Effectiveness of Adolescent Substance Abuse Treatment for Minorities and Whites

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Introduction

As part of a larger meta-analysis on the effects of adolescent substance abuse treatment, this poster presents results that focus on the experiences of ethnic minority adolescents before and after treatment. Our goals are to improve understanding of racial/ethnic differences in treatment outcomes and client service utilization, as well as provide insight into how to better engage and retain clients in treatment and produce improved clinical outcomes.

Background:

Differential Effectiveness for Minorities?
- Racial minorities are underrepresented in adolescent substance abuse treatment effectiveness research.
- In this meta-analysis, only 1/3 of treatment groups were composed primarily of minority youth.
- There is no clear consensus in adult research on whether or not there are ethnic differences in substance abuse treatment outcomes (Booth et al., 1992; Lowman & Le Fauve, 2003).
- Cultural tailoring was not evident in most of the studies in this meta-analysis that involved minority youth.
- If there was evidence of cultural tailoring, it generally took the form of ‘family oriented treatment’ (Szapocznik et al., 1983; Ungemack et al., 2007).

Different Treatments for Minorities?
- White samples were more likely to receive specialty treatments developed specifically for research purposes (69% of White samples vs. 52% of minority samples).
- Conversely, minority samples received ‘usual services’ more often (49% for minority samples vs. 31% for White samples).

Research Questions

- Are treatment completion rates of minority youth different from those of White youth?
- Are substance use treatment outcomes of minority youth different from those of White youth?
- Are other treatment outcomes of minority youth different from those of White youth?

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Discussion

Treatment Completion Rates
- Treatment completion rates for the minority samples were much lower than those for mixed ethnicity or mostly White samples.

Substance Use Outcomes
- Overall, adolescents who received treatment had significantly lower alcohol, marijuana, and other substance use after treatment. However, White samples did not show reduced alcohol or “other” substance use (e.g., heroin, hydrocodone) after treatment.
- Minority samples did not show reduced “other” substance use (e.g., heroin, hydrocodone) after treatment.
- Minority, mixed, and White samples did not significantly differ in substance use reduction after treatment.

Other Outcomes
- All samples showed significantly less externalizing and internalizing behavior after treatment.
- Minority samples showed significantly less delinquent behavior after treatment, and significantly improved family functioning.

Limitations:
- Pretest-posttest effect sizes index change for a single group; thus, effect sizes do not represent treatment effects. Observed change in outcomes may be due to treatment, or other factors not associated with treatment.
- Comparisons between minority and White samples are informative, but observed differences could be due to different configurations of risk, age, presenting substances, and treatment, rather than differences between minority and White youth.
- Similar substance use outcomes for minority and White youth could be the result of higher dropout among minorities with more severe problems.

Future Directions:
- The field needs controlled studies that compare minorities and Whites in the same treatment programs.
- We need research on the effectiveness of substance abuse treatment programs tailored specifically for minority groups.
- Intent-to-treat analyses are needed, especially with minority samples.

Method

Meta-analytic Design and Procedure:
- 81 total studies: most involve comparisons of 2 or more treatments, rather than comparisons between treatment and control groups.
- Effect sizes index change from pre- to post-treatment rather than treatment/control differences.
- 154 treatment groups.
- 101 groups.
- Groups were classified as ‘mostly minority’ if they contained 60% or more minority youth (29 groups).
- Groups were classified as ‘mostly white’ if they contained 60% or more White youth (101 groups).
- There were 33 mixed ethnicity groups.

Subjects:
- Over 6,000 adolescent substance users between the ages of 12 and 20 receiving treatment.
- Minority samples were younger than White samples (16 vs. 17).
- Minority and mixed White/minority samples had much higher rates of delinquency prior to treatment (45% for minority samples vs. 17% for White samples).

Treatment Characteristics:
- Treatment Setting
  - 2/5 of the programs were delivered in outpatient settings.
- Treatment Modality
  - Family oriented treatment is the most common (e.g., EBFT, FFT, FNN, MDFT, MST, other generic family treatment).
  - Minority samples were more likely than White samples to receive family-oriented treatment.
  - Cognitive-behavioral therapy (CBT), often in concert with motivational enhancement, was also among the most common modalities.
  - Minority and White youth were equally likely to receive CBT.
- 12-step focused programs and programs offering individual or group therapy were also common & equally likely in White/minority samples.

Outcomes of Treatment:
- Substance Abuse
  - Marijuana Use
  - Alcohol Use
  - Other Substance Use
  - Mixed Substance Use
- Other Outcomes
  - Externalizing Behavior
  - Internalizing Behavior
  - Delinquent, Criminal, Violent Behavior
  - Family Functioning

Results

Change in Substance Use from Pre- to Post-Treatment by Group Ethnic Composition

Treatment Completion Rates by Group Ethnic Composition

References