Challenges in Treating Youth Cannabis Use Disorders with Evidence-Based Practices

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Introduction

- I-502 allocates funds to DBHR for programs and practices aimed at the prevention or reduction of maladaptive substance use among middle school and high school age students
 - At least 85% must be directed to "evidence-based and cost-beneficial programs and practices that produce objectively measurable results"
 - Up to 15% may be directed to research-based and emerging best practices or promising practices.

Introduction

In deciding which programs to fund, DBHR is to consult at least annually with UW's Social Development Research Group (prevention) and Alcohol and Drug Abuse Institute (treatment)

TASK to ADAI:

Prepare an inventory of evidence-based, research-based, and promising practices for the treatment of maladaptive substance use in adolescents to help guide DBHR's funding decisions

Definitions

Set forth in RCW 71.24.025

- Evidence-based program or practice
 - tested in heterogeneous or intended populations with multiple randomized or statistically controlled evaluations, or both; or one large multiple site randomized, or statistically controlled evaluation, or both,
 - where the weight of the evidence from a systemic review demonstrates sustained improvements in at least one outcome.
 - that can be implemented with a set of procedures to allow successful replication in Washington and, when possible, is determined to be cost-beneficial.

Definitions Set forth in RCW 71.24.025

- Research-based program or practice
 - tested with a single randomized, or statistically controlled evaluation, or both, demonstrating sustained desirable outcomes;
 - or where the weight of the evidence from a systemic review supports sustained outcomes...but does not meet the full criteria for evidence-based.

Definitions

Set forth in RCW 71.24.025

- Emerging best practice or promising practice
 - based on statistical analyses or a well established theory of change, shows potential for meeting the evidence-based or research-based criteria, which
 - may include the use of a program that is evidencebased for outcomes other than those listed [under the definition of evidence-based].

Challenge

Vagueness in the Definitions

- Some degree of interpretation required
 - What outcomes?
 - How much improvement is enough?
 - Sustained for how long?
 - What are suitable controls or comparison conditions?

ADAI Interpretation

- Focus on standardized/manualized treatments
- Randomized, controlled trials single trial with single site vs. multiple trials or multiple sites
- Substance use-oriented outcomes
- Statistical significance
- Post-test only vs. post-test plus follow-up

What have others in WA done?

- Washington State Institute for Public Policy
 - Focus on benefit-cost analysis and heterogeneity
 - 2014 updated review of the evidence
 - Only three treatment programs were examined
 - Only one deemed evidence-based
 - = Teen Marijuana Checkup

What other lists/inventories exist?

- SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP; Ratings from 0.0=worst-4.0=best)
- Office of Juvenile Justice and Delinquency Prevention's Model Programs Guide (Effective, Promising, No Effects)
- California Evidence-Based Clearinghouse. (Ratings from 1-5; 1=Well-supported, 2=Supported, 3=Promising)
- Blueprints for Healthy Youth Development. (Ratings = Promising, Model, or Model Plus)

Challenge Devising ADAl's Strategy

- Examine all treatments found on other lists
- Identify additional treatments through PubMed and Google Scholar literature searches, citation indexes
- Examine original studies consult but do not rely on literature reviews or meta-analyses
- Exclude phone-, web-, internet-, and smartphone-based treatments and those primarily delivered on college campuses or in correctional settings

Findings

- 24 treatment approaches were rated according to their level of evidence
 - 6 evidence-based
 - 5 research-based
 - 11 promising
 - 1 unsupported

Evidence-based treatments

- Adolescent Community Reinforcement Approach
- Brief Intervention/Motivational Interviewing
- Cognitive Behavioral Therapy
- Functional Family Therapy
- Motivational Enhancement Therapy and Cognitive Behavioral Therapy
- Multidimensional Family Therapy

Research-based treatments

- Assertive Continuing Care
- Contingency Management
- Ecological Based Family Therapy
- Family Behavior Therapy
- Teen Marijuana Checkup

Promising treatments

- Adolescent Cannabis Checkup
- Brief Strategic Family Therapy
- Chestnut-Bloomington Outpatient Program
- Culturally Informed and Flexible Family-Based Treatment (for Hispanics)
- Community Reinforcement and Family Training
- Motivational Enhancement Therapy

Promising treatments

- MET/CBT Aftercare
- Multisystemic Therapy
- Seeking Safety for Adolescents
- Strengths-Oriented Family Therapy
- Structural Ecosystems Therapy
- The 7 Challenges

Explanations

- Full Inventory http://adai.uw.edu/pubs/pdf/2015youthsubstuse .pdf
- Research Brief
 http://adai.uw.edu/pubs/pdf/2016youthsubstuse
 brief.pdf

What we know

- There are several evidence-based treatment options for maladaptive substance use by adolescents
- However, many well-respected treatments did not make the list
 - Only a single RCT
 - Mixed findings
 - Lack of effect on substance use outcomes

What we still need to know

- More clarity in the definitions would be helpful
- Additional studies to convert research-based and promising practices into the evidence-based
- Additional studies to inform benefit-cost analysis
- Perhaps most importantly:
 - Are we meeting the needs of WA adolescents?
 - If not, what more can be done to meet their needs?

Acknowledgments

- This work was supported by DBHR and ADAI marijuana funds
- Much appreciation to Nancy Sutherland for her work on the inventory of treatment practices

Thank you!