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### Article 67

# Evaluating American Society of Addiction Medicine (ASAM) Dimension Assessment As an Outcome Measure: A Pilot Study With Substance Abusing Adolescents in Two Matched Residential Treatment Centers

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#### **Abstract**

American Society of Addiction Medicine (ASAM) dimension assessment is extensively used as admissions criteria into most accredited inpatient and intensive outpatient addictions treatment programs. No refereed journal articles exist within existing professional counseling literature addressing the efficacy of using the ASAM dimension assessment addiction outcome measures. This study evaluated ASAM dimension assessment as an effective outcome evaluation with substance abusing adolescents in two residential treatment centers. Results suggest ASAM dimension assessment can be an effective outcome evaluation, and regular ASAM evaluation updates elicit positive treatment outcomes among substance abusing youth.

Keywords: ASAM, residential treatment centers, outcome evaluation

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# Introduction

The likelihood of adolescents finding themselves placed in restricted, residential settings is often predicated on serious substance abuse (ASTART, 2012). Studies demonstrate that youth who abuse drugs tend to lack familial intimacy and peer support, and they often benefit from restrictive, intensive therapeutic environments (Duke, Borowsky, Pettingell, & McMorris, 2011; Subramaniam, Lewis, Stitzer, & Fishman, 2004).

With such challenging issues, there has been great concern about the treatment of and responses toward substance abusing youth. Adolescent residential treatment centers exist to support the health and care of many of the most serious substance abusing youth. An adolescent residential treatment center is a "facility that provides children and adolescents with a residential multidisciplinary mental health program (including substance abuse) under medical supervision and leadership" (American Academy of Child & Adolescent Psychiatry Council, 2010, p. 2). There exists repeatable and consistent evidence that residential treatment centers reduce recidivism, save communities money, improve academic skills, and support improved mental health among residents (French, McCollister, Sacks, McKendrick, & DeLeon, 2002).

Huizinga, Loeber, Thornberry, and Cothern (2000) and Hawkins et al. (2000) reported that accurate individual client assessment based upon an organized, reliable, and clinical approach was paramount to creating effective treatment intervention plans for substance abusing adolescents in residential treatment centers. One key area for such accurate substance abuse assessment is the American Society of Addiction Medicine (ASAM) dimension assessment. This assessment is the most extensively used admissions criteria for accredited inpatient and intensive outpatient treatment programs, provides a mental health industry assessment standard, and is often state mandated when residential treatment centers provide substance-abusing adolescents treatment. Stated differently, demonstrating ASAM criteria are vitally important to fulfill necessary entrance into inpatient addictions hospital settings, secure appropriate counseling treatment, and demonstrate need, reimbursement criteria, and adequate treatment for Medicaid and insurance. These criteria include six Dimensions: (1) Exploring an individual's past and current experiences of substance use and withdrawal; (2) Exploring an individual's health history and current physical condition; (3) Exploring an individual's thoughts, emotions, and mental health issues; (4) Exploring an individual's readiness and interest in changing; (5) Exploring an individual's unique relationship with relapse or continued use or problems; and (6) Exploring an individual's recovery or living situation, and the surrounding people, places, and things (ASAM, 2015).

ASAM's stated goal is to improve the care and treatment of addiction dependence (ASAM, 2014). The organization publishes clinical treatment assessment criteria and materials for determining admission to treatment centers and evidenced-based and promising addiction treatment practices (ASAM, 2014; Subramaniam et al., 2004). ASAM dimension assessment has been linked to better addictions treatment recovery results and other benefits (Magura et al., 2003; Plough, Shirley, Zaremba, et al., 1996). However, to date, no studies within existing professional counseling literature have investigated whether or not ASAM dimension assessment provides an effective outcome evaluation or effective pre-post evaluation outcomes for substance abusing adolescents

treated in residential treatment centers. Therefore, this study investigates the use of ASAM dimension assessment as an outcome evaluation with substance abusing adolescents in two matched residential treatment centers.

#### Method

#### Research Sites

Two adolescent residential treatment center sites in the United States Rocky Mountain region participated in this study. The sites were matched by rural location (communities of under 30,000 people), gender (males), common placement criteria, similar ethnic composition (90% Caucasian teens from rural, small towns), and therapeutic experiences. Both facilities treat court-referred substance abusing adolescents with criminal histories. Typical therapeutic treatment at these sites consisted of full school days, recreational activities, outdoor programming, and individual, group, and family counseling. Participant youth averaged one hour of individual counseling, four hours of group counseling, and 30 minutes of family counseling per week at each site.

# **Participants**

Participants were substance abusing adolescents in two residential treatment sites (n = 40 at Site A) and (n = 29 at Site B). The total ethnic composition was 90% Caucasian, 8% Hispanic, and 2% African American. The average age at sites was approximately 15 years old. A team of licensed professional counselors, psychologists, and social workers staffed both sites. Adolescents at Site A were assessed quarterly to ascertain movement across the ASAM dimensions and engaged therapeutic activities per ASAM recommendations. Adolescents at Site B were ASAM evaluated more regularly. Specifically, they were assessed via the ASAM dimensions one time per month. A summative assessment was completed at both sites after 3 months.

#### Instrumentation

The instrument utilized in this study was the *American Society of Addiction Medicine Patient Placement Criteria 2R* (ASAM PPC-2R), self-described as "the most widely used and comprehensive set of guidelines for placement, continued stay and discharge of patients with addiction disorders" (ASAM, 2014). Gastfriend, Lu, and Sharon (2000) noted that ASAM is a reliable and valid assessment process, and reported that an independent panel for substance abuse treatment discovered ASAM dimension assessment to have sufficient validity to support state implementation (Gastfriend, 2004).

The ASAM dimension assessment describes each of the six dimensions, includes a comment section, and provides a high (1), medium (2), and low (1) scale for scoring (see Appendix A). The assessment also includes 12 ASAM recommended therapeutic activities (e.g., relapse prevention strategies, promoting social support, and group living skills), as well as continued stay recommendations and recommended levels of care. Per ASAM guidelines, each site adjusted the ASAM dimension assessment to meet site specific treatment needs. Both sites concentrated on dimensions 3 through 6, as neither site was equipped to deal with intoxication/withdrawal and/or biomedical problems. ASAM therapeutic activities were widely utilized at both sites. Examples of such

activities include occupational/vocational activities, emotional expression activities, and recreational activities (see Appendix A).

# **Procedures**

Counselors at both adolescent treatment facilities systematically gathered information within the first month of admission from these assessments (pre-test) and developed treatment goals and interventions related to the ASAM dimensions and recommended activities, with ongoing follow-up previously described. At the 3-month mark, a summative assessment was completed at both sites (post-test).

### Results

T-test analysis demonstrated significant pre-post changes at both Site A and Site B on the ASAM dimensions evaluations (Dimensions 3–6). Specifically, Site A results demonstrated the most significant changes in dimensions 3 (emotional), 4 (change), and 6 (recovery environment; p < .05), with no significant change for Dimension 5 (relapse potential; see Table 1). The most common choices of therapeutic activity, with at least 70% of youth utilizing the activities at Site A, included: a) teaching group living skills (#4), b) recreational activities (#7), c) emotional expression activities (#8), d) relapse prevention strategies (#11), and e) bibliotherapy (#12).

Significant results were found across all Site B dimensions. These results are indicated in Table 2. Site B's most popular therapeutic activities for youth, with at least 70% of youth indicating utilization were: a) improving ability to manage and organize activities of daily living (#1), b) help youth to participate in treatment services (#2), c) help youth sustain involvement in regular productive activities (school, etc.; #3), d) teaching group living skills such as problem solving and conflict resolution (#4), and e) promoting development of social support network (#5).

Table 1

Comparison of the Means Site A Pre and Post Tests

| ASAM Subscales                                | Pre  | Post | Sig    | Difference |
|---|------|------|--------|------------|
| Dimension 3<br>(Emotional)<br>(Reverse score) | 2.2  | 1.59 | .00*** | 61         |
| Dimension 4<br>(Change)                       | 1.53 | 1.92 | .003** | +.39       |
| Dimension 5 (Relapse)                         | 1.4  | 1.61 | .094   | +.21       |
| Dimension 6 (Recovery environ.)               | 1.8  | 2.5  | .036** | +.70       |

<sup>\*\*</sup> p<.05; \*\*\*p<.001

Table 2
Comparison of the Means Site B Pre and Post Tests

| ASAM Subscales                                | Pre-test | Post-test | Sig     | Difference |
|---|----------|-----------|---------|------------|
| Dimension 3<br>(Emotional)<br>(Reverse score) | 2.53     | 2.0       | .005*** | 53         |
| Dimension 4<br>(Change)                       | 1.73     | 2.23      | .007*** | +.50       |
| Dimension 5 (Relapse)                         | 1.62     | 2.21      | .001*** | +.59       |
| Dimension 6 (Recovery env.)                   | 1.69     | 2.5       | .038**  | +.81       |

<sup>\*\*</sup> p<.05; \*\*\*p<.01

While ASAM dimension assessment was proven to be quite effective at both sites, Site B's results were more robust and elicited greater amounts of positive treatment among substance abusing youth.

## **Discussion**

The purpose of this pilot study was to investigate whether the ASAM dimension assessment process could serve as an effective outcome evaluation at two matched adolescent treatment facilities. Study findings indicate that ASAM dimension assessment was effective for noting progress across dimensions at both adolescent treatment sites. Site B's results in Dimension 5 - Relapse Potential were better. The authors believe the more frequent ASAM dimension assessment tracking, incorporated by the clinical director over the last number of years as a continual quality improvement practice, reinforced positive youth behaviors, especially in the area of relapse issues.

As indicated in the literature, adhering to specific ASAM guidelines provides consistency and higher standards. More significantly, understanding substance abusing residents' needs and whether they are effectively being met increases treatment success. Additionally, having an identifiable assessment that counselors use over time supports overall consistency and clear communications among counselors providing counseling to residents.

Improving the care and treatment of residents' addictive issues is the overall goal of residential treatment programs (ASAM, 2014). The ASAM dimension assessment evaluation process promotes a critical understanding of appropriate treatment and the effectiveness of such treatment (Subramaniam et al., 2004). Results from this pilot study support the broad-spectrum value of regularly utilizing measureable evaluation throughout the counseling process and specifically support the benefits of utilizing ASAM dimension assessment over a designated period of time and providing short-term

and long-term analyses and feedback to substance abusing youth in residential treatment programs.

# Limitations

Limitations of this study include the small sample size of select residential treatment groups in a particular U.S. region. Such limitations create challenges in generalizing the results to other residential treatment centers with a different demographic and geographic region.

# **Future Research**

This study contributes to the use of ongoing ASAM dimension assessment as valuable in adolescent substance abuse outcome evaluations. Given both the absence of research in existing professional counseling literature specific to the use of ASAM dimension assessment as an effective outcome evaluation with substance abusing youth in residential treatment centers and the paucity of existing professional counseling literature specific to substance abusing adolescents receiving counseling at residential treatment centers, this seminal research warrants large scale duplication. Additional studies need to employ larger scale sample sizes with more diverse adolescent substance abusing client populations among a broader range of geographic residential treatment center locations

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### APPENDIX A

#### **ASAM Dimensions**

**Dimension 1: Intoxication/Withdrawal** – Signs and symptoms of acute withdrawal or potential for withdrawal.

High / Medium / Low

1 2 3

**Dimension 2: Biomedical** – Physical health problems that potentially interfere with or complicate treatment and/or recovery.

High / Medium / Low

1 2 3

**Dimension 3: Emotional, Behavioral, Cognitive** – Problems with impulse control, disruptive behavior, poor coping skills, inability to resist negative peer influence, cognitive impairment, use of defense mechanisms and thinking distortions. (REVERSE SCORE)

Low / Medium / High

1 2 3

**Dimension 4: Readiness to Change** – Lack of engagement or low motivation to change.

High / Medium / Low

1 2 3

**Dimension 5: Relapse Potential** – Unable to sustain recovery or prevent continued use.

High / Medium / Low

1 2 3

**Dimension 6: Recovery Environment** – Family problems sufficiently complicated and intense as to prevent return to family environment, no D/C options, aging out of program, unstructured unsupervised community environment – sustained recovery at risk.

High / Medium / Low

1 2 3

# **Therapy Activities:**

- 1. Improving ability to manage and organize activities of daily living.
- 2. Help child to participate in treatment services.
- 3. Help child sustain involvement in regular productive activities (school, etc.)
- **4.** Teaching group living skills (problem solving, conflict resolution, etc.).
- **5.** Promoting development of social support network.
- **6.** Occupational/vocational activities
- 7. Recreational activities
- **8.** Emotional expression activities

- 9. Random drug/alcohol screening
- **10.** Enhancing understanding of addiction behaviors and processes
- **11.** Relapse prevention strategies
- **12.** Bibliotherapy (working in CD workbook)

# **Continuing Care/Discharge Assessment:**

<u>Continued Service Criteria:</u> Making progress/ Not yet achieved goals articulated in the individualized plan/ Capacity to resolve his or her problems/ Actively working towards the goals articulated in the plan/ New problems have been identified that are appropriately treated at the present level of care.

<u>Discharge/ Transfer Criteria:</u> Adolescent has achieved the goals articulated in his or her individualized treatment plan thus resolving the problem(s) that justified admission to the present level of care/ Adolescent has been unable to resolve the problem(s) despite amendments to the treatment plan. Treatment to another level of care is indicated/ Adolescent has experienced an intensification of his or her problem(s), or has developed a new problem(s) and can be treated effectively only at a more intense level of care.