Effectiveness of a Psychosocial Intervention on an Adolescent Psychiatric Inpatient Unit

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INTRODUCTION

Considerable evidence supports the efficacy of Cognitive-Behavioral Therapy (CBT) for treating a variety of psychological disorders, however there is a paucity of research using this approach in inpatient settings.1 Unfortunately, studies of youth discharged from inpatient treatment show high rates of rehospitalization and repeat psychiatric crises.2,3 The risk appears particularly high within the first 12 months post-hospitalization, with rates of readmission or repeat contact with psychiatric crises services being as high as 46%.4 Providing quality care in this setting has become increasingly challenging given reduced lengths of hospitalization and there is an increased need for delivering effective brief interventions.5,6

CBT has been well supported in outpatient settings for a host of disorders (e.g., anxiety, depression), but its feasibility and clinical utility in short-term inpatient settings have yet to be empirically determined. In inpatient settings, delivery of empirically supported treatments has become increasingly challenging given reduced lengths of hospitalization and increased acuity among youth.6

The limited research available suggests psychiatric hospitalization of youth is most helpful when there is a solid therapeutic alliance, longer stay, problem solving skills-based therapy utilizing a cognitive-behavioral theoretical orientation, better pre-morbid family functioning, and integration with aftercare services.7,8

OBJECTIVES

The present study aimed to adapt an empirically-supported CBT manual9 for use with acute adolescent inpatients with a broad range of psychopathology within the time constraints of a brief hospital stay, and to assess whether implementation of this adapted manual is associated with reduced inpatient psychiatric service utilization (i.e., reduced numbers of patients re-admitted to a psychiatric unit or seen in the emergency room for a psychiatric concern) over a 12-month period.

HYPOTHESES

1) The treatment would be feasible to implement as demonstrated by completion of more treatment modules as the number of days between treatment and discharge increased.

2) The feasibility of completing treatment modules would not be compromised by factors commonly cited as reducing the ability to provide empirically-informed treatment in inpatient settings. Specifically, we hypothesized that patients who completed treatment modules would not differ from those who did not in terms of age, sex, length of stay, and diagnostic status.

3) Module completion would be associated with lower prospective risk for return to intensive psychiatric services as evidenced by reduced readmissions and use of emergency services during the 12 months following hospital discharge.

METHODS

Participants: 463 patients between the ages of 12 and 16 admitted to a psychiatric facility in Rhode Island between April 2015 and March 2016. The majority of patients were female (64.58%) and had a mean age of 14.45 (SD=1.20). 74.34% were Caucasian, 7.52% were African American, 2.43% were multiracial, 15.71% were other, and 21.75% were Latino. Diagnoses based the Children’s Interview for Psychiatric Syndromes (ChIPS) structural interview using DSM-IV-TR criteria are listed in Table 1. The mean number of diagnoses was 2.38 (SD = 1.48). The average length of stay was 9.34 days (SD = 8.79), which was influenced by several factors including insurance coverage, disposition plan, and family involvement.

Table 1. Diagnoses based on the Children’s Interview for Psychiatric Syndromes

<table>
<thead>
<tr>
<th>Diagnoses</th>
<th>N (%)</th>
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<tbody>
<tr>
<td>Major Depressive Disorder/Anxiety</td>
<td>322 (69.55)</td>
</tr>
<tr>
<td>Mania/Hypermania</td>
<td>28 (6.05)</td>
</tr>
<tr>
<td>Attention-Deficit Hyperactivity Disorder</td>
<td>133 (28.73)</td>
</tr>
<tr>
<td>Generalized Anxiety Disorder/Anxiety</td>
<td>248 (53.56)</td>
</tr>
<tr>
<td>Oppositional Defiant Disorder/Conduct Disorder</td>
<td>181 (39.09)</td>
</tr>
<tr>
<td>PTSD/Acute Stress</td>
<td>102 (22.03)</td>
</tr>
<tr>
<td>Psychosis/Schizophrenia</td>
<td>61 (13.17)</td>
</tr>
<tr>
<td>Anxiety/Depression</td>
<td>26 (5.62)</td>
</tr>
</tbody>
</table>

The “COPES” Intervention: The “COPES” intervention begins with a clinical interview, structured diagnostic interview, and behavior checklists (completed by the parent and teen) used to assign teens to one of three tracks: 1) Depression, 2) Trauma, and 3) Anger and Mood Instability. Psychosocial education specific to the track assignment is provided from the treatment team to review common symptoms, etiology, treatment approaches, and information on reducing suicide and self-injury. With the help of various members on the multidisciplinary team, adolescents across all three tracks complete four skills training treatment modules.

1) Coping Plan: Teens identify triggers and physiologic signs of distress, and then generate a list of coping thoughts and behaviors that can be used to alleviate this distress.

2) Problem Solving: Teens identify the triggers that led to hospitalization and problem solve ways to address these issues.

3) Enhancing Life: Teens create an individualized plan for taking medication, eating healthily, engaging in pleasant activities, and improving sleep to enhance self-care and reduce vulnerability to negative emotions.

4) Safety Plan: Teens develop a safety plan that centers on ways they can keep themselves safe and obtain support when needed after leaving the hospital.

RESULTS

Feasibility: 98.70% of patients completed at least one of the treatment modules and 42.98% completed all four components (Figure 1). The number of modules completed was not related to factors commonly cited as reducing the ability to provide empirically-informed treatment in inpatient settings (i.e. age, sex, length of stay, and diagnoses including depression, mania, attention deficit/hyperactivity disorder (ADHD), anxiety, psychosis, conduct problems, PTSD/Acute Stress, and eating disorders). Conduct disorder was the only diagnosis associated with lower completion rate of any module (Enhancing Life) (OR=0.62, 95% CI=0.42–0.90).

Future Directions:

1) Randomize patients to treatment in order to compare those who received the intervention to those in a control group.

2) Examine the content of the completed modules more closely as it is likely that patients who had more thoughtful completion of the modules had greater benefit than those who had poor quality completion.

3) Identify variables such as intelligence, level of engagement, or other factors that may influence treatment response.

REFERENCES

1) Kiresuk TJ, D'Zurilla TJ. Contingency of care for suicide prevention and research: Facilitate attempts and suicide-related outcomes from discharge to the emergency department or psychiatric inpatient unit. American Association of Suicidology & Suicide Prevention Research Center.2010.


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