, 1995); 2) interview items inquiring about the number of times during the past year that the participant had been physically aggressive toward a relationship partner while drinking or shortly after drinking and the number of occasions during the past year on which the participant had consumed 6 or more drinks containing alcohol; and 3) a modified quantity-frequency index (Cahalan, Cisin, & Crossley, 1969) used to calculate average drinks per week and administered via interview questions about the frequency and quantity of typical alcohol consumption on weekdays and weekend days. All subsequent assessments were conducted by trained research staff who were not informed of participant condition assignment.

Substance use diagnoses were made using the substance use disorder module of the Structured Clinical Interview for DSM-IV patient version (SCID; First et al., 1996), administered by trained graduate research assistants during the initial study assessment session.

Motivation to change alcohol consumption was assessed at baseline and post-alcohol intervention using the 32-item University of Rhode Island Change Assessment (URICA; DiClemente & Hughes, 1990), which contains four stage-of-change subscales: pre-contemplation, contemplation, action, and maintenance. The 4-factor structure of the URICA has been supported through confirmatory factor analysis, and the 4 subscales have been shown to have adequate internal consistency.

The Time-Line Follow-Back Interview (TLFB; Sobell & Sobell, 1996) was used to assess participant report of alcohol use, illicit drug use, and intimate partner violence for the year prior to intervention (at baseline), the period of alcohol intervention (at post-treatment) and four quarterly follow-ups. Each day was coded as alcohol abstinent, light drinking (1–3 standard drinks), moderate drinking (4–6 standard drinks), or heavy drinking (> 6 standard drinks). Additional questions assessed non-prescribed use of sedatives, hypnotics, anxiolytics, stimulants, opiates, cocaine, hallucinogens, PCP, and cannabis. Psychometric analyses reveal that the TLFB method has high test-retest reliability, is useful across normal and problem drinkers, and has good convergent validity with collateral reports and with urine screens for drug use (e.g., Ehrman & Robins, 1994; Sobell & Sobell, 1996; Sobell, Sobell, Leo, & Concilla, 1988). After completing the TLFB assessment of alcohol and drug use, participants were shown a list of 8 physically assaultive behaviors from the Conflict Tactics Scale (Straus, 1979) and asked whether they had done any of these things during the assessment interval. Positive responses were followed by questions about specific incidents of partner aggression, which were recorded on the calendar. This TLFB method assesses violent incidents rather than specific violent actions (e.g., number of pushes or shoves), and has been used successfully to examine day-to-day associations between IPV and alcohol consumption (Schumacher, Coffey, Leonard, O'Jile, & Landy, 2013). Analyses examined the percentage of days within each assessment interval for which the participant reported alcohol abstinence, heavy drinking, illicit drug use, and IPV.

Assessment schedule. The interval from baseline to post-treatment assessment varied due to scheduling challenges, attendance problems, and variation in agency requirements. The median duration of the post-treatment interval was 41.5 days (mean = 53.3 days, sd = 37.2). There was no significant difference between treatment conditions in the interval from baseline to post-treatment for those who completed the post assessment, $F(1,200) = 1.08$, $p = 0.299$. For the TLFB, participants who missed one or more assessments and returned for a subsequent assessment completed the calendar retrospectively for any missed