The Effect of Maternal Physical Illness on Reporting Child Problem Behavior

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ABSTRACT

The purpose of this study is to investigate the influence of physical restrictions and the comorbidity of physical restrictions with depressive symptoms on biological mother’s reporting of their child’s behavior problems and the CBCL externalizing scales during their child’s treatment intake.

The sample consisted of 129 mother-child dyads referred to the UC Davis CAARE Diagnostic and Treatment Center for Parent-Child Interaction Therapy (PCIT). Children were referred to the PCIT program for treatment of their externalizing behavior problems; most had a maltreatment history.

Results of analyses revealed that the presence of health problems and depressive symptoms both significantly predicted higher levels of behavior problems in their children. However, analyses also showed that the effect of their health problems on mothers’ tolerance of their children’s behavior problems was largely a result of differences in their depressive symptoms.

INTRODUCTION

Research has shown that when mothers have physical illnesses, their children have impaired psychosocial functioning (Hammen et al., 1987). These mothers reported higher levels of internalizing and externalizing behavior problems in their children, as well as lower social competence (Giebel et al., 2002).

Of the aspects of physical illness that may contribute to lower psychosocial functioning, only illness-related activity restrictions have been found to relate significantly to child behavior problems (Bauman, et al., 2002).

Many physical illnesses that cause activity restrictions often present with depression (Cassano & Fava, 2002). This finding led us to run a preliminary analysis of our sample, which revealed that 50% of our sample of health restricted mothers showed depressive symptom compared to only 10% of non-health restricted mothers, which was similar to the rates reported in the established literature (Cassano & Fava, 2002).

As with activity restrictions, maternal depression has been shown to have a negative impact on child psychosocial functioning (Giebel et al., 2002).

The purpose of this study is to investigate the influence of physical health restrictions and the comorbidity of physical restrictions with depressive symptoms on biological mothers reporting of their child’s behavior problems.

HYPOTHESES

We hypothesized that mothers with physical health restrictions would report higher levels of child behavior problems than mothers who do not report that their daily lives are affected by physical illness.

Furthermore, we hypothesized that mothers who have both health restrictions and depressive symptoms would report even higher levels of child behavior problems due to the confounding effects of physical and mental illness.

METHODS

129 biological mother-child dyads were referred to the UC Davis CAARE Center for Parent-Child Interaction Therapy (PCIT). Mother-child dyads were assessed prior to the start of PCIT treatment.

Participants

We further measured children’s behavior problems using the Eyberg Child Behavior Checklist (CBCL; Achenbach, 2001). The CBCL consists of 140 items which inventory the child’s daily behaviors and is completed by the mothers prior to the start of treatment. The Extending behavior subscale of the CBCL was used in determining the level of child problem behaviors.

Children’s behaviors were rated using the Child Behavior Checklist (CBCL; Achenbach, 2001). The CBCL consists of 140 items which inventory the child’s daily behaviors and is completed by the mothers prior to the start of treatment. The Extending behavior subscale of the CBCL was used in determining the level of child problem behaviors.

We further measured children’s behavior problems using the Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999). The ECBI is a 36-item inventory of common child behavior problems designed for 2–17 year olds. The caregiver is asked to rate the frequency of behaviors on a 1-7 scale, and whether the behavior is a problem for them. We used data on the ECBI administered prior to beginning treatment. The results are divided into an intensity scale which describes the frequency of problem behavior (ECBI Intensity Scale) and a problem scale which describes how much of a problem these behaviors are in the child’s daily life (ECBI Problem Scale).

RESULTS

Graph 2 shows the significant effect of mothers’ depressive symptoms on their reports of the frequency and intensity of children’s behavior problems.

However, in the analysis of their tolerance of their children’s behavior problems, only illness-related activity restrictions have been found to relate significantly to child behavior problems. Mothers with health restrictions report more children behavior problems than those with no health restrictions, and increased numbers of depressive symptoms predict more behavior problems in both groups of mothers.

There were no significant demographic differences found except for child neglect history and child history of foster care.

Graph 1: ECBI Intensity Scale

Graph 2: ECBI Problem Scale

SUMMARY OF RESULTS

OLS Regression analyses were performed on the ECBI intensity, ECBI Problem, and CBCL Externalizing scales testing the predictive power of mothers’ health restrictions, then adding mothers’ depressive symptoms, and finally adding the interaction between mothers’ health and depressive symptoms. Results showed unique and significant effects of mothers’ health restrictions and depressive symptoms on their reports of the frequency and intensity of children’s behavior problems.

In the analysis of their tolerance of their children’s behavior problems, only maternal health restrictions and depressive symptoms to their reports of the intensity of children’s behavior problems. Mothers with health restrictions report more child behavior problems than those with no health restrictions, and increased numbers of depressive symptoms predict more behavior problems in both groups of mothers.

Best fit models for children’s behavior problems: *p < .05; **p < .01; ***p < .001.

DISCUSSION

The purpose of this study was to investigate the influence of mothers’ physical restrictions on their reports of their children’s behavior problems, then asking whether the effects of mothers’ health restrictions on their children’s behavior is attributable to their restricted activity or possible comorbid depression.

Results of regression analyses confirmed our second hypothesis, showing that both restricted activity and depressive symptoms predict increased levels of problem behavior on the CBCL Extending and ECBI Intensity scales. In contrast, we found that the effect of mothers’ health restrictions on their tolerance for their children’s behavior problems was partially mediated by the level of their depressive or psychosocial symptoms.

These findings suggest that while mothers with health restrictions have more problems with their children’s behavior, if they also have depressive symptoms they will report even higher intensities of behavior problems in their children.

The findings also suggest that mothers’ depressive symptoms, more than health restrictions, influence mothers’ tolerance for their children’s behavior. We speculate that heightened irritability and altered perceptions from the depression (Webster-Stratton & Hammond, 1998) may cause mothers to respond more negatively to their children’s annoying behaviors.

The results of this study reiterate our understanding of the interconnection of mothers’ health and mental health. We found that 50% of our sample of health restricted mothers showed clinical levels of depressive symptoms compared to only 10% of non-health restricted mothers.

CLINICAL IMPLICATIONS

This study reminds us that mothers’ mental and physical health are strongly connected; both can affect their children’s mental health. While PCT has demonstrated effectiveness in a variety of populations, mothers’ health restrictions plays a role in treatment and adherence.

PCT therapists could help caregivers work out a comfortable way for them to play with their children at home.

PCT therapists may want to help link caregivers with physicians if their health problems are unaddressed.