Discrepancies Between Patients’ and Partners’ Perceptions of Unsupportive Behavior in Chronic Obstructive Pulmonary Disease

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The literature on chronic diseases indicates that partner support, as perceived by patients, contributes to well-being of patients in either a positive or a negative way. Previous studies indicated that patients’ and partners’ perceptions of unsupportive partner behavior are only moderately related. Our aim was (1) to investigate whether discrepancies between patients’ and partners’ perceptions of two types of unsupportive partner behavior—overprotection and protective buffering—were associated with the level of distress reported by patients with chronic obstructive pulmonary disease (COPD) and (2) to evaluate whether the direction of the differences between patients’ and partners’ perceptions was associated with distress (i.e., whether patient distress was associated with greater patient or greater partner reports of unsupportive partner behavior). A cross-sectional study was performed using the data of a sample of 68 COPD patients and their spouses. Distress was assessed using the Hopkins Symptom Checklist-25. Patients’ and partners’ perceptions of unsupportive partner behavior were assessed with a questionnaire measuring overprotection and protective buffering. Distress was independently associated with patients’ perceptions of protective buffering and discrepancies in spouses’ perceptions of overprotection. Regarding the direction of the discrepancy, we found that greater partner reports of overprotection as compared with patient reports were related to more distress in COPD patients. Our study showed that patients’ distress was associated not only with patients’ perceptions, but also with discrepancies between patients’ and partners’ perceptions of unsupportive partner behavior.

Keywords: concordance, relationship-focused coping, overprotection, distress, chronic illness

Chronic Obstructive Pulmonary Disease (COPD) is a chronic disease characterized by a progressive limitation of airflow. COPD patients generally experience dyspnea (breathlessness) and cough, resulting in restrictions in activities of daily life. Research has indicated that having COPD may be accompanied by considerable levels of anxiety and depression (Breines, 2003; Mikkelsen, Middelboe, Pisinger, & Stage, 2004). Taking into account the difficulties that the disease brings with it, COPD patients may have a high need for support from their spouses. Living together with a spouse has been associated with better adherence to medication regimens (Rand, Nides, Cowles, Wise, & Connett, 2004) and rehabilitation programs (Fischer et al., 2009). There are a few studies which have examined the role of partner support or social support in general in relieving distress of COPD patients (e.g., Grodner, Prewitt, Jaworski, & Myers, 1996; Marino, Sirey, Raue, & Alexopoulos, 2008; McCathie, Spence, & Tate, 2002). These studies have shown that patients’ evaluations of their social support, including the support of their partners, are associated with their well-being (Grodner et al., 1996; Marino et al., 2008; McCathie et al., 2002). However, the way partners provide support may not always be positively associated with patients’ well-being, as has been shown in research on patients with other diseases (Joekes, van Elderen, & Schreurs, 2007; Thompson & Sobolew–Shubin, 1993).

Coyne and Smith (1991) have described two types of spousal supportive behavior that may be perceived as unhelpful by the recipient: protective buffering and overprotection. Protective buffering stands for concealing worries, hiding concerns, and avoiding negative experiences. Overprotection means that the partner lacks confidence in patients’ capabilities, resulting in providing unnecessary help and attempts to restrict the patients’ activities. Former studies have shown that patients’ perceptions of overprotection and protective buffering are positively related to psychological distress of patients with cancer, postmyocardial infarction, asthma, and diabetes (de Riddler, Schreurs, & Kuier, 2005; Joekes et al., 2007; Kuier et al., 2000; Thompson & Sobolew–Shubin, 1993).

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ive behavior seems to be only moderately related to partners’ perceptions, indicating that couples do not always agree about the healthy partner’s behavior (Hagedoorn et al., 2000; Kuijer et al., 2000; Schokker et al., 2010). Dissimilarities between spouses’ perceptions of unsupportive partner behavior could be due to different perceptions of wanted and needed support. For example, spousal support that does not match the needs of patients was found to be associated with higher levels of patient distress after hematopoietic stem cell transplantation (Rini et al., 2011). Yet, the association between discrepancies in spouses’ perceptions of partner support and distress of patients has received little study. Pence and colleagues (2006) showed that patient–partner dissimilarities in perceived spousal responses to pain were associated with depression in patients with chronic musculoskeletal pain. In contrast, the work of Norton and Manne (2007) showed that broad disagreements between cancer patients’ and partners’ perceptions of supportive and unsupportive behavior were not associated with psychological distress. This finding could be due to the fact that few of these couples differed in their perceptions of supportive behavior, because the authors used stringent criteria for disagreement. Because discrepancies in perceptions may be relatively small, less stringent criteria were used for measuring discrepancies in the current study. We examined Coyne and Smith’s conceptualization of unsupportive behavior from the perspective of COPD patients and their partners to investigate the association between discrepancies in spouses’ perceptions and patients’ distress.

The direction of the discrepancy has been put forward as a factor that is important to take into account when studying concordance of spouses’ perceptions (Pence et al., 2006). Evaluating the direction of the discrepancy may result in a better understanding of the relationship between dissimilarities in spouses’ perceptions and patients’ distress. For example, it has been suggested that distressed patients are inclined to negatively evaluate their partners’ behavior because of their negative state of mind (Story & Bradbury, 2004). As a consequence, distressed patients might evaluate their partners’ behavior as more unsupportive than their partners. In the present study, we investigated the association between the direction of the discrepancies (i.e., more reported unsupportive behavior by either patients or partners) and COPD patients’ distress.

Our aim was to test three hypotheses: First, we hypothesized that patients’ perceptions of overprotection and protective buffering would be positively related to distress of the COPD patients. Second, we hypothesized that absolute discrepancies between patients’ and partners’ perceptions of overprotection and protective buffering would be positively associated with distress in the patients, in addition to patients’ perceptions. Regarding the direction of the discrepancies, we hypothesized that patients’ greater reporting of overprotection and protective buffering, as compared with their partners, would be associated with more distress in COPD patients.

Method

Participants

The participants were 68 patients with COPD, between 40 and 80 years of age, and their partners, recruited at the outpatient clinic for pulmonary diseases of the University Medical Center Gro-ningen (UMCG) and at the Rehabilitation Center of the UMCG, at the start of the rehabilitation program. Both patients and partners had to be capable of filling out questionnaires. Four stages of COPD can be distinguished according to the Global initiative for Chronic Obstructive Lung Disease (GOLD, 2011). These stages are based on the ratio between Forced Expiratory Volume in 1 second (FEV₁) and the average FEV₁ of healthy people with the same age, sex, and height: FEV₁ ≥ 80% (GOLD I), FEV₁ between 50% and 80% (GOLD II), FEV₁ between 30% and 50% (GOLD III) or FEV₁ < 30% (GOLD IV), all in the presence of a FEV₁/FVC ratio < 70%. A high GOLD stage is associated with more pulmonary symptoms. Only patients diagnosed with GOLD stage II–IV for at least half a year were included in the study, because pulmonary symptoms may go unnoticed in GOLD stage I.

The mean (M) age of participating patients was 64 (standard deviation [SD] = 9.5) and the mean age of partners was 62 (SD = 9.7) years. Almost half of the patients (47%) and partners (46%) had a low level of education (primary school and/or vocational training for 12–16-year-olds). Most of the couples were married (88%) and had been in a relationship for 34.2 years on average (SD = 14.2). Slightly more male patients participated (57%) and more patients were included at the outpatient clinic (56%). GOLD stages II–IV were equally represented among patients. Almost one third of the patients used an antidepressant or a benzodiazepine (26%).

Procedures

Heterosexual couples that were recruited at the outpatient clinic were instructed to fill out the questionnaires separately at home. Couples that were recruited at the rehabilitation center filled out the questionnaire at the center but in separate rooms. Patients provided written informed consent for collecting data from their medical records. A total of 102 couples were eligible for the study. Fifteen couples refused to participate; 19 couples provided informed consent, but failed to return the questionnaires. The majority of the nonrespondents explicitly stated that they felt too ill to complete the questionnaire. The other 68 couples completed the questionnaires (response rate of 67%).

Measures

Overprotection and protective buffering by partners. Patients’ and partners’ perceptions of overprotection and protective buffering by partners were measured with a questionnaire developed by Buunk and colleagues (Buunk, Berkhuyzen, Sanderman, & Nieuwland, 1996), based on the work of Coyne and Smith (1991). The questionnaire was similar for patients and partners, except for minor differences in wording. Patients rated how often their partners engaged in overprotection and protective buffering (patients’ perceptions) and partners rated their own overprotective and protective buffering behavior (partners’ perceptions). Overprotection was measured with six items. An example of an item that patients were asked to rate is: “My partner continuously keeps an eye on me.” The protective buffering scale consists of eight statements. An example of an item that partners were asked to rate is: “I try to hide my worries about my partner.” Items were rated on a 5-point Likert scale ranging from never (1) to very often (5).
The internal consistency (Cronbach’s alpha) of the protective buffering scale was 0.67 for patients’ perceptions and 0.63 for partners’ perceptions. The internal consistency of the overprotection scale was 0.80 for patients’ perceptions and 0.55 for partners’ perceptions. Removing the item with the lowest item-total correlation did not improve the internal reliability of the overprotection scale measuring partners’ perceptions.

We calculated absolute discrepancies between patients’ and partners’ perceptions of both protective buffering and overprotection by taking the mean absolute difference between patients’ and partners’ perceptions per item (the discrepancies measure). This way, we were able to assess subtle discrepancies in spouses’ perceptions of unsupportive partner behavior. We measured the direction of the discrepancies by taking the mean of the differences between patients’ and partners’ perceptions per item (the direction measure). Similar to the scoring used by Benyamini, Medalion, & Garfinkel (2007), we subtracted partners’ ratings of overprotection and protective buffering from patients’ ratings, so that positive scores indicate that patients report more unsupportive partner behavior and negative scores indicate that partners report more unsupportive behavior.

Psychological distress. Psychological distress of patients was measured with a Dutch translation of the Hopkins Symptom Checklist-25 (HSCL-25; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). Because we were unable to get into contact with the author and inquire about the quality of the translation, we asked a team of professional translators to inspect the translation. They suggested minor revisions in the wording of two items. The questionnaire consists of 25 items measuring symptoms of anxiety and depression. Patients had to rate symptoms in terms of feeling blue, trembling, and crying easily. Patients were asked to rate symptoms experienced during the past week as ranging from never (1) to always (4). A higher score implied more psychological distress (range: 25–100). The internal consistency was sufficient (Cronbach’s alpha = .93).

Statistical Testing of the Hypotheses

To test the hypotheses, the correlations between the variables under study were inspected and three multiple regression analyses were performed. First, the associations between gender, age, education, occupational status, marital status, disease stage, time since diagnosis, use of antidepressants, and the variables under study were examined. Only patients’ level of education and gender were associated with patients’ distress and one of the variables under study. Level of education and gender were therefore included as covariates in a first step in all the analyses. Patients’ perceptions were entered in a second step in all analyses in order to control for their shared variance with patient–partner discrepancies. The discrepancies measure was entered in a third step in the analysis on the absolute discrepancies in spouses’ perceptions. The direction measure was entered instead of the discrepancies measure in the analysis on the direction of the discrepancies. All analyses were performed using data from 68 couples.

Results

Patients’ perceptions of overprotection and protective buffering. The mean scores of overprotection and protective buffering, presented in Table 1, were within the range of means found in other studies (Kuijer et al., 2000). Table 1 shows that patients’ perceptions of both overprotection and protective buffering were bivariately positively associated with distress of patients. When both types of unsupportive behavior were jointly regressed on distress, only protective buffering was associated significantly with patients’ distress (see Table 2). Together, patients’ perceptions of overprotection and protective buffering explained 24% of the variance in distress of COPD patients.

Discrepancies between patients’ and partners’ perceptions. We examined whether absolute discrepancies in spouses’ perceptions of unsupportive partner behavior were associated with patients’ distress. Discrepancies in perceived overprotection were bivariately related to distress (see Table 1), also when adjusted for patients’ perceptions (see Table 2). Discrepancies in perceived protective buffering were not associated with distress of patients, neither bivariately nor after adjustment for patients’ perceptions. Overall, absolute patient–partner discrepancies in both types of unsupportive partner behavior added 6% explained variance in distress of COPD patients, in addition to patients’ perceptions.

Direction of patient–partner discrepancies. Finally, we explored the direction of the discrepancies between patients’ and partners’ perceptions of overprotection and protective buff-

<table>
<thead>
<tr>
<th>Variable</th>
<th>Distress</th>
<th>OP patients</th>
<th>PB patients</th>
<th>OP partners</th>
<th>PB partners</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distress patients</td>
<td></td>
<td>.44**</td>
<td></td>
<td></td>
<td></td>
<td>44.26</td>
<td>11.37</td>
</tr>
<tr>
<td>2. OP patients</td>
<td></td>
<td></td>
<td>.45**</td>
<td></td>
<td></td>
<td>4.13</td>
<td>.80</td>
</tr>
<tr>
<td>3. PB patients</td>
<td>.60**</td>
<td>.45**</td>
<td></td>
<td>.16</td>
<td></td>
<td>2.41</td>
<td>.58</td>
</tr>
<tr>
<td>4. OP partners</td>
<td>.46**</td>
<td>.30</td>
<td>.29</td>
<td>.44**</td>
<td></td>
<td>2.07</td>
<td>.56</td>
</tr>
<tr>
<td>5. PB partners</td>
<td>.26</td>
<td>.04</td>
<td>.29</td>
<td>.44**</td>
<td></td>
<td>2.41</td>
<td>.56</td>
</tr>
<tr>
<td>6. OP discrepancies</td>
<td>.52**</td>
<td>.55**</td>
<td>.47**</td>
<td>.23</td>
<td>.10</td>
<td>0.90</td>
<td>.56</td>
</tr>
<tr>
<td>7. PB discrepancies</td>
<td>.19</td>
<td>.25</td>
<td>.31</td>
<td>.28</td>
<td>.20</td>
<td>0.89</td>
<td>.40</td>
</tr>
<tr>
<td>8. OP direction</td>
<td>.11</td>
<td>.76</td>
<td>.33</td>
<td>-.39**</td>
<td>-.26**</td>
<td>0.06</td>
<td>.83</td>
</tr>
<tr>
<td>9. PB direction</td>
<td>.30</td>
<td>.34**</td>
<td>.62**</td>
<td>-.23</td>
<td>-.57**</td>
<td>0.00</td>
<td>.68</td>
</tr>
</tbody>
</table>

Note. OP = overprotection; PB = protective buffering; discrepancies = absolute discrepancies between spouses’ perceptions; direction = the mean discrepancy between spouses’ perceptions (positive scores indicate that patients report more OP or PB and negative scores indicate that partners report more OP or PB). N = 68 couples.

*p < .05.  ** p < .01.
er. Partners’ greater reporting of overprotection as compared with patients’ reporting was associated significantly with patients’ distress, when controlling for patients’ perceptions (see Table 2). The direction measure of patient–partner discrepancies in perceived unsupportive partner behavior explained 13% of the variance in distress of COPD patients.

It might be that partners’ greater reporting of overprotection explains the association between absolute patient–partner discrepancies in perceived overprotection and distress. Therefore, we carried out an additional regression analysis in which distress was regressed on both absolute discrepancies in perceived overprotection and the direction of the discrepancy measure of overprotection (adjusted for patients’ perceptions and the covariates). This analysis showed that distress was associated with both the absolute discrepancies in perceived overprotection ($B = 0.37, t = 3.51, p = <0.01$) and greater partner reports of overprotection ($B = -0.57, t = -4.57, p = <0.00$).

**Discussion**

The aim of the study was to examine the associations between discrepancies in spouses’ perceptions of unsupportive partner behavior and distress of COPD patients. Patient–partner discrepancies in perceived overprotection were associated with more distress in COPD patients, over and above what patients’ perceptions explained. In addition, we investigated the role played by the direction of the difference. We hypothesized that patients’ greater reporting of unsupportive partner behavior would be positively associated with patients’ distress. Contrary to our hypothesis, we found that greater partner reports of overprotection, as compared with patient reports, were associated with more distress.

The findings on COPD patients’ perceptions of unsupportive partner behavior are similar to findings of other studies (Hinnen, Ranchor, Baas, Sanderman, & Hagedoorn, 2009; Joekes et al., 2007; Manne et al., 2007). Previous studies also found that bivariately both protective buffering and overprotection were related to distress; examined together, only one of the support types showed an independent association (Kuijer et al., 2000). When taking both types of support into account simultaneously, only protective buffering was associated significantly with distress in the present study. This suggests that COPD patients report higher levels of distress, especially when they perceive that their partner hides concerns and acts as if nothing is going on. However, another explanation might be that distressed patients elicit more protective buffering behavior from their partners.

We are the first to show that discrepancies between patients’ and partners’ perceptions of overprotection are associated with more distress of patients. This association was not explained by the direction of the discrepancy; patient–partner discrepancies in perceived overprotection were associated with patients’ ‘distress, over and above the direction of the difference. It might be that spouses have dissimilar perceptions of unsupportive partner behavior due to a lack of communication about their needs and ways of coping with the illness. Discrepancies in spouses’ perceptions may also result from distress of either patients or partners, since the burden of caregiving in COPD may lead to distress in partners as well (Pinto, Holanda, Medeiros, Mota, & Pereira, 2007). Previous research has shown that depressed individuals perceive different behaviors as being helpful than do never-depressed individuals (Vollmann et al., 2010).

The present study did not support the hypothesis that distressed patients report more overprotection and protective buffering in comparison to partners’ self-report of overprotection. Instead, we found that distress is associated with partners’ greater reporting of overprotection as compared with patients. Partners might distrust the patient’s capability of coping with the disease and might constantly keep an eye on the patient because of patients’ distress. Patients might not notice their spouses’ overprotective behavior, which is reflected in lower levels of overprotection reported by patients. However, this finding needs to be replicated to establish its robustness.

The present study has several strengths such as data from both patients and their spouses, and a high response rate (67%). Yet, the study has some limitations as well. A first limitation is the cross-sectional nature of the study. We cannot rule out that patients’ distress leads to more discrepancies in spouses’ perceptions of unsupportive behavior. Multicollinearity between protective buffering and overprotection may be a limitation of the present study as well. It is conceivable, protective buffering and overprotection

### Table 2

**Multiple Regression Analyses: Different Perspectives on Unsupportive Partner Behavior as Predictors of Distress of COPD Patients**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Patient analysis</th>
<th>Discrepancies analysis</th>
<th>Direction analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$t$</td>
<td>$p$</td>
</tr>
<tr>
<td>1. Gender patients</td>
<td>0.14</td>
<td>1.30</td>
<td>0.20</td>
</tr>
<tr>
<td>Education patients</td>
<td>-0.17</td>
<td>-1.66</td>
<td>0.10</td>
</tr>
<tr>
<td>2. PB patients</td>
<td>0.42</td>
<td>3.52</td>
<td>0.01</td>
</tr>
<tr>
<td>OP patients</td>
<td>0.20</td>
<td>1.70</td>
<td>0.09</td>
</tr>
<tr>
<td>3. PB discrepancies</td>
<td>0.38</td>
<td>2.99</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>OP discrepancies</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Note. OP = overprotection; PB = protective buffering; discrepancies = absolute discrepancies between spouses’ perceptions; direction = the mean discrepancy between spouses’ perceptions (positive scores indicate that patients report more OP or PB and negative scores that indicate partners report more OP or PB). $N = 68$ couples.
reflect different aspects of unsupportive behavior associated with distress in patients. The way we measured discrepancies may be limited as subtle discrepancies may reflect measurement error or self-other reporting bias. Another limitation is the low reliability of the scale that measured overprotection as perceived by partners. The overprotection scale measures a behavioral aspect (constantly keeping an eye on the ill spouse) and a cognitive aspect (distrust in the patient’s capability of coping with the disease) of overprotection. These two aspects of overprotection do not seem to be strongly related in the current sample of partners, while they are in fact related in the patients. The relationship between these two aspects of overprotection might warrant future research.

Investigating unsupportive partner behavior from both the provider’s and recipient’s perspective is valuable, since reports of patients and discrepancies between spouses are independently associated with distress of COPD patients. Couples could thus be encouraged to communicate more with each other about their ways of giving support. Exchanging perceptions and expectations regarding supportive behavior may in turn enhance the well-being of both patients and partners (Kuijer, Buunk, De Jong, Ybema, & Sanderman, 2004). Future studies may shed more light on the mechanisms through which dissimilarities in spouses’ perceptions of unsupportive behavior might negatively affect patients’ well-being, for example by looking into the role of wanted and unwanted support as well as spousal communication.

References


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Call for Papers for a Special Section of the *Journal of Family Psychology*: Spirituality and Religion in Family Life

Editors: Annmarie Cano and Annette Mahoney

This special section of the *Journal of Family Psychology* aims to stimulate the breadth and depth of rigorous scientific studies on the interface of faith and family life. Recent reviews demonstrate that spirituality and religion remain relevant to contemporary families, but critical gaps in the research literature compromise a balanced or deep understanding how faith operates in a family context (see Mahoney, Swank & Tarakeshwar, 2001; Mahoney, 2010; Mahoney, in press). For example, repeated studies suggest that higher religious attendance and salience helps to form (e.g., marital unions) and maintain (e.g., lowers divorce risk) traditional family bonds. But scarce research exists on specific positive or negative roles that spirituality and religion may play in families, especially in nontraditional or distressed families. To help address these gaps, we invite papers that address any of the following ways in which specific spiritual cognitions and behaviors centered on family life may:

- help or harm relational and individual adjustment, including, but not limited to, the sanctification of an aspect of family life, prayer for a family member, positive religious/spiritual coping strategies to cope with family issues, spiritual struggles or negative religious/spiritual coping tied to family difficulties, and perceiving negative family events as a sacred loss and/or desecration.
- facilitate or undermine the formation and maintenance of diverse types of families (e.g., cohabiting unions with and without children, same-sex couples with and without children, blended, foster, adoptive, and multi-generational families).
- be part of the problem or solution in coping with family-related distress. This includes, but is not limited to, difficulties in the formation (e.g., unwanted singleness or cohabitation, unintended pregnancy, infertility) and maintenance (e.g., coping with infidelity, partner or parent-child violence, chronic relational conflict, divorce, or a family member who has medical, mental health, or developmental problems) of family relationships.

Questions about the special section can be addressed to the section editors, Annmarie Cano, Ph.D. (acano@wayne.edu) or Annette Mahoney, PhD. (amahone@bgsu.edu) Submit manuscripts through the *Journal of Family Psychology* portal (http://www.apa.org/pubs/journals/fam) no later than **May 3, 2013** and please note that the submission is for this special section.