Original article

Coping with information style and family burden: Possible roles of self-stigma and hope among parents of children in a psychiatric inpatient unit

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A B S T R A C T

Objective: Parents of children who are hospitalized in inpatient psychiatric units must cope with significant challenges. One of these challenges relates to the way in which they cope with illness-related information. The current study examined the relationship between two such coping styles – monitoring and blunting – and family burden among parents of children in a psychiatric inpatient unit. Moreover, the possible moderating roles played by hope and self-stigma in these associations were also examined.

Methods: Questionnaires regarding coping with information style, self-stigma, hope and family burden were administered to 70 parents.

Results: A main positive effect of hope and a main negative effect of self-stigma were uncovered. An interaction between self-stigma and monitoring was also revealed, suggesting that for parents with high self-stigma, compared to those with low self-stigma, more monitoring was related to more burden.

Conclusions: Tailoring family interventions according to coping style and self-stigma is highly recommended as a mean to reduce the family burden of parents whose child is hospitalized in a psychiatric inpatient unit.

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1. Introduction

The mental health problems of children and adolescents greatly impact the social, familial, educational and leisure domains of their parents’ lives, creating challenges and burden for them [1,2]. Many studies have in fact shown that parents of children with psychiatric disorders experience both objective and subjective burden [3]. The objective burden refers to the disrupted daily life routines of the family, and to the limitations on the social, occupational, and familial domains of quality of life, which arise as a result of the child’s disorder. The subjective burden refers to the relatives’ various psychological reactions, such as anxiety, frustration and depression [4]. It should be noted that the parents’ emotional reactions could affect the child’s symptomatology, which can in turn increase the parents’ emotional experience [5].

Previous studies have shown that objective and subjective aspects of family burden are correlated with patient characteristics, such as severity of symptoms and number of hospitalizations [5,6] and with family environment and support [4]. In addition, variables related to illness perception, such as insight into the illness and internalization of the stigma by parents were also found to be positively associated with the family burden experienced by parents of both adolescents and adults with psychiatric disorders [7,8].

Parents’ perceptions of their child’s psychiatric illness are based on the knowledge that was already in their possession prior to its onset (i.e., knowledge they may have picked up “on the streets”, often with negative and stigmatizing connotations; or via acquaintances they have with persons with serious mental illness), and on the information that they are either provided with or actively seek out from professionals, or from informal sources, after receiving their child’s diagnosis. These perceptions – or mental representations of the illness – are also related to the way these parents process and cope with their knowledge of their child’s illness.

In general, the literature distinguishes between two ways in which people tend to cope with threatening information: monitoring and blunting. Monitoring is expressed by seeking
threat-relevant information, whereas blunting is expressed by avoiding it [9]. Although there has been some criticism of the making of a distinction between approaching and avoiding the stressor, due to the multidimensionality of both approaching and avoiding (i.e., integrating dimensions, such as activeness, being emotionally constructive and stressor-oriented) [10], it seems that in health-related situations the monitoring and blunting distinction can uniquely illuminate the experience of coping with information [11,12]. Notably, coping that is related to either approaching or avoiding is seen as being neither “good” nor “bad”, per se; rather, the relative “goodness” or “badness” of types of coping are determined based on their consequences and their subjective experience [10].

The effects of monitoring versus blunting have been studied in different contexts. For example, two studies have shown the benefits and positive aspects of monitoring among soldiers who participated in a war [13], and among individuals in the process of rehabilitation from cancer [14]. In contrast to these positive effects, monitoring has also been found to be related to insomnia, whereas blunting has been associated with high sleep quality [15]. High monitoring has also been found to be associated with more distress among persons whose genetic testing for cancer revealed either indeterminate or positive results [16], whereas blunting has been associated with optimism and well-being among cardiac patients [17].

Several variables – including parents’ personal characteristics – may moderate the association between coping style and outcome. This idea is consistent with studies that have shown that self-efficacy moderates the association between blunting and outcome among cardiac patients [17], and with studies showing that the interaction between coping style and type of intervention are important in determining outcome [11].

Two characteristics of parents are examined as possible moderators of the association between coping with threatening information and family burden in the current study: hope and self-stigma. Whereas hope refers to a general attitude one has toward life, self-stigma refers to the mental representations one has with regard to illness. More specifically, hope is defined as a positive and realistic goal-oriented attitude toward the future [18,19], which acts as an important resource for individuals when they are coping with daily demands as well as with crises [20,21]. Hope has been found to be an important factor in the outcome of relatives of children and adults who have both physical and psychiatric illnesses [22–24].

Another factor that plays an important role in family burden is self-stigma, which is defined as the internalization of stigmatizing views held by members of the community (e.g., seeing the individual with mental illness as dangerous and incompetent; or, from the perspective of the parents of persons with mental illness, viewing one’s self as being responsible for the child’s illness) [25–28]. Studies on parents of persons with serious mental illness have examined parents’ self-stigma [7,28] and showed the negative consequences it had on family burden and parental stress [7,8]. Family members’ stigmatizing views seem to stem from their perception of the family as being an extension of the individual family member’s deviation and as perhaps being responsible for it [29]. The internalization of this perception refers to the parents’ self-stigma.

Parents’ self-stigma was found to mediate the relationship between their insight into the disorder (i.e., their awareness of the illness and its implications) and their sense of burden and distress [7,8]. In addition, parents’ opinions, perceptions and attitudes toward the illness were found to be related to the outcomes of both relatives and patients [30]. Parents’ concerns regarding disclosure of their child’s illness, due to the resultant stigma, were also found to be related to the self-stigma of children with psychiatric disorders [31], highlighting the importance of confronting the issue of stigma in the management of these illnesses.

The current study explored the possible moderating roles played by hope and self-stigma in the relationship between style of coping with threatening information (i.e., monitoring or blunting) and family burden, among parents of children in a psychiatric inpatient unit. We expected that blunting would be effective for parents with high levels of self-stigma, whereas monitoring would be more helpful for parents with low levels of self-stigma. We hypothesized that self-stigma would moderate the relationship between coping style and family burden; we also hypothesized that blunting would be associated with better outcomes in parents with high levels of self-stigma, and monitoring would be associated with better outcomes in parents with low levels of self-stigma. In addition, we tested in an exploratory fashion interactions between coping and hope, and coping and self-stigma, in order to trace the conditions under which monitoring or blunting would be most beneficial in reducing family burden.

2. Method

2.1. Participants

Eighty-three parents of children (mean age of the children = 10.30, SD = 2.18) who were hospitalized in a psychiatric inpatient unit were invited to participate in the study. Thirteen parents declined to participate as a result of being overwhelmed with the situation, of being afraid of emotional disclosure, or of not trusting that the collected information would be anonymous. All of the parents who declined to participate were fathers who were in the same age range as the fathers who did choose to participate. Additional information on non-participants was not available. The final sample consisted of 70 parents (65% of whom were women, 90% of whom were married, 74% of whom the child’s gender was male; mean age = 43.28, SD = 2.76; mean year of education = 4, SD = 2.68). Of the hospitalized children, 54.3% had a behavioral disorder; 34.3% had a serious mental illness, such as schizophrenia, bipolar disorder or major depression; and 11.4% had a communication disorder. Inclusion criteria were: inclusion criteria were 1) that this was the child’s first psychiatric hospitalization; 2) that participants were fluent in Hebrew; and 3) that participants signed informed consent forms. Exclusion criteria included having an organic or psychotic disorder.

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The inpatient unit in this facility is staffed by an interdisciplin- ary team working together with families. Treatment includes a weekly guidance session with parents and routine meetings with the psychiatrist and with the on-site school counselor. Parents are also required to visit their children twice a week and, in addition, the children return home either every weekend or every other weekend, depending on clinical considerations. The children are provided with psychotherapy, individually adapted school programs, and additional services during their transition back into the community, such as the involvement of a social worker when needed.

2.2. Instruments

2.2.1. Parental self-stigma scale

This is an adapted 26-item version [7] of the Internalized Stigma of Mental Illness Scale [32]. The scale was adapted for use
among parents, with all items referring to the parents’ experience of internalized stigma associated with their child’s mental illness (e.g., “I am ashamed or embarrassed to have a son or daughter with mental illness”). The scale was previously used with parents of adults and adolescents with serious mental illness [7,8]. Cronbach’s alpha of the scale in the current study was 0.92.

2.2.2. Hope scale [33]

This is a 12-item measure comprising two components: agency (goal-directed determination) and pathways (planning how to meet goals). It contains eight hope items and four filler items, which are not included in the score. The four agency items measure the person’s sense of successful determination in relation to meeting general goals. The four pathway items relate to a person’s cognitive appraisals of the ability to generate the means for overcoming goal-related obstacles and reaching goals. Each item is scored on a 4-point scale, ranging from “definitely false to definitely true”. The total is based on the sum of the eight hope items. Previous studies found this scale to be reliable and valid [18,33]. Cronbach’s alphas in the current study were found to be 0.88.

2.2.3. Family Burden Scale

Parents’ burden was assessed by Anar’s Hebrew translation [34] of the Family Burden Interview [35]. This scale is a 29-item questionnaire designed to assess how often the individual feels oppressed by various aspects of care giving. It assesses the frequency with which relatives experience these feelings on a 4-point Likert scale and was previously used among parents of persons with serious mental illness [36]. In the present study, Cronbach’s alpha for the scale was 0.838.

2.2.4. Miller Behavioral Style Scale [37]

This coping with threatening information scale, in its Hebrew version [38], was used to assess monitoring and blunting style. This self-report scale provides the participant with four hypothetical anxiety-provoking scenarios. Following the presentation of each scenario, eight statements reflecting possible ways to cope with the situation are offered. Four of the statements present the tendency for monitoring, and the other four present the tendency for blunting. Participants check off the statements that best describe them. Both the monitoring and the blunting scores are calculated, as they present independent tendencies [39]. In the current study, the reliability of the monitoring score was satisfactory (Cronbach’s alpha = 0.56). A relatively low reliability of the blunting score has also been found in previous studies [39,40], a result which has been attributed to blunting being a complex and heterogeneous set of phenomena [39].

2.3. Procedure

The study was conducted at a psychiatric hospital in Israel, in the children’s inpatient ward. After receiving approval from the hospital’s institutional review board (IRB), the third and fourth authors of this paper approached the parents of children who had been hospitalized in this facility during the previous two months. The researchers explained to them the purpose of the study and the anonymous nature of its data collection. After signing informed consent forms, parents were provided with the questionnaires.

2.4. Statistical analysis

First, descriptive statistics were calculated for all of the study variables. Second, any possible relations between the study variables and relevant parent variables were examined via inter-correlations (parent’s gender; parent’s age; parent’s years of education). The third stage of the analysis was a moderation analysis based on the model proposed by Hayes [41], which was carried out in order to analyze the extent to which the correlation between the coping variables (monitoring and blunting) and family burden was moderated by hope and self-stigma. Two separate analyses were conducted, one for each of the coping variables (monitoring and blunting). For the analyses we used the macro program developed for the SPSS software by Hayes [42]. Hayes’ approach to moderation allows for a direct estimate of different effects. That is to say, the relationship between two variables can be estimated at each level of the moderating variable, enabling one to track the exact point at which the interaction becomes significant.

3. Results

3.1. Descriptive statistics

Table 1 presents descriptive statistics of the study variables. As can be seen in the table, the sample of participants is characterized by higher monitoring than blunting, t(69) = 8.81, P < .001. In addition, the self-stigma of the parents in this study was higher than that which had been found among parents of adolescents in an outpatient adolescent unit in a previous study [8] (t(105) = 2.32, P < .01).

3.2. Inter-correlations between variables

We calculated Pearson correlations between the background variables and the study variables. No significant correlations were found between the background variables except for a positive correlation between the parent’s age and blunting (r = 0.31, P < 0.01). Based on these results, we included parental age as a covariate in the moderation analysis.

Table 2 presents the Pearson correlation between the study variables. Self-stigma was found to have a significant positive correlation with all of the other variables except for hope (i.e., family burden, monitoring and blunting). Hope was found to have a significant negative correlation only with family burden and not with the other variables. Monitoring and blunting were found to have a positive significant correlation with self-stigma, and family

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Descriptive statistics of the study variables.</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
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<tr>
<td>Hope</td>
<td>5.97</td>
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<tr>
<td>Self-stigma</td>
<td>2.06</td>
</tr>
<tr>
<td>Family burden</td>
<td>2.65</td>
</tr>
<tr>
<td>Monitoring</td>
<td>0.52</td>
</tr>
<tr>
<td>Blunting</td>
<td>0.24</td>
</tr>
</tbody>
</table>

* Scores are based on mean of YES/NO responses.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Inter-correlation between the study variables.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hope</td>
</tr>
<tr>
<td>Hope</td>
<td>1.00</td>
</tr>
<tr>
<td>Stigma</td>
<td>1.00</td>
</tr>
<tr>
<td>Family burden</td>
<td>–316</td>
</tr>
<tr>
<td>Monitoring</td>
<td>–0.05</td>
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<tr>
<td>Blunting</td>
<td>0.04</td>
</tr>
</tbody>
</table>

^ * P < .05. ^ ** P < .01.
burden was positively significantly related to monitoring but not to blunting. Monitoring and blunting were not found to be related to each other.

3.3. Moderation of self-stigma and hope

We built two separate multiple linear regression models for monitoring and blunting coping styles. Coping style, hope and self-stigma were dependent variables, and the interaction terms of coping style with hope and coping style with self-stigma were also tested as predictors; family burden served as an independent variable. Each of the models included age as a covariate. All of the variables were centered prior to the analyses.

The first regression model (see Table 3), with monitoring as a predictor, was found to be significant, \( F(6,50) = 8.19, P < 0.0001, R^2 = 0.496 \). Positive main effects of monitoring and self-stigma, and a negative main effect of hope, were found. Accordingly, higher monitoring and self-stigma and lower hope were associated with higher family burden. The interaction between monitoring and self-stigma was significant in the prediction of family burden (negative correlation), whereas the interaction between monitoring and hope was not significant.

The contribution (\( R^2 \) change) of both interactions (hope and self-stigma) together was significant (\( R^2 = 0.0794, F(2.50) = 3.936, P < 0.0259 \)). In order to understand the nature of the moderation, we divided the participants into four groups according to the medians of hope and self-stigma (high self-stigma and high/low hope and low self-stigma high/low hope) and calculated the correlation between monitoring and family burden within each group. The correlation between monitoring and family burden was significant only in the low self-stigma/high hope group (\( r = 0.65, P < 0.009 \)). Fig. 1 presents more specifically the effect of monitoring on family burden at various levels of hope and self-stigma. As can be seen in the figure, if self-stigma is high and hope is not too low, then the association between monitoring and burden is positive.

The second regression model was presented in Table 4. This analysis included family burden as the predicted variable, and blunting, age, hope, self-stigma, and the interactions between blunting and hope and blunting and self-stigma as predictors. The overall model was found to be significant \( (F(6,50) = 4.97, P < 0.0005, R^2 = 0.373) \). No main effect of the blunting style of coping was found, whereas a positive main effect of self-stigma and a negative main effect of hope were found. When examining the regression coefficient, it was found that none of the interactions were found to be significant predictors of family burden. The \( R^2 \) change of both interactions (hope/self-stigma with blunting) together was not significant \( (R^2 = 0.038; F(2,50) = 1.515, P = 0.2297) \). When examining the effect of blunting on family burden at various levels of hope and self-stigma, no significant results were found.

### Table 3

<table>
<thead>
<tr>
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<th>B</th>
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<th>P</th>
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<tr>
<td>Constant</td>
<td>3.73</td>
<td>0.38</td>
<td>9.68</td>
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<tr>
<td>Hope</td>
<td>−0.10</td>
<td>0.04</td>
<td>−2.40</td>
<td>&lt; 0.0203</td>
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<tr>
<td>Monitoring</td>
<td>0.58</td>
<td>0.24</td>
<td>2.38</td>
<td>&lt; 0.0212</td>
</tr>
<tr>
<td>Monitoring × hope</td>
<td>0.11</td>
<td>0.15</td>
<td>0.77</td>
<td>&lt; 0.4426</td>
</tr>
<tr>
<td>Stigma</td>
<td>0.42</td>
<td>0.12</td>
<td>3.44</td>
<td>&lt; 0.0012</td>
</tr>
<tr>
<td>Monitoring × stigma</td>
<td>−1.21</td>
<td>0.49</td>
<td>−2.49</td>
<td>&lt; 0.0163</td>
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<tr>
<td>Age</td>
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<td>0.01</td>
<td>−2.75</td>
<td>&lt; 0.0083</td>
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### Table 4

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<th>t</th>
<th>P</th>
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<tbody>
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<td>3.22</td>
<td>0.42</td>
<td>7.77</td>
<td>&lt; 0.0000</td>
</tr>
<tr>
<td>Hope</td>
<td>−0.10</td>
<td>0.05</td>
<td>−2.03</td>
<td>&lt; 0.0479</td>
</tr>
<tr>
<td>Blunting</td>
<td>0.10</td>
<td>0.52</td>
<td>0.20</td>
<td>&lt; 0.8442</td>
</tr>
<tr>
<td>Blunting × hope</td>
<td>0.56</td>
<td>0.37</td>
<td>1.53</td>
<td>&lt; 0.1321</td>
</tr>
<tr>
<td>Stigma</td>
<td>0.40</td>
<td>0.13</td>
<td>2.99</td>
<td>&lt; 0.0043</td>
</tr>
<tr>
<td>Blunting × stigma</td>
<td>−1.04</td>
<td>0.85</td>
<td>−1.22</td>
<td>&lt; 0.2279</td>
</tr>
<tr>
<td>Age</td>
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<td>0.01</td>
<td>−1.38</td>
<td>&lt; 0.1751</td>
</tr>
</tbody>
</table>

4. Discussion

This study examined the possible moderating roles of self-stigma and hope on the association between two types of coping with information styles (monitoring and blunting) and family burden, among parents of children who have been hospitalized in a psychiatric facility. Results showed main effects of monitoring, self-stigma and hope on family burden; that is, the more parents used monitoring in coping with information, the more self-stigma they experienced and the less hope they had, leaving them more vulnerable to experiencing family burden. In addition, the interaction effect showed that the negative effect of monitoring on burden was evident only among parents who had high self-stigma in comparison to those who had low self-stigma.

The finding that a monitoring coping style is related to a negative outcome is consistent with a few previous studies [16], but inconsistent with several others [14]. A possible explanation for the finding that monitoring can either be beneficial or stressful – depending on the situation – is that when an individual is in an acute and stressful situation, such as the one presented in the current study (i.e., a child’s psychiatric hospitalization), and when an individual is coping with the ongoing critical medical tests [16], monitoring might lead to even greater distress. By contrast, in a relatively chronic and non-acute situation, monitoring can be beneficial (e.g., two years after participation in a war [13], or in the rehabilitation process from cancer [14]). Thus, for parents who are coping with the acute situation of their child’s psychiatric hospitalization, the monitoring of knowledge seems to increase their distress.

As mentioned above, this negative effect of monitoring on burden was found for parents who had high self-stigma, a finding that implies that the combination of monitoring and self-stigma can be harmful and lead to high family burden. Due to the cross-
sectional nature of the study, however, interpretation of this finding must be made cautiously. That said, it could be that parents who perceive themselves as being responsible for their child’s situation and who see the illness’s implications as harmful (i.e., have a high degree of self-stigma) actively search for “confirmatory” information. Thus, rather than de-stigmatizing the information they already have, the newly attained data may actually strengthen the sense of stigma they feel. In such cases, a cognitive intervention aimed at reducing self-stigma and subsequently providing the opportunity for a “beneficial” type of monitoring might be implemented. Accordingly, forms of narrative enhancement and cognitive therapy, uniquely adapted for parents of children who are hospitalized with psychiatric illnesses and aimed at reducing their self-stigma [43], combined with personalized psychoeducation programs, should be instituted and examined for efficacy. Already, an in-hospital intervention for changing illness perceptions in the field of health psychology has been shown to be beneficial [44].

In addition to the central role of self-stigma in the association between monitoring and family burden, the current study showed main effects of hope and parent’s age on family burden. Evidently, hope seems to be an important resource for parents who are coping with their son’s or daughter’s mental disorder [36,45], as hope seems to contain both a certain kind of fundamental optimism and also a belief in one’s concrete ability to effect change [18]. A relatively older age of the parent was also found to be associated with decreased burden. This finding is in accord with a study on midlife in the United States that showed older parents were less likely than younger ones to experience the negative effects of having a disabled child, possibly due to an age-related attenuation of the stress of non-normative parenting [46].

Implications of the current study include the need to tailor interventions for parents according to the way in which they cope with threatening information and their level of self-stigma. In addition, special attention should be given to relatively young parents who seem to experience more burden than do older ones. While psychoeducational interventions provided for parents of children and adults with mental illnesses are considered evidenced-based [36,47–50], it seems that fine-tuning these interventions to the specific needs of each parent will likely increase their positive effects. For instance, for some parents, who have low self-stigma, providing them with information on their child’s illness might be beneficial. For others, however – i.e., those who have high self-stigma –, it seems important to first provide them with the opportunity to understand how this information will affect them and their sense of self. This idea is supported by research that has shown that parents’ insight into their child’s illness – i.e., being aware of the diagnosis and its implications – is related to self-stigma and consequently to increased burden and distress [7,8]. Thus, merely educating the parent regarding the child’s illness might be harmful if such education does not also address both the parent’s personal style of coping as well as his/her level of self-stigma.

The current study’s limitations include its cross-sectional design, which does not allow for conclusions regarding causality. In addition, the number of participants in the current study is relatively small, and the internal reliability of the blunting sub-scale was low to moderate. With these limitations in mind, we would recommend conducting further studies using larger samples and longitudinal designs in order to strengthen the current study results. These studies should also trace additional moderators in order to broaden our knowledge regarding the circumstances under which monitoring or blunting is beneficial.

Disclosure of interest

The authors declare that they have no competing interest.

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