



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 (LeBlanc 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 (Chavira 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

Measures

- Demographic Questionnaire
- Child Behavioral Checklist (CBCL/6-18)
- Youth Self-Report (YSR)

Procedure

Baseline data from large RCT examining effects of MATCH-ADTC (Chorpita & Weisz, 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

Race/Ethnicity	%	N
Non-Hispanic White	32.06	84
Black	26.72	70
Latino/Hispanic	25.57	67
Asian	0.76	2
Multi-racial	13.74	33
Other	1.15	3
Physical Illness		
Yes	27.0	71
No	73.0	191
CBCL T-scores	M	SD
Internalizing	64.21	9.59
Affective	64.96	8.96
Anxiety	62.54	8.58
YSR T-scores		
Internalizing	56.61	11.79
Affective	59.29	9.16
Anxiety	58.11	7.86

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 's > .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 's > .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 's > .05)
- There was a significant mean difference between groups on CBCL Affective T-scores, $F(2, 256) = 5.098, p = .007, \eta^2 = 0.038$
- Children with two or more illnesses had significantly higher CBCL Affective T-scores than children with one or zero physical illnesses, $p < .05$.

RESULTS (cont.)

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

- Number of physical illnesses not significantly associated with YSR Anxiety T-scores $F(2, 242) = 1.381, p = .253$.
- There was a significant mean difference between groups on YSR Internalizing T-scores, $F(2, 242) = 3.044, p = .049, \eta^2 = 0.025$.
 - Post-hoc analyses failed to detect significant differences between the three groups' means (p 's: .089 - .43).
- There was a significant mean difference between groups on YSR Affective T-scores, $F(2, 242) = 6.46, p = .002, \eta^2 = 0.051$.
 - Children with two or more physical illnesses had higher YSR Affective t-scores than children with one or zero physical illnesses, $p < .05$.

Figure 1. Parent-Reported Internalizing Problems

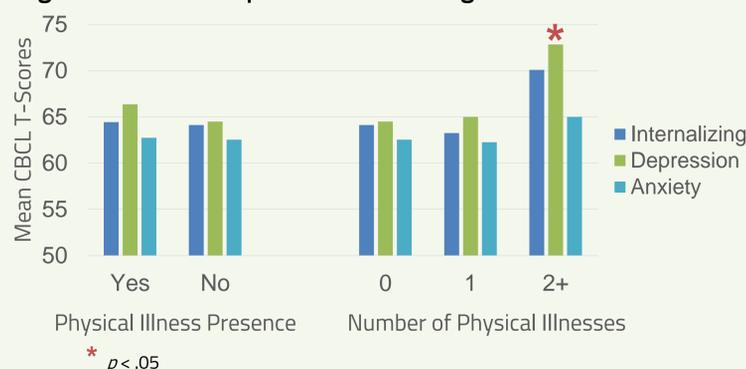
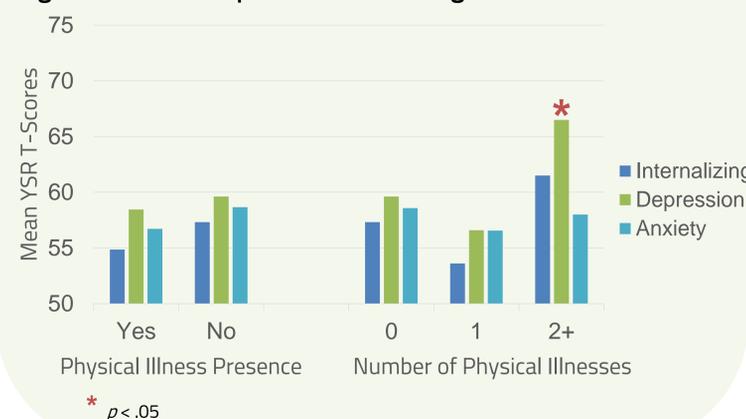


Figure 2. Youth-Reported Internalizing Problems



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 (LeBlanc 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

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