The Relationship between Physical Illness and Internalizing Symptomatology in a Transdiagnostic Clinical Sample of Youth

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INTRODUCTION/PURPOSE

Mental illness in children with physical health problems

- Rates of mental illness (especially internalizing disorders) 4X higher in children with physical illnesses (Pinquart & Shen, 2011)
- Anxiety: at highest risk within first year of physical illness diagnosis (Letitre et al., 2003)
- Depression: higher in those with chronic illness, especially females (Pinquart & Shen, 2011)

Cumulative effect of managing multiple chronic illnesses→ greater emotional and behavioral problems in youth (Newacheck & Stoddard, 1994)

Physical health in children with mental illness

- Medical comorbidity is higher in youth with at least 1 anxiety disorder (Chau et al., 2009)
- Health-Related Quality of Life (HRQL) lower in children with mental illness (Sawyer et al., 2002)

Goal: examine relationship between physical illness and internalizing symptomatology in transdiagnostic clinical sample of youth

METHODS

Participants (Table 1)

- N = 262
- Mean age: 10.79
- 48.47% female
- More than 75% earned less, than $60,000 per year

Procedure

Baseline data from large RCT examining effects of MATCH-ADTC (Chorpita & Weiss, 2009) in community outpatient clinics in state of Connecticut

Analyses

Independent samples t-tests and one-way ANOVAs (with Dunnett’s C and Tukey HSD post-hoc analyses)

RESULTS

Table 1. Sample characteristics

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic White</td>
<td>32.06</td>
<td>84</td>
</tr>
<tr>
<td>Black</td>
<td>26.72</td>
<td>70</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>25.57</td>
<td>67</td>
</tr>
<tr>
<td>Asian</td>
<td>0.76</td>
<td>2</td>
</tr>
<tr>
<td>Multiracial</td>
<td>13.74</td>
<td>33</td>
</tr>
<tr>
<td>Other</td>
<td>1.15</td>
<td>3</td>
</tr>
<tr>
<td>Physical illness</td>
<td>Yes</td>
<td>27.0</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>73.0</td>
</tr>
<tr>
<td>CBCL T-scores</td>
<td>M</td>
<td>50</td>
</tr>
<tr>
<td>Internalizing</td>
<td>64.21</td>
<td>9.59</td>
</tr>
<tr>
<td>Affective</td>
<td>64.96</td>
<td>8.96</td>
</tr>
<tr>
<td>Anxiety</td>
<td>62.94</td>
<td>8.59</td>
</tr>
<tr>
<td>YSR T-scores</td>
<td>M</td>
<td>50</td>
</tr>
<tr>
<td>Internalizing</td>
<td>56.61</td>
<td>11.79</td>
</tr>
<tr>
<td>Affective</td>
<td>59.29</td>
<td>9.16</td>
</tr>
<tr>
<td>Anxiety</td>
<td>58.11</td>
<td>7.86</td>
</tr>
</tbody>
</table>

Presence of Physical illness

- There were no significant differences in mean CBCL Internalizing, Affective, or Anxiety subscale T-scores between children who had physical illness and those who did not (p > .05)
- There were no significant differences in mean YSR Internalizing, Affective, or Anxiety subscale T-scores between children who had physical illness and those who did not (p > .05)

Figure 1. Parent-Reported Internalizing Problems

Figure 2. Youth-Reported Internalizing Problems

Number of Physical Illnesses: Youth-report (Figure 2)

- Number of physical illnesses not significantly associated with YSR Anxiety T-scores: t(2, 242) = 1.381, p = .253.
- There was a significant mean difference between groups on YSR Internalizing T-scores, t(2, 242) = 3.044, p = .0049, η² = 0.025.
- Post-hoc analyses failed to detect significant differences between the three groups’ means (p > .008).
- There was a significant mean difference between groups on YSR Affective T-scores: t(2, 242) = 6.46, p = .002, η² = 0.051.
- Children with two or more physical illnesses had higher YSR Affective T-scores than children with one or zero physical illnesses, p < .05.

Number of Physical Illnesses: Parent-report (Figure 1)

- Number of physical illnesses was not significantly associated with CBCL Internalizing or Anxiety T-scores (p > .05).
- There was a significant mean difference between groups on CBCL Affective T-scores: t(2, 256) = 5.098, p = .0007, η² = 0.038
- Children with two or more illnesses had significantly higher CBCL Affective T-scores than children with one or zero physical illnesses, p < .05.

DISCUSSION

- No relationship between presence of physical illness and internalizing symptoms
- Overall low-severity of physical illnesses (asthma)
- Physical illness was caregiver-reported
- Children with two or more physical illnesses had higher depression scores than those with one or zero
- Affective problems scale → MDD and PDD
- Difficulty of managing multiple illnesses
- Social and physical limitations → withdrawal (Bennett, 1994)
- Loss of control → hopelessness (Shaw & McCabe, 2007)
- Many of the youth had asthma as first illness, which is often well-managed/not severe (Letitre et al., 2014)
- No relationship between number of illnesses and anxiety Adjustment period (1st year after diagnosis) is over, which is when risk of anxiety is highest (Letitre et al., 2003)

IMPLICATIONS/FUTURE DIRECTIONS

Clinical implications

- Screening for depression should be further implemented in hospitals and primary care
- There is an importance of incorporating mental and physical illness treatment into one protocol
- Mental health providers should understand, in depth, medical history and current physical problems

Future Directions

- Administer a more comprehensive questionnaire that includes severity and age of onset and get primary care provider report in addition to caregiver report
- A larger sample size would allow for a more heterogeneous population and enable examination of moderators such as age, ethnicity, and SES

REFERENCES