Parenting with Bipolar Disorder: Coping with Risk of Mood Disorders to Children

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Abstract

Children of individuals with bipolar disorder (BPD) have increased risk for mood disorders and other adverse psychosocial outcomes due to genetic and environmental risk. Though parents with BPD are aware of increased risk to children, little is known about efforts undertaken in response or their perceived utility. Among parents who self-report with BPD, this study identifies key variables associated with parental coping with children's risk of mood disorders; and explores the relationship between monitoring children's moods and perceived coping efficacy. In this U.S. study, active parental coping with, and cognitive distancing from, child's risk were measured using novel scales. Parents (n=266) who self-identified as having BPD completed a web-based survey. They had at least one unaffected child. Most participants endorsed monitoring their children's moods. Monitoring was associated with increased perceived control over the child's well-being (p<0.005), but not feeling less worried. Active parental coping with risk to children was positively associated with active coping with own illness (β=0.25, p=0.001), family history (β=0.24, p=0.001), and self-report of current depression (β=0.16, p=0.037), explaining 13.8% of the variance (F=8.81, p<0.001). Cognitive distancing from the child's risk was positively associated with confidence in diagnosis (β=0.25, p=0.001), and negatively associated with self-report of current mania (β=−0.19, p=0.007), perceiving BPD as genetic (β=−0.26, p<0.001) and having more children (β=−0.20, p=0.004); explaining 16.2% of the variance (F=8.63, p<0.001). Parents' adaptation to their own BPD was modestly correlated with active coping with child's risk (r=0.15, p<.05) but not with cognitive distancing. The findings support the importance of understanding causal attributions and the value of genetic education and counseling for parents with BPD. Further research is necessary to elucidate the psychological benefits of active coping versus cognitive distancing from child's risk, and explore additional variables that predict parental coping with children's risk of mood disorders.

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Introduction

Bipolar disorder (BPD) is a common and frequently debilitating mood disorder that is highly heritable and has a significant public health burden. A population-based study estimated that the 12-month prevalence of BPD in mothers was 1.6%, and the lifetime prevalence was 2.5% (Boyd et al., 2011). An epidemiologically-representative sample of women with psychosis (including but not limited to bipolar psychosis) in London (Howard et al., 2001) found that 63% of the women studied had children, and the majority of mothers had more than one child.

Risk of Mood Disorders in Children of Affected Individuals

A large body of literature concludes that children of individuals with BPD have increased risk for many liabilities compared to offspring of parents without bipolar disorder: for psychopathology, most specifically mood disorders (Duffy et al., 2007; Henin et al., 2005; Hodgins et al., 2002); and negative effects on psychosocial and behavioral functioning (Bella et al., 2011; Henin et al., 2005). The empiric risk for a first-degree relative of an individual with BPD to have a mood disorder is approximately 30%–40%; that risk increases to upward of 60% if both parents are affected (Duffy et al., 2007; Peay & Austin, 2011).

Parental mood disorders are hypothesized to increase risk to children by several mechanisms: through genetic susceptibility (Duffy et al., 2007); and through compromises to parenting abilities and household environment caused by the parent's illness (Calam et al., 2012; Chang et al., 2001; Kahng et al., 2008; Romero et al., 2005). Many studies have demonstrated the need for interventions to reduce risk to offspring of individuals with mood disorders, including efforts to reduce parents' symptoms during acute illness (Kahng et al., 2008) and improve parenting skills and the home environment (Bella et al., 2011; Calam et al., 2012).

Illness, Risk, and Parenting Perceptions of Individuals with Serious Mental Illness

Individuals with serious mental illness tend to appreciate the complex etiology of their disorder, and commonly endorse both genetic and environmental risk factors (Meiser et al., 2007; Peay et al., 2009; Targum et al., 1981). A significant proportion of individuals with serious mental illness have been shown to be concerned about their children's risks for mood disorders (Austin et al., 2006; Quaid et al., 2001). These concerns appear to be related to worries about genetic predisposition along with perceived negative effects of their mental illness on parenting quality, family functioning and home stability (Austin et al., 2006; Calam et al., 2012; Hirschfeld et al., 2003; Wilson & Crowe, 2009). In a systematic review of qualitative studies exploring mothering with severe mental illness, Dolman and colleagues identified recurring themes (Dolman et al., 2013) related to affected mothers' perceptions and needs. These included the centrality of motherhood; difficulty managing dual roles as parent and individual with mental illness; guilt over perceived parental inadequacies and the impact of their illness on their children; and concern about genetic and environmental risks to their children (Dolman et al., 2013). Given advances in understanding the etiology of serious mental illness, parental concerns about risk to offspring may become more prevalent.

The majority of research on parenting and serious mental illness is focused on predictors of risk to children, and associated risk reduction interventions. Oyserman and colleagues (Oyserman et al., 2000) and Montgomery and colleagues (Montgomery et al., 2006) present critical reviews of literature in which affected parents are described in terms of the risk they pose to their children. This focus on pathology and risk is described by Wilson and Crowe (Wilson & Crowe, 2009) as reinforcing "inadequacy, fear, and dire predictions for their own and their children's futures" for parents with BPD. Investigation is needed into effective ways that parents manage their cognitions and affect surrounding risks to their children.

Conceptual Model

To investigate variables associated with parents' coping strategies for managing concerns about their children's risk for BPD, we selected the Transactional Model of Stress and Coping (Folkman et al., 1986). In this study, there are two potential stressors: experiencing BPD and perceiving a child to be at increased risk for a mood disorder. The model posits that in response to a stressor, individuals form illness appraisals. Those appraisals lead to coping, which (when effective) lead to adaptation over time. Evidence for the appropriateness of this model for a BPD population comes from a previous qualitative study (Peay et al., 2009). Participants described relationships among illness appraisals, coping with the illness, coping with risk to their children, their perceived coping efficacy, and their overall wellbeing that is consistent with the model. The large majority of parent participants were concerned about their children's risk for serious mental illness. Participants' coping efforts were often influenced by a perception of limited control over risk in the family. Many participants described using monitoring (watching/being aware) and/or cognitive distancing (identifying specific reasons why their relative would have less risk, e.g., because of protective personality factors) as methods of coping with family risk (Peay et al., 2009). Coping with risk to children through cognitive distancing has some conceptual overlap with Miller's blunting style of coping (Miller, 1987).

Study Aims and Population

We have described literature reporting that parents with BPD are aware of the risk to their offspring and that they engage in efforts to limit exposure of their children to the manifestations of bipolar disorder—efforts that are consistent with the research and clinical community's endorsement of the need for risk-reduction strategies for at-risk offspring (Brockington et al., 2011). This paper aims to evaluate how parents cope with the increased risk of mood disorders to their children; the data originated from a larger study that also investigated coping and adaptation of the parents to their own bipolar disorder, and their perceived risk to their children. The parents' increased active coping and dispositional optimism were positively associated with higher levels of adaptation, while denial coping was negatively associated with adaptation. Eighty-seven percent endorsed a somewhat greater or much greater risk for mood disorders in one's child(ren) than someone without a family history (Peay et al., 2013).

This paper focuses on novel measures of parental coping to manage the stress of perceived risk of mood disorders in one's children. The measures included active parental coping efforts and parental coping through cognitively distancing the child from the risk. We also assessed the relationship between watching the child's moods as a means of coping and perceived coping efficacy; and analyzed open-ended responses to a question about changes in parenting due to the child's chance for a mood disorder. We hypothesized that variables associated with parental coping with risk would include dispositional optimism, illness perceptions (perceived illness severity, etiology, risk to children, and confidence in diagnosis), and the parents' success in coping with their own illness.

Measures and Procedures

This cross-sectional survey was self-administered online from Fall 2009 through Fall 2010. The survey was advertised through mental health advocacy organizations in the United States and word-of-mouth recruiting. Adults who self-reported as having 1) BPD and 2) at least one unaffected biological child aged 30 or younger were eligible to participate. The reasoning for limiting the child's age to 30 or younger is that the average age at BPD onset is in the late 20s (Goodwin and Jamison, 1990), and parents may accurately attribute less risk to their children as the children age.

We aimed to understand the coping of individuals who *self-identify as having* BPD. The accuracy of participant self-identification was assumed, and the survey did not include a mental health evaluation. Though this is later described as a limitation, employing Internet-based surveys that recruit affected participants through a source known to be heavily enriched with the desired sampling population (e.g., advocacy and support organizations) offers the opportunity to capture larger and potentially more representative samples of those diagnosed with BPD. This study was approved by the National Human Genome Research Institute's Institutional Review Board.

Measures

Demographics—Data collected were respondents' age, age at diagnosis, sex, ethnicity, marital status, state of residence, number of child(ren), and age of child(ren). For those with more than one child, we queried birth order and sex of the child they worried about the most.

Illness characteristics and perceptions—Participants were asked to self-report whether they perceived themselves as currently manic or as currently depressed (yes/no/uncertain), and their confidence in diagnosis (i.e., their level of endorsement, on a 5-item response scale, that people close to them agree that BPD best explains their symptoms).

Benefit Finding and Coping Efficacy—We included a single item on benefit-finding: "My own experiences with bipolar disorder allow me to know what changes to watch for in my child's moods", and two parental coping efficacy items: 1. "If I watch my child's moods, I can feel less worried about him/her getting a mood disorder"; and 2. "Watching my child's moods makes me feel more in control of his or her mental well-being". All three questions were assessed using a 5 point scale anchored by "strongly disagree" to "strongly agree".

Independent variables

The Brief Illness Perceptions Questionnaire Revised (Brief IPQ)

The Brief IPQ (Broadbent et al., 2006) was used to measure self-assessed illness severity. The eight-item scale used a range of 0–9 anchored with "No effect at all" to "Severely affects my life". The measure was summed with higher scores indicating increased severity. Cronbach's alpha was 0.7.

Life Orientation Test (LOT)

The LOT (Scheier and Carver, 1985) was used to measure participants' dispositional optimism. The eight item ranked scaled has a range of 0–4 ("strongly disagree" to "strongly agree"). The items were summed with higher scores indicating greater optimism. Cronbach's alpha was 0.9.

Coping with BPD (Brief COPE)

We used the 28-item Brief COPE (Carver, 1997) to assess parents' coping with their own BPD. Principle components analysis identified two coping domains in this population, using 16 items that explained 48% of the variance. Component 1, "active/social support coping" loaded to 11 items and had a Cronbach's alpha of 0.9. Component 2, "self-blame/denial coping" loaded to 5 items and had a Cronbach's alpha of 0.7. For each factor, the items on a 1–4 scale ("I usually don't do this at all" to "I usually do this a lot") were summed and averaged, with higher scores indicating increased use of the coping domain.

Psychological Adaptation Scale (PAS)

Adaptation to bipolar disorder was measured using the PAS (Biesecker et al., 2013). The 20 items on the scale were ranked from 1–5 ("not at all" to "very much"). To score the PAS, items were summed and averaged, with higher scores indicating higher adaptation. Cronbach's alpha was 0.9.

Family History Risk Score

The survey included a brief set of questions about family history. Participants were asked, "If anyone, who else in your family has a serious mood disorder or other serious mental illness?" Based on these responses, the study investigators used empiric risk data to inform the provision of a risk score for each participant that was based on the number of first, second and third-degree relatives who were reported as affected (scores ranged from 1–5).

Perceived Risk to Children

Perceived risk was assessed with the following item: "Compared to a child who does not have anyone in his/her family with a mood disorder, in my opinion MY child has a _____ chance to have a mood disorder", with five response options ranging from 'much smaller' to 'much greater'. Participants with more than one child were prompted to think about risk for the child they worried about the most.

Perceived Etiology of BPD

This novel scale assesses perceptions about "how bipolar disorder happens in families". As described elsewhere (Peay et al., 2013), the 5-item scale comprises two components: factor 1 includes genetic and familial items and factor 2, attributes and environment. Items from each factor were summed and averaged, and higher scores indicated increased endorsement. Cronbach's alpha was 0.7 for factor 1 and 0.8 for factor 2.

Outcome Variables

Novel measures were developed to assess ways that parents manage the risk for mood disorders in their children. In-depth interviews of individuals with bipolar disorder and siblings of affected individuals (Peay et al., 2009) yielded strong and recurrent themes regarding perceptions of risk to children, concerns about parenting in light of that risk, and modifications to parenting. Analysis of the interviews generated item pools. We reviewed the content validity of the items by identifying content areas and mapping each item to one area. The items retained reflect the minimum necessary to cover the most important, distinct efforts identified by the interview participants.

The result of this process was the development of an eight-item *Parental Active Coping with Risk to Children* measure and a four-item *Parental Cognitive Distancing of the Child from the Risk* measure. The active coping measure was intended to assess active ways of managing risk for mood disorders and was measured on a scale of 1–5 ("I never do this" to

"I always do this"). The items are provided in Table 1. The parental cognitive distancing measure was intended to assess ways of denying or minimizing risk because of specific attributes/experiences perceived as being protective. The items are measured on a scale of 1–5 ("strongly disagree" to "strongly agree").

To provide further support for the validity of these coping measures, and more depth and breadth to our interpretation, we included an open-ended parenting question: "Please tell us more about how your child's chance for a mood disorder affects your parenting, if at all".

Statistical Analysis

Data were analyzed using the statistical software SPSS Statistics 17.0. The data were initially explored with descriptive statistics and tests of normality. The reliability of all measures was assessed using Cronbach's alpha coefficients. The novel outcome measures were evaluated with an exploratory factor analysis using principal components analysis to assess the interrelationships among the items and whether each measure represented one factor, as intended by the authors. The number of factors to be retained was guided by Kaiser's criterion (eigenvalues above 1) and inspection of the scree plot.

Bivariate associations between the independent variables and the two outcome variables were examined using Pearson's correlations for continuous or dichotomous variables and Spearman's correlations for ordinal variables. Linear regression was used to assess the relationship among independent variables and confounders on parental coping. After bivariate analysis, we entered all independent variables with a p value <0.25, then removed one variable at a time until only those with p-value <0.05 remained. We then added potential confounders one at a time, including in the model any confounders that changed the β values of any variable by more than 10%. Age, time since diagnosis, number of children, confidence in diagnosis and self-report of current mania and current depression were included as potential confounders in the regression analyses.

Results

Two hundred and sixty-six parents with BPD completed the online survey. Of 198 participants who provided data on ethnicity, 181 reported being Caucasian. The majority were female (83.7%), married (59.7%), and had more than one child (63.7%). The median age was 41–45, with a range spanning 18–20 to 61–65. Eighty seven percent endorsed a "somewhat greater" or "much greater" risk for their child to have a mood disorder than someone without a family history. Overall, participants reported relatively high confidence in their BPD diagnosis (on a 1–5 scale, mean of 4.2, SD=1.0). The majority reported not being currently manic (84.7%) or currently depressed (59.5%). Reports of affected relatives, and thus associated family-history risk scores, were high; 57.5% of the study sample scored a 4 or 5, representing having several close relatives affected with a psychiatric disorder. The mean dispositional optimism (LOT) score was 13.5 (SD=6.4); mean illness severity (BRIEF IPQ) score was 46.0 (SD=9.6); and mean adaptation (PAS) score was 2.6 (SD=1.0). The population is described in more detail elsewhere (Peay et al., 2013).

The large majority of parents in the study endorsed monitoring their child's moods (mean 3.8, SD=1.1 on a scale of 1–5). Among the participants who report monitoring, monitoring was not significantly related to less worry based on responses to the item "If I watch my child's moods, I can feel less worried about him/her getting a mood disorder" (unstandardized β 0.11, p=.231). However, monitoring was significantly associated with perceived control over the child's wellbeing, based on the responses to the item "Watching my child's moods makes me feel more in control of his or her mental well-being". A one-

point change in endorsement of "I watch my child's moods" was associated with a 0.344 increase in feeling more control (unstandardized β 0.34, p<0.005).

The majority of participants endorsed "agree" or "strongly agree" (mean 4.2, SD=0.9) to the benefit-finding statement that the parents' own experience allowed them to know what changes to watch for in their children's moods.

Exploratory Factor Analysis: Parental Coping Measures

Both parental coping measures were suitable for factor analysis. The Kaiser-Meyer-Olkin value was 0.8 for active coping and 0.7 for distancing coping; and the Bartlett's Test of Sphericity was highly significant for both measures (p<0.001), supporting the factorability of the correlation matrix (Tabachnick & Fidell, 2001).

Principal components analysis for each measure revealed the presence of one component with an eigenvalue exceeding 1, explaining 50.8% of the variance for the active parental coping and 64.7% for the distancing coping. Inspection of each scree plot revealed a clear break after the first component. After determining a one-factor solution for each measure, items on a measure were averaged. The mean score for the active parental coping measure was 3.4 (SD=0.9) and the mean parental cognitive distancing score was 2.6 (SD=1.0).We evaluated internal consistency of the items using Cronbach's alpha, which was acceptable for each measure (0.9 for active parental coping and 0.8 for distancing coping). Table 1 includes mean scores for each item on the two measures.

Correlations of Parental Active Coping and Parental Distancing Measures

Parental active coping with risk to children was positively correlated with active coping with one's own illness (r=0.261, p<0.001), adaptation to BPD (r=0.153, p<0.05), increased confidence in diagnosis (r=0.239, p<0.001), higher risk score based on family history (r=0.233, p<0.001), endorsing the benefit-finding statement of knowing what changes to watch for in their children's moods (r=0.305, p<0.001), endorsing that monitoring the child's moods resulted in higher perceived control (r=0.464, p<0.001), and endorsing that monitoring the child's moods resulted in less worry (r=0.286, p<0.001). See Table 2. Parental distancing of the child from the risk was negatively correlated with endorsing a genetic etiology (r = −0.163, p<0.05), and with endorsing a currently manic state (r = −0.168, p<0.05). More parental distancing was associated with having fewer children (r = −0.232, p<0.001), more confidence in the diagnosis r = (0.161, p<0.05), and endorsing that monitoring the child's moods resulted in less worry (r = 0.230, p<0.001).

Contrary to our hypothesis, neither illness severity, as measured by the BRIEF IPQ, nor perceived risk of mood disorders in children was correlated with parental coping with risk. In addition, dispositional optimism was not correlated with parental coping with risk. Parents' adaptation to their BPD was modestly correlated with active coping with child's risk and not correlated with cognitive distancing.

Regression Models for Parental Coping

Active Parental Coping with Risk—The initial regression model included the family history score, confidence in diagnosis, adaptation to BPD, and active coping with one's own illness. We added the potential confounders marital status, age, time since diagnosis, sex, self-report of current manic state and current depressive state, and number of children. The final regression model included parental active coping with own illness (β=0.25, p=0.001), risk score based on family history (β=0.24, p=0.001), and self-report of current depressive state (β=0.16, p=0.037), which were significantly associated with active parental coping with risk; together the variables explained 13.8% of the variance (F=8.81, p<0.001).

Unexpectedly, comparing those endorsing a current non-depressive state to those endorsing a depressive state predicted an increase in active parental coping (unstandardized β=.280, p=.037).

Parental Cognitive Distancing of the Child from the Risk—Included in the initial regression model were confidence in the diagnosis, endorsing a genetic etiology, and perceived risk to children. We added the potential confounders marital status, age, time since diagnosis, sex, self-report of current manic state and current depressive state, and number of children. The final model showed that confidence in diagnosis (β=0.25, p=0.001) and current manic state (β=−0.19, p=0.007) were significantly associated with parental distancing. Perceiving the etiology of bipolar disorder as genetic (β=−0.26, p<0.001) and having more children (β=−0.20, p=0.004) exhibited a negative association. Together the variables explained 16.2% of the variance (F=8.63, p<0.001). Comparing those endorsing a current non-manic state to those endorsing a manic state predicted a decrease in parental blunting (unstandardized beta - 0.510, p=.007).

Open-ended responses

The survey included an open-ended question about parental coping that read, "Please tell us more about how your child's chance for a mood disorder affects your parenting, if at all". As expected based on our finding that parental coping with risk to children was not correlated with perceived risk to children, these themes were not strongly clustered based on perceived risk to children.

The majority of parents' responses demonstrated active parental coping efforts. The active coping themes included:

- watchful awareness of the child's psychological state and moods,

- talking to the child about the child's moods,

- making changes to the child's environment, such as promoting calm, reducing stress, and striving to give child a home environment different than the one in which they grew up,

- maintaining open communication about mood disorders and the parent's own illness,

- being empathetic about the child's moods and experiences,

- seeking professional help and/or planning when to seek help, and

- teaching their child positive life lessons.

Many parents noted feeling guilty about passing risk to their children and/or for exposing their children to the effects of their own BPD. Some parents expressed a perceived lack of control over their child's ultimate mental health outcome, and a small subset expressed fatalistic beliefs that their child was destined to be affected with a psychiatric disorder. An overarching theme was the parents' responsibility to mitigate the risk in an effort to give a child the best possible chance, regardless of eventual mental health outcome.

Discussion

Most participants, regardless of perceived risk to children, monitor their children's moods. Our data suggest that more monitoring does not predict feeling significantly less worried about risk to children, but does have a significant effect on perceived control over the child's wellbeing. This finding reinforces the pragmatic approach of affected individuals that we

identified in previous research (Peay et al., 2009). This was further supported by the open-ended responses: parents do not feel that they have sufficient control with their own actions to greatly reduce the risk and thus reduce their worry, but they do perceive that they are able to modify their parenting and the environment to the overall benefit of their child(ren), regardless of the child's eventual mental health outcomes. The high endorsement of the benefit-finding statement that their own illness experience allows them to better monitor their children's moods suggests a specific area in which parents feel some control. Also, endorsement of this statement was correlated with active parental coping with risk to the child. Based on the known association between early identification of symptoms and initiation of treatment and better long-term outcomes (Hirschfeld, 2007; Lish et al., 1994; Swann et al., 2005), this represents an important effort by affected parents and a potential intervention target for those parents with BPD who have lower perceived coping efficacy.

Our primary outcome variables of parental active coping with risk and parental distancing of children from risk were assessed using novel scales. The use of interviews with "expert" informants (i.e., individuals with BPD and unaffected siblings) to create the scale items supports face validity. Clinically, we have significant experience providing clinical genetic counseling to individuals with psychiatric disorders, and clinical observations also support the face validity of the items. Responses to the open-ended question about changes to parenting provide concurrent validity. Finally, studies based on the Transactional Model of Stress and Coping frequently report coping styles that may be defined as active vigilance/monitoring types of coping versus those that involve avoidance/blunting.

In developing this scale, we aimed to move away from the perception of parents with BPD as vehicles of risk to their children. The scale includes positively-valenced items that focus broadly on parenting, home environment, and environment outside the home.

This study suggests that predictors of parental coping with risk to children are somewhat different than predictors of coping with risk to their own health (Peay et al., 2013). However, parents who use active coping with their own illness also use more active coping related to risk to children. Having a more significant family history may act as a stimulus for more active coping with risk to children. Those with more than one child used less cognitive distancing of the child from the risk, perhaps because having more than one child allows the parents to compare children and identify one for whom to attribute the most risk. Our data support a positive relationship between active parental coping and perceived coping self-efficacy, and between distancing coping and reduction in worry. The relationships between parental coping with risk to the child and perceived coping self-efficacy should be evaluated in future studies.

The findings that confidence in diagnosis, family history, and endorsement of genetic etiology predict coping support the importance of healthcare providers understanding parents' illness appraisals and providing education about BPD etiology. Genetic counseling may assist parents in coping with their own BPD as well as coping with their perceived risk for mood disorders in their children. To inform genetic counseling and other interventions, follow up research is need to identify whether distancing coping is less advantageous to parental well-being than is active coping. Previous research suggests that active coping may be associated with better long-term adaptation (Taylor & Stanton, 2007). In our study parental adaptation to BPD was correlated with, but did not explain significant variance in, active parental coping with risk to children. Coping through distancing the child from the risk was not associated with parental adaptation to their own BPD. Further efforts are needed to understand the outcomes of coping strategies related to children's risk on parent and child well-being.

We found that self-reported mania was associated with less coping through cognitive distancing, while self-reported depression was associated with increased active coping. Though this is an interesting finding worthy of follow up research, it may reflect the cyclical nature of bipolar disorder and/or effects of the manic or depressed state on response to the questionnaire rather than true differences in coping.

The BRIEF IPQ score of perceived illness severity and the perceived risk to children for a mood disorder were not associated with parental coping efforts; however, in this population perceived risk was skewed to high risk, possibly limiting our ability to evaluate the effect of perceived risk on parental coping. Additional studies are needed to replicate and provide explanation for our finding that perceived illness severity did not significantly affect parental coping with risk to children.

Limitations

The primary limitation of this study is the use of a sample with self-reported BPD. Given the optin nature of ascertainment through advocacy organizations, the study sample is likely to be self-selected for having an interest in the research question and being able to participate. Reports of affected relatives, and thus associated risk scores, were unexpectedly high, indicating a biased study sample, an unclear survey question, and/or an over-reporting of illness in relatives. Not all measures used in this study have been validated in a population with mental illness. A response rate was not calculated because the total number of individuals who had access to the web link but chose not to participate is unknown.

Stability and empirical validity data were not available for the novel parental coping outcome measures. We did not evaluate for social desirability bias; the fact that the mean score for the active parental coping measure was significantly higher than for the distancing measure may reflect more prevalent active parental coping, but also could represent social desirability bias (assuming that participants would perceive active coping as the "preferred" way of coping).

This study asked parents to think about risk and coping in an analytical way, when emotional responses may be important to appreciating parental coping with risk. Parents' perceptions that their own illness negatively impacts their relationships with their children (Dolman et al., 2013; Hirschfeld et al., 2003) reinforces the importance of follow up studies that evaluate the role of emotion in coping with risk to children.

Conclusions

The findings provide important data about how parents with BPD cope with their perceived risk of mood disorders to their children. These data fill an important gap in the literature: children of individuals with BPD are at higher risk, and their parents are aware of the increased risk. At the same time, experts recommend risk-reducing interventions that are largely focused on changes to parenting and home environment. Many risk-reducing interventions are likely to fall to the parents, who are managing their own illness as well. This study provides a first set of data about how parents are attempting to cope with the risk to their children, and how they perceive their coping efforts. To support coping, genetic education and counseling may assist healthcare providers in understanding parents' illness perceptions and educating them about BPD etiology, the diagnosis, and the risk for unaffected relatives based on the family history. Healthcare providers need to move away from a model of parents with mental illness as vehicles of risk to offspring. They should capitalize on parents' strengths and help them identify and evaluate their coping strategies. Given the resourcefulness demanded of parents with BPD, excellence in treatment and management is of high importance.

Acknowledgments

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Research Highlights

- Parents with bipolar disorder frequently monitor their children's moods

- Monitoring increases parents' perceived control over risk but does not reduce worry

- Family history and active coping with BPD predict active coping with child's risk

- Confidence in diagnosis and endorsing genetics predict distancing from child's risk

- Genetic counseling may be beneficial for the coping of parents with BPD

Table 1

Parental Active Coping with Risk and Cognitive Distancing: Items and Means

Parental Coping Items	Mean (standard deviation)
1. I watch my child's moods.	3.8 (1.1)
2. I teach my child how to monitor his/her own moods.	2.8 (1.3)
3. I teach my child to talk about his/her own moods with an adult.	3.4 (1.3)
4. I teach my child what to do if his/her moods become bad or unstable.	3.1 (1.4)
5. I teach my child how to make good life decisions.	4.3 (0.9)
6. I try to reduce my child's stress to protect his/her moods.	3.6 (1.1)
7. I try to keep our home extra stable to protect my child's moods.	3.3 (1.3)
8. I plan for what I would do if I noticed symptoms in my child.	3.4 (1.1)
Active Coping Overall Score	**3.4 (0.9)**
1. My child's personality makes him/her less likely to develop a mood disorder.	2.5 (1.3)
2. The way I am raising my child makes him/her less likely to develop a mood disorder.	2.7 (1.2)
3. The home environment my child has grown up in makes him/her less likely to develop a mood disorder.	2.6 (1.2)
4. My child's life experiences outside of the home make him/her less likely to develop a mood disorder.	2.8 (1.1)
Cognitive Distancing Overall Score	**2.6 (1.0)**

Table 2

Correlation of variables with active coping and distancing

	Active parental coping with risk to children	Parental distancing from risk to children
Endorsing current manic state	.005	.−168[*]
Endorsing current depressed state	.045	.−033
Confidence in diagnosis	.239[**]	.161[*]
# biological children (1 or > 1)	.−042	.−232[**]
Risk score based on family history	.233[**]	.028
Perceived risk to child	.082	.−113
Endorse genetic etiology	.077	.−163[*]
Dispositional optimism (LOT)	.046	.055
Illness severity (BRIEF IPQ)	.−017	.034
BPD experience allows knowing what to watch for	.305[**]	−.053
Monitoring child increases perceived control	.464[**]	.100
Monitoring child reduces worry	.286[**]	.230[**]
Active coping with own bipolar disorder	.261[**]	.035
Adaptation to bipolar disorder	.153[*]	.086

[**] Correlation is significant at the 0.01 level (2-tailed).

[*] Correlation is significant at the 0.05 level (2-tailed).