The impact of illness acceptance and helplessness to subjective health, and their stability over time: A prospective study in a sample of cardiac patients

Evangelos C. Karademas a, Irene Hondronikola a
a Department of Psychology, University of Crete, Rethymnon, Greece

Online publication date: 17 May 2010

To cite this Article Karademas, Evangelos C. and Hondronikola, Irene(2010) 'The impact of illness acceptance and helplessness to subjective health, and their stability over time: A prospective study in a sample of cardiac patients', Psychology, Health & Medicine, 15: 3, 336 — 346

To link to this Article DOI: 10.1080/13548501003668265
URL: http://dx.doi.org/10.1080/13548501003668265
The impact of illness acceptance and helplessness to subjective health, and their stability over time: A prospective study in a sample of cardiac patients

Evangelos C. Karademas* and Irene Hondronikola

Department of Psychology, University of Crete, Rethymnon, Greece

(Received 6 October 2009; final version received 1 February 2010)

The purpose of this prospective study was to examine whether illness acceptance and helplessness predict the subjective health of patients with a cardiac problem over a six months period, after controlling for baseline subjective health. A second aim was to examine whether acceptance and helplessness remain stable over time. One hundred and six cardiac patients participated in the study (66 males and 40 females. Mean age = 59.34 years; SD = 13.22). According to the results, acceptance predicted subjective health (i.e., physical functioning and emotional well-being) in a positive way, whereas helplessness predicted subjective health in a negative way. These effects were both direct and indirect through certain coping strategies (i.e., emotional reactions, wishful thinking and palliative coping). A further important finding was that illness acceptance and helplessness remained stable over time and had an independent impact on subjective health. These findings have significant clinical implications and suggest that interventions with a concurrent focus on illness acceptance and helplessness could promote patients’ subjective health.

Keywords: illness acceptance; helplessness; coping; cardiovascular disease; adaptation to illness

Introduction

According to the European Cardiovascular Disease Statistics 2008, cardiovascular disease is the leading cause of death in Europe, as it causes nearly half of all deaths (48%). It is also the main cause of disease burden, costing European economy 192 billion Euros per year (Allender et al., 2008). In addition, cardiovascular disease may trigger severe stress reactions that impact patients’ well-being (Bellg, 2004; Smith & Ruiz, 2002).

Self-regulatory models and several theories about stress suggest that a major pathway through which illness impacts well-being refers to related cognitions (e.g., Lazarus & Folkman, 1984; Leventhal, Meyer, & Nerenz, 1980). Indeed, there is consistent evidence about the gravity of illness-related cognitions in shaping well-being, as well as their mediating role in the relationship between illness and patients’ quality of life (DeVellis & Blalock, 1992; Fowler & Baas, 2006; Frosthom et al.,

*Corresponding author. Email: karademas@psy.soc.uoc.gr

ISSN 1354-8506 print / ISSN 1465-3966 online
© 2010 Taylor & Francis
DOI: 10.1080/13548501003668265
http://www.informaworld.com
Two such important illness cognitions are acceptance and helplessness. Illness acceptance has been described by McCracken and Eccleston (2003) as an effort to halt the search for a definitive solution with physical complaints and as a reorientation of attention towards positive aspects of life. Evers et al. (2001) conceptualized acceptance as the recognition of the need to adapt to a chronic illness while perceiving the ability to handle the aversive nature of the disease. In general, illness acceptance seems to represent a cognition that promotes the integration of the illness experience into the patient’s lifestyle. Research has demonstrated a consistent beneficial relation of acceptance to several health and well-being indices, including levels of anxiety and depression, physical functioning, engagement in normal daily activities, and illness prognosis across several diseases, such as chronic pain (McCracken & Eccleston, 2005; Vowles et al., 2008); rheumatoid arthritis (Persson, Berglund, & Sahlberg, 1996); multiple sclerosis (Evers et al., 2001), and diabetes (Richardson, Adner, & Nordström, 2001). Furthermore, intervention programs focusing at acceptance have already been developed (Hayes, Strosahl, & Wilson, 1999; McCracken, MacKichan, & Eccleston, 2007).

Illness-related helplessness represents a cognitive evaluation emphasizing the negative meaning of the illness as an uncontrollable and burdensome condition (Evers et al., 2001). It has also been described as a negative explanatory style consisting of negative evaluations for both the situation and self (Abramson, Seligman, & Teasdale, 1978; Seligman, 1975). Several models of illness describe helplessness as a critical factor (Turk & Rudy, 1992). According to these models, patients who perceive themselves as unable to control their illness are more vulnerable and, therefore, susceptible to further health problems. In fact, there is considerable evidence that helplessness is negatively associated with health-related quality of life in many illnesses, including cardiovascular disease (Anda et al., 1993; Everson et al., 1996), cancer (Everson et al., 1996; Jensen, 1987; Parle, Jones, & Maguire, 1996), rheumatoid arthritis (Smith, Christensen, Peck, & Ward, 1994) and gastrointestinal problems (Voth & Sirois, 2009). There is also evidence that helplessness is important for treatment outcomes, such as psychological well-being and pain reduction (e.g., Burns, Kubilus, Bruehl, Harden, & Lofland, 2003).

The impact of illness cognitions on health and well-being has often been attributed to the role of coping (e.g., Lazarus & Folkman, 1984; Leventhal et al., 1980). There is evidence that acceptance is associated with more use of active and problem-focused coping and higher coping capabilities (Richardson et al., 2001; Schussler, 1992), whereas helplessness is associated with more frequent use of passive coping strategies, such as denial and avoidance, and lower levels of coping efficacy (Evers et al., 2001; Voth & Sirois, 2009). Typically, strategies like denial or avoidance have been associated with worst levels of functioning and well-being, whereas problem solving or positive reappraisal with better outcomes (Compa & Lueck, 2002; Gilbar, 2005; Jim, Rischardson, Golden-Kreutz, & Andersen, 2006; Murberg, Furze, & Bru, 2004; Shen, Myers, & McCreary, 2006).

In general, illness cognitions seem to remain stable over time. Although some studies show that illness cognitions change over time (e.g., Sheldrick, Tarrier, Berry, & Kincley, 2006), most research suggests otherwise. For example, there is evidence that perceptions about illness chronicity, degree of control, consequences or illness causes remain rather steady over time (Devcich, Ellis, Gamble, & Petrie, 2008; Foster et al., 2008; Rutter & Rutter, 2007). However, very few studies have examined
the stability of illness acceptance and helplessness. Smith et al. (1994) in a four-year longitudinal study between rheumatoid arthritis patients found that helplessness was at least moderate stable over time. Also, Carver et al. (1993) in a sample of breast cancer patients showed that acceptance stayed constant over a 12-month period.

Regarding this study, the first aim was to examine whether illness acceptance and helplessness can predict, either directly or through coping, the subjective health of patients with a cardiac problem, over a six-month period. Based on the existing studies, our hypothesis was that acceptance is positively associated with subjective health, whereas helplessness is negatively associated, even after controlling for baseline levels of subjective health. The second aim was to examine whether these illness cognitions change over time. Our hypothesis was that they remain rather constant. This study is a part of a broader research effort to determine the interplay between several cognitive factors with respect to chronic patients’ well-being.

Method

Participants and procedure
Consecutive adult patients were recruited at the outpatient cardiology departments of two public hospitals in Crete, Greece. Inclusion criteria were a confirmed cardiac problem. Exclusion criteria were unable to speak or read Greek, understand the study protocol and provide informed consent. One hundred forty-two patients agreed to participate in the study. After obtaining written informed consent from the patient, a research assistant conducted a short interview in a hospital room (helplessness, acceptance, subjective health, and demographic variables were assessed at baseline). All patients who agreed to participate were invited to another appointment in the hospital premises six months later. Helplessness, acceptance, subjective health, and coping strategies were assessed at the follow-up. A phone-call of reminder was taking place a week prior to the scheduled appointment. Thirty-six patients did not attend the appointment. There were no significant differences concerning gender, age, marital status, education level, and type of cardiovascular disease between those who participated at both times and those who did not. The final sample consisted of 106 patients (66 males; 40 females). Their mean age was 59.34 years ($SD = 13.22$). The majority (75.50%) was married; 17% were divorced or widowed; 7.50% were single. Seventy-four had suffered a myocardial infarction in the past (35 of which had undergone a coronary angioplasty or a coronary artery bypass graft surgery); 20 were mainly dealing with angina pectoris (grades II or higher at the CCS grading system; Campeau, 1976); 12 were suffering from arrhythmias. The mean time elapsed since initial diagnosis was 9.71 years ($SD = 4.52$; $min = 2$). The study was approved by the Ethics Committees of the hospitals.

Measures

Illness-related cognitions
Helplessness and illness acceptance were measured with the relevant scales from the Illness Cognition Questionnaire developed by Evers et al. (2001). The helplessness scale focuses on the uncontrollable nature of the illness and its consequences on
everyday functioning (six items, e.g., ‘my illness frequently makes me feel helpless’; Cronbach’s $a = 0.88$ at baseline and 0.90 at follow-up). The acceptance scale reflects the patients’ efforts to diminish the aversive meaning of the illness by acknowledging its reality and believing in their ability to live with it (six items, e.g., ‘I have learnt to accept the limitations imposed by my illness’; Cronbach’s $a = 0.85$ at baseline and 0.82 at follow-up).

**Subjective health**

The Physical Functioning and the Emotional Well-being scales from the RAND 36-item Health Survey (version 1.0) were used to assess subjective health. The items of the RAND Health Survey are identical to the Medical Outcomes Study SF-36 (Stewart & Ware, 1992; Ware & Sherbourne, 1992). However, the RAND Survey employs a more straightforward scoring procedure, with the final scores ranging from 0 to 100 (higher scores indicate better health; see, http://www.rand.org/health/surveys_tools/mos/mos_core_36item.html). The Physical Functioning scale consists of 10 items regarding current limitations imposed by health status (e.g., lifting or carrying groceries; Cronbach’s $a = 0.92$ at baseline and 0.91 at follow-up). The Emotional Well-being scale consists of five items regarding personal feelings during the past four weeks (e.g., ‘felt downhearted and blue’; Cronbach’s $a = 0.78$ at baseline and 0.84 at follow-up).

**Coping strategies**

Illness-related coping strategies were measured with the Coping with Health Injuries and Problems Scale (CHIP; Endler, Parker, & Summerfeldt, 1998), as adapted in Greek (Karademas, Zarogiannos, Stravodimos, Gyftopoulos, & Constadinides, in press). The Greek version of the questionnaire consists of five factors: instrumental coping, which corresponds to problem-solving coping (eight items; e.g., find out more information; Cronbach $a = 0.79$); adherence to medical advice (four items; e.g., comply with advice; Cronbach $a = 0.78$); palliative coping, which refers to soothing strategies aiming in reducing the unpleasantness of the health problem (four items; e.g., stay in bed; Cronbach $a = 0.64$); wishful thinking (five items; e.g., fantasize about being healthy; Cronbach $a = 0.74$); emotional reactions that refer to the emotional consequences of the illness (four items; e.g., feel angry; Cronbach $a = 0.87$). Participants were asked to respond in relation to their own health problem during the last 6 months, by using a Likert type scale ranging from 1 (not at all) to 5 (very much). Coping was assessed only in the follow-up.

**Statistical analysis**

One-way ANOVAs were performed (as a preliminary analysis) in order to examine differences in illness cognitions and subjective health between the four ‘types’ of the participants’ main cardiac problem (i.e., patients with a myocardial infarction and coronary surgery, infarction without surgery, angina pectoris, and arrhythmias). Statistically significant relationships between the study variables were examined using Pearson product–moment correlations (two-tailed significance). Paired $t$-tests were conducted to identify possible baseline and follow-up differences in illness cognitions.
To examine the relations between illness cognitions, coping strategies, and subjective health measures, the structural equation modeling (SEM) technique was employed using Lisrel 8.54 (Joreskog & Sorbom, 1996). SEM (or path analysis) is a technique for examining a hypothesized model of causal assumptions by testing the relations (paths) between all variables included in the model simultaneously. Moreover, it allows the examination of direct relations between two variables, as well as indirect relations (i.e., whether two variables are connected to each other through a third one). The overall fit to the data is examined by the model’s chi-square value and certain other indexes. Each path is examined by the corresponding $T$-value (for further information, Kline, 2005).

According to the model we tested, follow-up physical functioning and emotional well-being were assumed to be predicted by all coping strategies, baseline illness acceptance and helplessness, as well as by baseline health scores (which were included in the model as control variables). In turn, coping strategies were assumed to be predicted by baseline illness cognitions and baseline subjective health scores, as well as by each other. All data were checked for assumptions of normality and homogeneity of variance before parametric analyses.

**Results**

No significant differences were noticed in baseline and follow-up illness acceptance, helplessness, and subjective health measures between the four ‘types’ of participants’ cardiac problems [$F$s(3, 102) < 2.25, $p$s > 0.05]. Both illness cognitions were concurrently and prospectively related to both physical functioning and emotional well-being (see Table 1): helplessness in a negative way and acceptance in a positive way ($p$s < 0.05). Several associations were also identified between illness cognitions and coping strategies, as well as between coping strategies and health measures. In particular, both baseline and follow-up helplessness were positively associated with palliative coping, wishful thinking and emotional reactions ($p$s < 0.01). Baseline illness acceptance was negatively associated with palliative coping and emotional reactions ($p$s < 0.05), while follow-up acceptance was negatively correlated to emotional reactions ($p$ < 0.001) and positively to instrumental coping ($p$ < 0.05). With the exception of the latter correlation, instrumental coping and adherence were not related to illness cognitions. With respect to the association between coping strategies and follow-up subjective health measures, palliative coping and emotional reactions were negatively correlated to physical functioning and emotional well-being ($p$s < 0.001); wishful thinking was negatively related only to emotional well-being ($p$ < 0.01); on the other hand, instrumental coping and adherence were unrelated to subjective health measures.

Helplessness and illness acceptance were moderately associated with each other (Pearson $r$s = −0.29 and 0.40, at baseline and follow-up, $p$s < 0.01). Paired $t$-tests showed that helplessness remained stable over the 6-month period [$t$(105) = −0.79, $p$ > 0.10; confidence intervals (95%) = −1.09–0.47]. The same was also true for illness acceptance [$t$(105) = −0.29, $p$ > 0.10; confidence intervals (95%) = −0.81–0.60].

With respect to the relations of illness cognitions to subjective health, the model tested in the path analysis provided a very good fit to the data ($\chi^2 = 1.88$, df = 2, $p$ = 0.39, NFI = 1.00, CFI = 1.00, RMSEA = 0.00). Helplessness was found to
Table 1. Descriptive statistics and intercorrelations of illness cognitions, coping strategies, and subjective health measures at baseline (T1) and follow-up (T2) (N = 106).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. T1 Helplessness</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. T1 Illness acceptance</td>
<td>-0.29**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. T2 Helplessness</td>
<td>0.61***</td>
<td>-0.26**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. T2 Illness acceptance</td>
<td>-0.28**</td>
<td>0.64***</td>
<td>-0.40***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Instrumental coping</td>
<td>-0.18</td>
<td>0.13</td>
<td>-0.13</td>
<td>0.21*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Adherence</td>
<td>0.11</td>
<td>0.14</td>
<td>0.09</td>
<td>-0.02</td>
<td>0.49***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Palliative coping</td>
<td>0.26**</td>
<td>-0.25*</td>
<td>0.28***</td>
<td>-0.07</td>
<td>0.08</td>
<td>0.03</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Wishful thinking</td>
<td>0.42***</td>
<td>-0.07</td>
<td>0.52***</td>
<td>-0.11</td>
<td>0.15</td>
<td>0.21*</td>
<td>0.28**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Emotional reactions</td>
<td>0.46***</td>
<td>-0.39***</td>
<td>0.57***</td>
<td>-0.43***</td>
<td>0.17</td>
<td>0.31***</td>
<td>0.30**</td>
<td>0.55***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. T1 Physical functioning</td>
<td>-0.23*</td>
<td>0.21*</td>
<td>-0.33***</td>
<td>0.32***</td>
<td>0.14</td>
<td>-0.11</td>
<td>-0.32***</td>
<td>-0.14</td>
<td>-0.27**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. T1 Emotional well-being</td>
<td>-0.51***</td>
<td>0.43***</td>
<td>-0.56***</td>
<td>0.40***</td>
<td>0.22*</td>
<td>0.06</td>
<td>-0.08</td>
<td>-0.22*</td>
<td>-0.49***</td>
<td>0.51***</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. T2 Physical functioning</td>
<td>-0.25*</td>
<td>0.36***</td>
<td>-0.45***</td>
<td>0.32***</td>
<td>0.13</td>
<td>-0.07</td>
<td>-0.46***</td>
<td>-0.18</td>
<td>-0.38***</td>
<td>0.69***</td>
<td>0.31***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>13. T2 Emotional well-being</td>
<td>-0.57***</td>
<td>0.32***</td>
<td>-0.61***</td>
<td>0.25*</td>
<td>0.18</td>
<td>0.05</td>
<td>-0.35***</td>
<td>-0.44***</td>
<td>-0.53***</td>
<td>0.25*</td>
<td>0.67***</td>
<td>0.45***</td>
<td>1.00</td>
</tr>
<tr>
<td>Mean</td>
<td>11.47</td>
<td>16.13</td>
<td>11.78</td>
<td>16.23</td>
<td>24.39</td>
<td>15.86</td>
<td>10.43</td>
<td>15.61</td>
<td>12.91</td>
<td>59.59</td>
<td>62.41</td>
<td>57.75</td>
<td>58.61</td>
</tr>
<tr>
<td>SD</td>
<td>4.50</td>
<td>4.28</td>
<td>4.71</td>
<td>4.55</td>
<td>6.77</td>
<td>3.71</td>
<td>3.18</td>
<td>4.86</td>
<td>4.04</td>
<td>28.12</td>
<td>19.72</td>
<td>27.48</td>
<td>22.31</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001.
predict follow-up emotional well-being directly and indirectly through wishful thinking and palliative coping. That is, it predicted wishful thinking and palliative coping, which in turn were related to well-being. Helplessness also predicted follow-up physical functioning through palliative coping (Figure 1). Illness acceptance predicted follow-up physical functioning directly and indirectly through emotional reactions and palliative coping. It also predicted emotional well-being directly and indirectly through palliative coping. Overall, helplessness had a detrimental impact on subjective health measures, whereas illness acceptance had a positive impact. Figure 1 presents the significant standardized estimates of the model.

Discussion

In this study, we examined the degree to which illness acceptance and helplessness predict the subjective health of patients with a cardiac problem over a six months period (after controlling for baseline subjective health), as well as whether they remain stable over time. According to our findings, higher levels of illness-related helplessness predicted decreased emotional well-being. Also, higher helplessness predicted more use of two coping strategies, that is wishful thinking and palliative coping. In turn, these strategies were associated with decreased emotional well-being and physical functioning. In other words, helplessness negatively affected patients’ subjective health both directly and through coping. On the contrary, higher levels of

Figure 1. Path analysis between baseline illness cognitions and subjective health measures, and follow-up coping strategies and subjective health measures, and β-coefficients. Note: $R^2$ physical functioning = 0.62; $R^2$ emotional well-being = 0.76. T1 = baseline assessment; T2 = follow-up assessment. Only significant paths are presented (for $p < 0.05$, two-sided). Paths from baseline health measures, which were included in the model as control variables, are presented in dotted lines. Covariances between baseline illness cognitions and health measures, as well as paths between coping strategies are not presented for simplicity reasons.
illness acceptance predicted increased levels of both emotional well-being and physical functioning. Furthermore, higher acceptance predicted lower emotional reactions and palliative coping. Hence, acceptance seems to be a protective factor for subjective health both directly and by lowering the use of maladaptive coping.

These findings are in line with previous research. Indeed, previous studies have shown the detrimental impact of helplessness in well-being (e.g., Jensen, 1987; Parle et al., 1996; Voth & Sirois, 2009). Also, helplessness has been associated with the use of coping strategies, which may comfort the unpleasantness of the condition (i.e., denial, avoidance) but are related to worst physical and emotional well-being (e.g., Compas & Luecken, 2002; Shen et al., 2006). On the other hand, previous research has demonstrated the beneficial impact of acceptance to health and well-being in chronic patients (Evers et al., 2001; Vowles et al., 2008). Acceptance has also been related to more use of adaptive coping (Gilbar, 2005; Jim et al., 2006).

In addition, our study showed that acceptance and helplessness had an independent impact on subjective health, as indicated by the path analysis, while the coping strategies through which they affected subjective health were not the same. Thus, it is possible that acceptance and helplessness reflect different cognitive-emotional processes that take place in the encounter of the disease and its consequences. Moreover, we found that helplessness and acceptance remained stable over the six-month period. This is in line with two previous studies that were, however, conducted within different patient populations (Carver et al., 1993; Smith et al., 1994). It is possibly that chronic illness cognitions remain relatively constant unless modified by major events, such as changes in health, or as a result of a systematic intervention (Rutter & Rutter, 2007).

At this point it should be noted, however, that neither of the illness cognitions was related to instrumental coping or adherence to medical advice. A possible explanation for this rather unexpected finding might be the heterogeneity of the sample. Participants were suffering from different cardiac problems and they probably followed different treatment regimens. Thus, they probably used coping strategies in diverse ways, which may have resulted in null associations.

In summary, we found that illness acceptance and helplessness represent stable illness cognitions, which can predict subjective health directly and through coping, independently of the previous subjective health levels. Therefore, the clinical implications of these findings are significant. The enhancement of illness acceptance and the attenuation of helplessness could form the base for an intervention aiming in promoting adjustment to illness and improving well-being. As McCracken, Carson, Eccleston, and Keefe (2004) have suggested, frequently a positive change in patients’ quality of life only occurs when some aspects of the illness are accepted as they are. Likewise, dealing with helplessness represents a crucial way for facilitating change and adaptation (Beck, 1999). Cardiac patients often have to deal with permanent changes in their health and life, and often are met with feelings of helplessness (Bellg, 2004). In this regard, it may be important for clinicians to incorporate screening tests for illness acceptance and helplessness in their assessment process, as well as focus on these in their intervention efforts. In fact, such efforts focusing on acceptance or hope that already exist (e.g., Hayes et al., 1999; Scheier & Carver, 2001). Typically, they are incorporated into cognitive-behavioral therapies (i.e., a combined effort to work on personal values, perceptions of self and the meaning of illness, together with more traditional efforts to modify coping and behavior). Our results suggest that
intervention approaches should centre on acceptance and helplessness in a parallel way, given their independent impact on subjective health.

However, this study is faced with certain limitations: the size of the sample was moderate; the sample was rather heterogeneous, as it consisted of patients with different cardiac problems; the study was based on self-reported data; only certain coping strategies were assessed (those included in the CHIP); only two of the RAND Survey subscales were used, while no measures of specific psychological difficulties (e.g., depression) were employed. Yet, we believe that the findings are significant. They showed that the study of overall illness evaluations, such as illness acceptance and helplessness, is important for understanding adaptation to illness, as well as for the development of appropriate intervention programmes.

References


