

## INTRODUCTION

Therapeutic alliance, representing an evaluation of the quality of the therapeutic relationship, has often been employed to judge the strength of the connection between therapist and patient. Across different psychotherapies, the quality of early therapeutic alliance has been correlated with therapeutic outcomes (Horvath & Symonds, 1991), particularly as judged by the patient (DiClemente, Carroll, Miller, Connors, & Donovan, 2003; Horvath & Symonds, 1991).

While empathy and therapeutic alliance are known to be salient relationship factors that directly influence outcome, few studies have evaluated their role in interventions with opioid-dependent young adults. The goal of this study was to investigate the role of alliance with a sample of opioid dependent adolescents and young adults treated with buprenorphine to determine whether participants' perceptions of therapeutic alliance were associated with a reduction in opioid use.

## METHODS

Adolescent and young adult opioid dependent patients were randomized to either a 12-week course of outpatient buprenorphine/naloxone plus psychosocial treatment or detox plus psychosocial treatment alone in this National Institute on Drug Abuse (NIDA) funded Clinical Trials Network (CTN) study.

Participants in this study were those who completed the HAQ-II and who had at least 14 weeks of urinalysis data (98 of 152: 64%). Regardless of treatment assignment, all of these patients were offered weekly individual therapy sessions for the first three months of treatment. Individual counseling was 12-step oriented and based on a version of those described in the Individual Counseling Manuals available on the NIDA web site. The Helping Alliance Questionnaire (HAQ-II) was completed as part of the larger assessment battery administered at the 4-week time point (Luborsky, Barber, Siqueland, & Johnson, 1996). There are 19 items on the HAQ-II that participants rated on a scale of 1-6 from "strongly disagree" to "strongly agree". An example is the statement "I feel I can depend upon the therapist".

## RESULTS

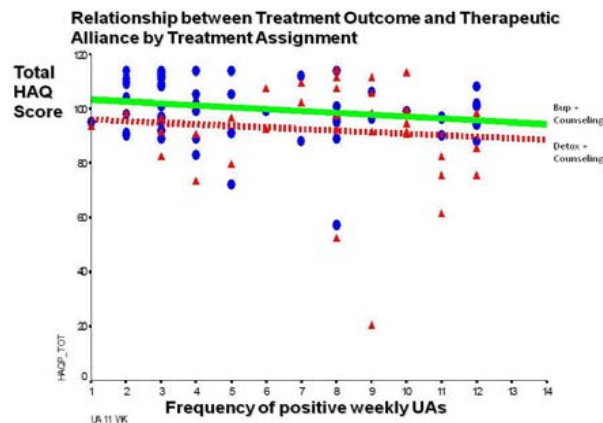
Analyses were conducted to determine whether HAQ scores at 4 weeks were predictive of opioid use, defined as composite measures of weekly urine drug test screens across the 12 weeks of active treatment.

A factor analysis was first conducted to determine the underlying structure of this instrument (alpha extraction and varimax rotation). One factor emerged with an eigenvalue >1, suggesting that the 19 items included in this instrument measured one underlying construct.

In general, scores were high on participants' perceptions of therapeutic alliance with their individual counselor. Across items and treatment

conditions, participants (N=98) indicated a strong, positive relationship with their therapist, with mean scores =  $96.80 \pm 14.83$ . According to Luborsky et al. (1996), scores below 86 are considered poor alliance (range from 19 to 114). Analyses were conducted to determine whether total HAQ-II scores differed by treatment condition. Findings indicated that the experimental group reported significantly higher alliance compared to the TAU group ( $p=.007$ ). The association between higher therapeutic alliance and lower rates of positive UA screens for opioids, however, was not significant ( $r=.16$ ;  $p=.11$ ) when controlling for treatment condition.

Secondary analyses were conducted to examine a composite measure of substance use, assuming missing UAs to represent positive use. In an analysis of this broader outcome measure, therapeutic alliance and reductions in substance use were significantly correlated and consistent with findings from earlier studies,  $r = -.22$ ,  $p < .03$ .



## DISCUSSION

- Contrary to what was hypothesized, enhanced therapeutic alliance did not influence within therapy opioid use as measured by weekly UA screens.

- Therapeutic alliance and a broader spectrum measure of illicit drug use were associated in the hypothesized direction.

- Why therapeutic alliance may influence the frequency of use of some illicit drugs and not others is unclear but warrants future attention.

- Why did the experimental group report higher therapeutic alliance than controls when the single difference between the interventions was whether one received an active medication? It is reasonable to assume that

randomization to the no-medication control condition was met with some disappointment and, in turn, that this unmet expectation influenced overall treatment satisfaction. Ratings on inverse-scored HAQ-II items such as "The procedures used in my therapy were well suited to my needs" may have been affected by satisfaction (or lack thereof) with treatment assignment.

- In addition, patients assigned to the experimental condition received more therapy relative to the control condition, and alliance tends to improve over time. Thus, another explanation is that the buprenorphine patients saw their counselor more often and therefore liked them better.

- Alternatively, patients who strongly disliked their therapist were more likely to drop out of treatment, which would, in turn result in the assumption of positive UAs.

- The finding that therapeutic alliance is important in predicting substance use reduction appears to be generalizable to adolescents. Of some import, this positive finding was robust across the two treatment conditions. It seems, then, that specific ingredients of therapeutic modalities may not moderate the benefit of a healthy and supportive relationship between adolescent and therapist.

- Limitations of this study include the correlational design and restriction to self-selected subsamples with adequate participation for inclusion in the analysis. The comparisons between the study conditions are likely to be influenced by differential attendance and retention.

## REFERENCES

- DiClemente, C. C., Carroll, K. M., Miller, W. R., Connors, G. J., & Donovan, D. M. (2003). A look inside treatment: Therapist effects, the therapeutic alliance, and the process of intentional behavior change. In T. F. Babor & F. K. Del Boca (Eds.), *Treatment matching in alcoholism* (pp. 166-183). New York: Cambridge University Press.
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38*(2), 139-149.
- Luborsky, L., Barber, J. P., Siqueland, L., & Johnson, S. (1996). The revised Helping Alliance questionnaire (HAQ-II): Psychometric properties. *Journal of Psychotherapy Practice & Research, 5*(3), 260-271.

## ACKNOWLEDGEMENT

*This research was supported in part by NIDA's Clinical Trials Network.*