Attitudes toward evidence-based pharmacological treatments among community-based addiction treatment programs targeting vulnerable patient groups

Center for Addictions Research and Services, Boston University School of Social Work

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Acknowledgments

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Overview

National study of CSAT/SAMHSA funded community-based addiction-treatment organizations

Specifically, their implementation of evidence-based practices

Focus: Director attitudes regarding use of behavioral and pharmacological EBPs were assessed.
Research question

Is working in an organization that serves higher levels of vulnerable populations associated with Program Directors’ attitudes toward evidence-based behavioral and pharmacological treatments?

- Controlling for director characteristics (age, years of experience on the job, level of education, and years of professional experience) and treatment unit organizational characteristics (type of treatment unit, program size, whether PI affiliated with a university or hospital, geographic location, organizational capacity for change (TCU-ORC)).
Government treatment funders and addiction treatment researchers recommend that addiction treatment programs implement EBP interventions.¹ CSAT/SAMHSA funding requirements include that CBOs applying for treatment services grants implement EBPs as part of their service projects.

However, many CBOs, are small, they have limited economic -organizational resources and they are, due to factors such as geographic location, not able to connect with research institutions that have better access to new research evidence on EBPs.

Often these organizations serve the highest percentage of vulnerable populations (such as those with co-morbid mental health disorder, racial/ethnic minority groups, homeless, women).²⁻⁴
**Methods**

- Sample identified through publicly available SAMHSA web-lists of funded projects
- Received awards between 2003 and 2008
- Web-based surveys conducted with Program Directors and staff.
- 93% response rate
Validity and reliability

- Texas Christian University’s Organizational Readiness for Change (TCU-ORC) scales.
- Directors and staff completed 115 items (5-point agree-disagree Likert scales); items summed to form 18 scales.
- Organizational areas include motivation for change, resources, staff attributes, and organizational climate.

Principal Components Analysis completed on TCU-ORC:
- Confirmed same internal structure as Lehman, et al.
- The questions forming each subscale generally loaded on a unique factor. Eigenvalues were similar to the Lehman et al. values;
  - In instances where more than one eigenvalue exceeded 1, the second value was quite low.
- In addition, our Cronbach’s alpha for these scales were consistent with the values reported in Lehman et al. and suggested similar internal consistency and reliability.
Analysis

Bivariate and multivariable linear regression modelling explored the relationship between:

Working in a CBO that serves a high percentage vulnerable population and Program Director attitudes toward evidence-based behavioral and pharmacological treatments

- Vulnerable client groups included:
  - Homeless, African-American, Hispanic/Latino, those with comorbid addiction-mental health disorders, women and any organizations that served at least > 50% vulnerable populations
Dependent variables

Program Directors:

- “Buprenorphine is an effective treatment for opiate dependence”
- “Psychiatric medications should be used more in addiction treatment”
- “Addiction treatment programs should provide pharmacotherapy for psychiatric disorders”

- 5 point Likert scale
- Disagree strongly, disagree, uncertain, agree and agree strongly
## Analysis – Step 1

Bivariate analysis examined the statistical relationship between:

**Percentage vulnerable population clients served in the CBO:**
- Homeless
- Hispanic/Latino
- >50% vulnerable
- Co-morbid
- African American
- Women

**PD Characteristics:**
- Program Director age
- Years experience on the job
- Years of education
- Years of professional experience

**Program Characteristics:**
- Type of treatment unit
- Program size (# annual admissions)
- PI research affiliation (university/hospital)
- Primary service area

**TCU-ORC:**
- 18 sub-scales

and the three dependent variables.
Analysis – Step 2

- Multivariate methods:
  - Given that a number of TCU-ORC variables were associated with dependent variables at the bivariate level, separate preliminary linear regression models were developed for each TCU-ORC organizational area:
    - motivation for change, resources, staff attributes and organizational climate which all included director and treatment org characteristics (not TCU) also significant at the bivariate level.

- Final linear regression models include:
  - TCU variables significant in preliminary linear regression models and director and treatment unit characteristics significant at the bivariate level.
Analysis continued

15 final regression models developed:

For the following groups:

* % clients homeless
* >50% any vulnerable populations
* % clients with co-morbid disorders

* % Hispanic/Latino
* % African American

- Program Director highest degree
- Program Director years of experience in drug abuse counseling
- Program size (number of admissions)
- Working in an organization affiliated with a university or hospital (research affiliation)
- Organizational control variables significant at the bivariate level (training score, technology score)

**ALL run with each of the three dependent variables**
Results – Regression

Final Linear Regression Results Program Director attitudes
Project Director Sample n = 296

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients B</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Semi-partial correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV: “Buprenorphine is an effective treatment for opiate dependence”</td>
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<tr>
<td>Percent Homeless*</td>
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<td>Technology Score*</td>
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<td>Adjusted R square:</td>
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<td></td>
<td>.117</td>
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*p<.05  **p<.01  ***p<.000
## Results – Regression

Final Linear Regression Results Program Director attitudes
Project Director Sample n = 296

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<tr>
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<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Semi-partial correlations</th>
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</thead>
<tbody>
<tr>
<td>Percent Co-morbid*</td>
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Adjusted R square: .120
# Results – Regression

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<td>Psychiatric medications should be used more in addiction treatment</td>
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<td>.139</td>
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</table>

*p<.05  **p<.01  ***p<.000

Adjusted R square .091
Summary results

1. No significant association between working in organizations that serve a high percentage of vulnerable populations and attitudes on a range of behavioral interventions.

2. Directors in organizations serving higher percentage homeless clients and higher percentage of clients with co-morbid disorders had more negative attitudes toward buprenorphine controlling for director and organizational characteristics.

3. Directors in organizations with more IT technology, affiliated with a university or hospital and higher number of annual admissions reported more positive attitudes about buprenorphine and pharmacological therapies for mental health disorders.

4. Directors with more professional experience reported more positive attitudes toward the use of pharmacological therapies for mental health disorders.
Recommendations

Addiction researchers and policy makers need to make research on evidence based practices available and accessible to programs serving a high concentration of homeless and co-morbid populations.

These vulnerable populations might benefit most from pharmacological and psychiatric interventions, although they may be the last to benefit from advances in the field.
Federal and State governments funding community based addiction treatment organizations implementing EBPs need to:

- promote development and use of technology in CBOs and
- promote CBO linkages with research institutions
Limitations

- This project only sampled community-based CSAT-funded substance abuse treatment organizations.
  - Did not include treatment organizations solely funded by states or by private insurance.
- Given that this is an exploratory cross-sectional study, it is only able to identify associations rather than causal connections between selected study factors.
- A possible concern is sample bias; since organizations that are the least successful with implementation of EBPs probably never apply for government funding, the director and staff perspectives from those organizations are not included in or study.
References


