PADDI Findings for Adolescents in Treatment
Norman G. Hoffmann, Ph.D.

The PADDI (Practical Adolescent Dual Diagnostic Interview) is a structured diagnostic interview designed explicitly for identifying the prevalent conditions found in both treatment and juvenile justice populations. It can be administered in 30 to 40 minutes for evaluating individuals who are from 12 to 18 years of age. The PADDI covers 10 Axis I mental health diagnostic areas in addition to substance dependence/abuse in accordance with DSM-IV diagnostic criteria. It also covers dangerousness to self or others and whether the adolescent was the victim of physical, sexual, or emotional abuse.

Systematically and consistently identifying the nature and extent of substance use disorder symptoms and co-occurring mental health problems in adolescent populations has been a long-standing concern for clinicians. To address questions of prevalence, severity, and relationships between problem areas, the staff of juvenile justice facilities and treatment programs in several states are providing anonymous data from PADDI interviews.

The data from the first 251 cases were utilized for the following statistical analyses. The sample included 141 males and 110 females ranging in age from 12 to 18, but over 80% of the cases were between 15 to 17 years of age. Two-thirds of the cases were Caucasians, 18% were African-Americans and 6% were Native Americans. The remainder included Hispanics and individuals of mixed ethnicity. The majority (51%) lived with their mothers and relatively few (18%) lived with both parents.

The data suggest learning difficulties and low educational attainment. Comparisons of age with the highest grade completed suggest that almost a third of the adolescents are behind at least one grade level in anticipated school performance. More than one in five reported having a reading problem, and 45% reported having been in special classes.

Almost 40% of this sample was currently on some type of medication, and an additional 34% reported previous prescriptions. About two-thirds reported previous treatment or involvement with agencies relative to the problems for which they entered this program.

Internal consistency reliability refers to the extent to which the items in a scale measure a consistent, homogenous construct. Cronbach’s alpha coefficients ranged from .70 for conduct disorder to .92 for a major depressive episode. Only conduct disorder had a reliability coefficient below .80.

The following table provides a summary of prevalence and severity of key conditions covered by the PADDI. The “no symptom” column indicates the proportion of cases for which individuals had no indications of a problem. The “sub-diagnostic” category is for those with some symptoms but whose symptoms did not reach DSM-IV criteria for the diagnosis indicated on the basis of the PADDI information. The sum of the next three columns for a given condition provides the proportion of cases that appear to meet DSM-IV criteria for the respective diagnosis. Those in the “minimal criteria” column met just the minimal criteria for the diagnosis. The remaining two columns indicate the proportion of the total sample that reported symptoms exceeding the minimal criteria. For substance dependence, those meeting only abuse criteria are listed in the “sub-diagnostic” category.

### Symptom Profiles for Selected Conditions

<table>
<thead>
<tr>
<th>Condition (Lifetime)</th>
<th>No Symptoms</th>
<th>Sub-diagnostic</th>
<th>Minimal Criteria</th>
<th>Exceeds Criteria</th>
<th>Far Exceeds Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depressive Episode*</td>
<td>46%</td>
<td>17%</td>
<td>9%</td>
<td>9%</td>
<td>19%</td>
</tr>
<tr>
<td>Manic Episode*</td>
<td>48%</td>
<td>16%</td>
<td>12%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>Panic Attacks**</td>
<td>61%</td>
<td>20%</td>
<td>4%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Posttraumatic Stress Disorder</td>
<td>42%</td>
<td>26%</td>
<td>2%</td>
<td>18%</td>
<td>12%</td>
</tr>
<tr>
<td>Conduct Disorder</td>
<td>4%</td>
<td>13%</td>
<td>22%</td>
<td>28%</td>
<td>33%</td>
</tr>
<tr>
<td>Oppositional Defiant Disorder</td>
<td>8%</td>
<td>35%</td>
<td>16%</td>
<td>12%</td>
<td>29%</td>
</tr>
<tr>
<td>Substance Dependence†</td>
<td>0%</td>
<td>19%</td>
<td>3%</td>
<td>7%</td>
<td>71%</td>
</tr>
</tbody>
</table>

* Subsance induced conditions are counted as sub-diagnostic.
** Only symptoms for attacks in the previous 12 months are considered.
† Diagnosis considered only if use is reported in the past 12 months; abuse cases are counted in the sub-diagnostic category.
As can be seen in the table, almost 40% of the adolescents met diagnostic criteria for a major depressive episode, and over a third met criteria for a manic episode. About half of the cases do not reach diagnostic levels for either affective disorder, but 16% reported both depression and mania. Findings for this latter group suggest the possibility of bipolar disorder or mixed states where manic and depressive symptoms tend to coexist or alternate rapidly. Some of these individuals and the 14% reporting multiple types of hallucinations not related to drugs may require some medications for proper clinical treatment.

Among the anxiety disorders, PTSD appears to be the most common, but almost 40% of the cases endorsed the majority of the items on generalized anxiety and phobias. Over 60% were below diagnostic range for both PTSD and panic attacks and almost 50% of all cases were also negative for strong indications of generalized anxiety or phobias. Reports of panic attacks were significantly associated with indications of PTSD in that almost 70% of those with substantial panic attack symptoms also met criteria for PTSD.

The table ignores the fact that a diagnosis of conduct disorder overrides the diagnosis of oppositional defiant. Of those meeting oppositional defiant disorder criteria, about 95% also met criteria for conduct disorder. Thus, fewer than 5% of the sample qualified for oppositional defiant disorder only. In contrast, about a third of those meeting criteria for conduct disorder did not meet criteria for oppositional defiant disorder. About 15% of the sample did not meet diagnostic criteria for either of these conditions.

The substance use disorder items suggest extensive clinical severity. About 45% of the sample met all seven of the dependence criteria. Of those who were dependent, 88% met at least five of the seven dependence criteria and more than 90% of dependent adolescents met at least three of the four abuse criteria as well.

The majority of the adolescents indicated a current or past history of self-harm. About a fourth currently had suicidal or self-harm thoughts and had some plan about how to harm themselves. In addition, about 30% had some past history of self-harm. Almost a half admitted at least some past thoughts of harming others.

More than 90% of the females and 75% of the males were the victims of physical, sexual, and/or emotional abuse. Emotional abuse consisting of persistent ridicule was the most prevalent with 71% of females and 43% of males reporting such abuse. Sexual abuse of females (60% prevalence) and physical abuse of males (41%) were the second most prevalent types of victimization for the two genders. Almost 40% of females and about 6% of males were victims of all three forms of abuse. Sexual abuse was most likely to occur in conjunction with other forms of abuse.

SUMMARY

Diagnostic assessments from the PADDI reveal that adolescents entering either juvenile justice or community programs typically have multiple behavioral health problems and substantial clinical severity. For an addictions treatment program, one might expect substantial substance involvement and high clinical severity. However, the indications are that the level of addiction severity is extremely high in this sample. In addition, a substantial proportion of individuals manifest affective and anxiety disorders. Some of these are likely to require medications for proper clinical management. This would be particularly evident for those where bipolar disorders are confirmed.

The syndromes identified appear to represent quite distinct and consistent conditions. This is supported both by the clinical profiles of severity as noted in the table and the relatively high internal consistency reliabilities for most of the scales formed from the symptoms. For example, reliability coefficients for substance dependence, depression, and mania range from .87 to .92. Conditions such as conduct disorder, which has a more varied presentation, had one of the lowest coefficients at .70.

Some of the indications of conduct disorder and victimization may be related to substance dependence. In any event, issues related to victimization are likely to require clinical attention both within and beyond the context of the addictions treatment. Likewise, for those whose extensive conduct disorder symptoms are not substance related, other services may be necessary to address these behaviors.

In short, this is a multiple-problem population in need of appreciable clinical services. Some of these individuals are likely to require services over a protracted time to address their addictions, mental health, and behavioral problems.