Assessment of Burden in Partners of Stroke Patients With the Sense of Competence Questionnaire

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Background and Purpose—The burden of caregiving can be harmful to both carers’ and patients’ functional health, but a specific instrument to assess the burden of caregiving as experienced by carers of stroke patients is not yet available. The Sense of Competence Questionnaire (SCQ), reliable and valid among caregivers of dementia patients, was evaluated on its metric properties in a population of partners of stroke patients.

Methods—As part of a multicenter study on quality of care, SCQ burden scores of partners and functional health of patients were assessed 6 months after stroke (group A; n=166). In this study group, the reliability in terms of homogeneity, the construct validity, and the clinical validity of the SCQ were evaluated. The test-retest reliability was assessed in a separate group (group B; n=47). The feasibility was examined in both study groups.

Results—The reliability of the total SCQ score was good (Chronbach’s α coefficient=0.83; intraclass correlation coefficient=0.93). Statistical support for construct validity was shown by principal-components analysis. Clinical validity was supported by the association between higher SCQ burden scores and patients’ impaired functional health: cognitive function (P<.03), disability (P<.10), handicap (P<.01), and quality of life (P=.02).

Conclusions—The SCQ is a reliable and valid instrument for assessing burden of caregiving as experienced by partners of stroke patients. It is suitable for use in cross-sectional stroke studies and may help to identify partners at risk for high levels of burden and caregiving-related problems. (Stroke. 1998;29:373–379.)

Key Words: psychometrics • caregivers • stress • stroke management

Although stroke is a major cause of long-term disability in Western societies, only a few authors have studied the consequences of stroke for the family. Most stroke patients live in the community and depend on long-term professional care facilities. Professional care is comprehensive, but many patients are foremost cared for by relatives, primarily partners, who also have to cope with the devastating impact of stroke. The expected rise of absolute stroke numbers and the continuing shift from institutional to community care will further increase the demands made on caregivers. Demands such as providing help with activities of daily living (ADL) may ultimately lead to unacceptably high levels of burden among caregivers. This burden often leads to physical health problems, social isolation, and emotional distress.

Not only the caregivers but also patients may suffer from higher levels of caregiver burden. For example, rehabilitation after stroke proves to be less successful if the partner feels stressed or depressed, inadequate social support showed to be a risk factor for poor physical and psychosocial outcomes, and stroke patients may be institutionalized to relieve the family. However, if the caregivers are healthy and feel capable of providing the care, this informal care proved to have a clearly positive effect on the recovery, rehabilitation, and even the survival of patients.

In view of the potential benefits of informal care, various interventions have been developed to reduce the caregivers’ burden, eg, visits by a specialist outreach nurse, long-term counseling, and early involvement of the caregivers in the planning of the patients’ discharge. However, there is no clear evidence of benefit of these interventions. An explanation may be that the interventions are not properly directed at the most burdensome demands made on caregivers. More knowledge of these specific demands is essential to determine how caregivers’ burdens can be best alleviated. Unfortunately, instruments to estimate the burden of caregiving are rare, whereas their metric properties in a population of caregivers of stroke patients are unknown.

The concept of burden can be defined in different ways. Distinction has been made between objective burden (eg, amount of time spent on caregiving or financial problems) and subjective or perceived burden, referring to the caregiver’s perception of the impact of caregiving-related demands or problems. Perceived burden was shown to have a major impact on the lives of caregivers.
The Sense of Competence Questionnaire (SCQ), derived from the family-crisis model and the Burden Interview, seems to be able to assess the caregivers’ perceived burden from a wide range of possible problems related to caregiving (see Appendix). The SCQ has been developed and repeatedly used to measure the burden in caregivers of dementia patients, and it has proved to be reliable (Chronbach’s \( \alpha = 0.79 \)) and valid for this population. The SCQ is able to distinguish various dimensions of perceived burden that also seem relevant and applicable to the burden of caregivers of stroke patients: (1) satisfaction with the impaired person as a recipient of care; (2) satisfaction with one’s own performance as a caregiver, and (3) consequences of involvement in care for the personal life of the caregiver. These dimensions were identified by factor analysis in a population of caregivers of dementia patients and were shown to have a high degree of correspondence with classifications made by a panel of 39 experts, including professional caregivers and clinical researchers.

We investigated the applicability of the SCQ for partners of stroke patients and whether the SCQ meets the metric criteria of feasibility, reliability, and validity.

**Subjects and Methods**

The SCQ comprises 27 items. The caregiver has to indicate the extent of agreement for each item on a 4-point rating scale. The burden score is calculated by summation of item scores (range of total score, 27 to 108); the higher the score, the higher the burden.

The reliability in terms of homogeneity, the construct validity, and the clinical validity of the SCQ were assessed in a multicenter study on quality of care (group A). For the test-retest reliability (or score stability), a separate group was used (group B). The feasibility of the SCQ was examined in both study groups.

**Subjects**

**Study Group A**

Group A consisted of 166 partners of noninstitutionalized patients who had been hospitalized because of stroke 6 months earlier. These patients were the survivors of a cohort of 760 consecutively admitted stroke patients who participated in a multicenter study on quality of care in 23 hospitals in The Netherlands. Of the 502 patients who survived up to 6 months after stroke, 17 patients (3%) refused to participate and 157 (31%) were readmitted to hospitals, stayed in rehabilitation centers, or lived in nursing homes or homes for the elderly. Of the remaining 328 noninstitutionalized patients, 236 (72%) lived with a partner. Sixty-two of these 236 partners (26%) refused to participate for various reasons (no time, too ill, and 2 were not interested). The 47 questionnaires were not completed with <10% missing scores.

**Data Collection**

Six months after stroke, patients were interviewed at home by trained research assistants using a semistructured questionnaire. Nineteen of the 166 participating patients (11%) were not communicative because of cognitive, speech, or language disorders. Data about these patients were collected in a proxy interview with their partners. Data on partners themselves were collected with a self-report questionnaire.

**Study Group B**

Group B consisted of 47 partners of noninstitutionalized patients who had been hospitalized in the Academic Medical Center because of stroke. Mean time between stroke onset and burden assessment was 17 months (range, 3 to 24 months). Patients were retrieved from the register of the Department of Neurology. Ninety-three of the 199 consecutively hospitalized patients (47%) had died, were institutionalized, or could not be traced. Fifty-eight of the remaining 106 noninstitutionalized patients (55%) lived with a partner. Eleven of these 58 partners (19%) did not participate (5 did not speak Dutch, 4 felt too ill, and 2 were not interested). The 47 questionnaires were completed with <10% missing scores.

**Data Collection**

Partners were interviewed twice over the telephone with an interval of 1 week by the same interviewer.

**Feasibility**

The feasibility of the SCQ was assessed in terms of the percentage of missing values per item, a standardized index of missing values, and the time needed to complete the scale. Standardized index of missing values is defined as the mean number of missing values per patient divided by the total number of items, multiplied by 100.

**Reliability: Homogeneity and Test-Retest Reliability**

**Homogeneity**

Homogeneity refers to the statistical coherence of the scale items and is based on the average correlation of items in a scale. To evaluate the homogeneity of the SCQ, Chronbach’s \( \alpha \) coefficients were calculated for the three subscales and for the entire SCQ. In general, homogeneity is considered to be good if \( \alpha > 0.70 \).

**Test-Retest Reliability**

Test-retest reliability reflects the stability of a scale based on the measurement of the same person on two occasions with the same instrument. The test-retest reliability was estimated by comparing the individual item scores of the two interviews by calculating weighted \( \kappa \). The \( \kappa \) expresses the amount of agreement beyond chance between the scores; values are interpreted as poor (\( \kappa < 0.0 \)), slight (\( \kappa = 0.0 \) to 0.20), fair (\( \kappa = 0.21 \) to 0.40), moderate (\( \kappa = 0.41 \) to 0.60), substantial (\( \kappa = 0.61 \) to 0.80), or almost perfect (\( \kappa = 0.81 \) to 1.00). We calculated intraclass correlation coefficients (ICC) for the separate subscale total scores and the total score of the entire SCQ. The ICC not only assesses the strength of correlation between two measurements but also detects systematic errors. Thus, if a set of items in one measurement is systematically lower or higher than in the other measurement, the ICC is correspondingly reduced. Values of the ICC are interpreted in the same way as \( \kappa \).

**Validity: Construct and Clinical Validity**

**Construct Validity**

Construct validity was statistically evaluated through principal-components analysis using oblimin rotation and a minimum of 2.0 for eigenvalues. In this analysis, a linear relation between item scores is used to examine whether these items can be described in a limited number of underlying constructs or factors. We considered the construct validity of the SCQ to be supported if this analysis revealed the same scale structure as found in a study among caregivers of dementia patients.

**Clinical Validity**

In this context, clinical validity refers to the extent to which different levels of patients’ impaired functional health are reflected in differences in burden scores. We assumed that for a valid SCQ, a higher partner burden should be significantly associated with an impaired functional health. Patients’ functional health was estimated for cognitive functioning (Mini-Mental State Examination), disability in ADL (Barthel Index), handicap (Rankin Scale), and quality of life (Sickness Impact Profile). For the various functional health aspects, differences between mean burden scores on the total SCQ and its subscales were calculated with unpaired t tests. To get more insight into the magnitude of the observed burden differences related to patients’ functional health, we additionally con-
TABLE 1. Descriptive Statistics of Sense of Competence Questionnaire (SCQ)

<table>
<thead>
<tr>
<th>Estimates of SCQ Total Scores*</th>
<th>Group A (n=166), 6 Mo After Stroke</th>
<th>Group B (n=47), 1st Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>43.5</td>
<td>42.0</td>
</tr>
<tr>
<td>Median</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>Mode</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>10.6</td>
<td>13.9</td>
</tr>
<tr>
<td>Minimum</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Maximum</td>
<td>84</td>
<td>77</td>
</tr>
<tr>
<td>Range of missing values</td>
<td>0–3.0%</td>
<td>0–1.3%</td>
</tr>
<tr>
<td>Standardized index of missing values</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Range of missing values indicates percentage of missing values per item; Standardized index of missing values = (mean number of missing values per patient/total number of items)×100.

*Possible SCQ total scores range from 27 to 108. A higher score indicates a higher level of burden.

The feasibility of the SCQ was indicated by the number of missing values and the time needed to complete the SCQ. Eight of the 174 participating partners in group A (5%) were excluded from the analysis because of >10% missing SCQ values (see “Subjects and Methods”). Five of these partners overlooked one page of the SCQ, and there were no indications that the missing items clustered. For study group A, including the 8 partners, the percentage of missing values per item ranged from 0% to 4.2%, and the standardized index of missing values was 1.7. After excluding the 8 partners, the percentage of missing values per item ranged from 0% to 3%, and the standardized index of missing values was 0.2 for group A and 0.1 for group B (Table 1). A relatively high percentage of missing values per item (2.4% to 3.0%) was observed in items addressing the partners’ feelings about the benefits and appreciation of their care and feelings that patients rely on their care only (Appendix: items 10, 11, and 24). The mean time that a trained research assistant needed to complete the SCQ during a telephone interview was less than 10 minutes. The partners needed 15 to 20 minutes to complete the SCQ.

Table 2 presents the reliability of the SCQ in terms of homogeneity and test-retest reliability. The homogeneity was satisfactory for subscale 1 (α=0.77), subscale 2 (α=0.75), and the entire SCQ (α=0.83), with the exception of subscale 3 (α=0.68), which was only slightly below the 0.70 criterion. All items contributed more or less to the scale’s coherence. The test-retest reliability per item, indicated by weighted κ, was substantial (range, 0.51 to 0.76) for almost all items of subscale 3 (consequences for personal life). The majority of the individual items of subscale 1 showed a moderate agreement (range, 0.43 to 0.71), whereas the κ values of the items on subscale 2 ranged considerably from −0.03 to 0.94. The stability of item 17 was the highest, whereas the items regarding the partners’ guilty feelings about the sufficiency and usefulness of their care (items 4, 6, and 18) showed poor κ values (0.27, −0.03, and −0.01, respectively). On the subscale level, however, the score stability was almost perfect: ICC=0.84 (subscale 1), ICC=0.89 (subscale 2), ICC=0.92 (subscale 3), and ICC=0.93 for the entire SCQ.

Statistical support for the construct validity of the SCQ is presented in Table 3. Principal-components analysis showed that the SCQ contains three factors with a minimum eigenvalue of 2.0, explaining 42% of the total variance. The three identified factors explained a higher percentage of the SCQ’s total variance than the three factors found among caregivers of dementia patients (34%). Most variance (24%) was explained by the factor addressing the consequences of caregiving for the carer’s personal life. The second factor found, addressing the satisfaction with one’s performance as a caregiver, explained 9% of the variance. The third factor, addressing the satisfaction with the impaired person as a recipient of care, explained another 9% of the variance. Our factor structure was not identical to the factor solution found in caregivers of dementia patients. Nevertheless, our factor structure was also able to identify the three main concepts. Support for the clinical validity of the SCQ is shown in Table 4. As hypothesized, higher SCQ total burden scores were associated with patients’ impaired functional health: cognitive functioning (P=.03), disability (P=.10), handicap.
The results showed that the SCQ is a reliable and valid instrument to assess the burden of caregiving as experienced by partners of stroke patients. The reliability of the total scores and the subscale scores, in terms of homogeneity and score stability, was sufficient. Construct validity was statistically supported by principal-components analysis, which revealed a scale structure able to identify the three main concepts as found among caregivers of dementia patients: (1) satisfaction with the impaired person as a recipient of care, (2) satisfaction with one’s own performance as a caregiver, and (3) consequences of involvement in care for the personal life of the caregiver.19,20 Evidence for clinical validity was shown by our finding that patients’ impaired functional health was reflected in higher SCQ burden scores on all subscale levels, especially subscale 3 (Appendix). The feasibility

TABLE 2. Homogeneity of SCQ as Indicated by Chronbach’s α and Test-Retest Reliability as Shown by Weighted κ and Intraclass Correlation Coefficients

<table>
<thead>
<tr>
<th>Subscale 1: Satisfaction with...a s recipient of care (7 items)</th>
<th>α Subscale If Item Deleted, Group A (n=166)</th>
<th>Weighted κ, Group B (n=47)</th>
<th>Intraclass Correlation, Group B (n=47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscale 2: Satisfaction with one’s own performance as caregiver (12 items)</td>
<td>0.75*</td>
<td>0.84</td>
<td>0.89</td>
</tr>
<tr>
<td>Subscale 3: Consequences of involvement in care for personal life of caregiver (8 items)</td>
<td>0.68*</td>
<td>0.92</td>
<td></td>
</tr>
</tbody>
</table>

*Chronbach’s α, without deleting an item.

(P<.01), and quality of life (P=.02). The effect sizes suggest that the patients’ impaired functional health, especially cognitive function (d=0.62) and handicap (d=0.72), had a moderate effect on the partners’ total burden scores. Additional analysis on the subscale level revealed that cognitive function (d=1.07), disability (d=0.57), handicap (d=1.17), and quality of life (d=0.88) had the highest impact on the subscale “consequences of involvement in care for the personal life of the caregiver.”

Discussion

The purpose of this study was to investigate to what extent the SCQ is able to assess the burden of caregiving in partners of stroke patients and whether the SCQ meets the metric criteria of feasibility, reliability, and validity. The results showed that...
of the SCQ in terms of the number of missing values was satisfactory, compared with missing value rates observed for well-known health status measures such as the Nottingham Health Profile (range of missing values, 0.4% to 1.3%; standardized index of missing values, 0.8), and the Medical Outcomes Study 36-Item Short Form Health Survey (range of missing values, 1.1% to 5.4%; standardized index of missing values, 3.1).32 The SCQ could be completed within 15 to 20 minutes by partners themselves and within 10 minutes by a trained research assistant during a telephone interview.

Although the SCQ is reliable and valid on an aggregated level, it contains a number of psychometrically weak items in terms of a relatively poor sensitivity, ie, a relatively low mean burden score in combination with a small standard deviation (items 4, 6, 7, 26, and 27), a relatively high percentage of missing values (items 10, 11, and 24), and a poor score stability (items 4, 6, and 18). Only two items, addressing the partners’ guilty feelings about the sufficiency of their care (items 4 and 6), were weak for more than one psychometric criterion. Furthermore, the arrangement of items in the factor structure we found was not identical to that found among caregivers of dementia patients.19,20 Although our factor structure explained a higher percentage of the SCQ’s total variance, indicating a better goodness of fit, 10 of the 27 items were loaded on different factors. There may be various reasons why we could not replicate a completely identical factor structure. Factors identified can be influenced by type of caregivers (our study included only spouses, whereas the study on dementia patients also included children), type of patients’ disease (acutely debilitating in case of stroke versus chronically progressive in case of dementia), disease duration (6 months after stroke in our study versus a mean of 4 years in the dementia study), age

| TABLE 3. Construct Validity: Principal-Components Analysis of 27 Items of SCQ (n=166)* |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
| Factor 1: Consequences of involvement in care for personal life of caregiver | Factor 1 | Factor 2 | Factor 3 | Communality |
| 9 Feels nervous/depressed | 0.67 | ... | 0.59 |
| 21 Privacy is regarded | 0.66 | ... | 0.47 |
| 19 Feels strained | 0.66 | ... | 0.53 |
| 1 Responsibilities weigh heavily | 0.63 | ... | 0.43 |
| 22 Social life has suffered | 0.60 | ... | 0.39 |
| 16 Feels resentful | 0.59 | ... | 0.58 |
| 20 Health has suffered | 0.57 | ... | 0.34 |
| 15 Has enough time for him/herself | 0.56 | ... | 0.37 |
| 5 Feels angry | 0.55 | ... | 0.48 |
| 12...cannot be left alone | 0.42 | ... | 0.31 |

| Factor 2: Satisfaction with one’s own performance as caregiver | Factor 1 | Factor 2 | Factor 3 | Communality |
| 18 Feels useful | 0.60 | ... | 0.43 |
| 17 Feels not pleased | 0.59 | ... | 0.60 |
| 2 It is clear how much care...needs | 0.59 | ... | 0.43 |
| 11...benefits from everything he/she does | 0.50 | ... | 0.26 |
| 13 Worries all the time | ... | 0.48 | 0.37 |
| 3 Capable to care | 0.39 | ... | 0.16 |
| 4 Could/should do more | 0.36 | ... | 0.18 |
| 10...appreciates care | 0.34 | ... | 0.14 |

| Factor 3: Satisfaction with...as recipient of care | Factor 1 | Factor 2 | Factor 3 | Communality |
| 27 Feels manipulated by... | ... | -0.84 | 0.72 |
| 25...tries to have his/her own way | ... | -0.78 | 0.62 |
| 26 Feels annoyed by... | ... | -0.78 | 0.63 |
| 8 Feels embarrassed over behavior of... | ... | -0.66 | 0.47 |
| 14...requests more than necessary | ... | -0.58 | 0.44 |
| 6 Could/should have done more | ... | -0.46 | 0.21 |
| 24...relies only on his/her care | ... | -0.46 | 0.40 |
| 23 Wishes a better relationship | ... | -0.46 | 0.43 |
| 7 Feels guilty about interaction | ... | -0.44 | 0.28 |

| Explained variance | 24% | 9% | 9% | 42% |

Loadings indicate correlation coefficients between the concerning factor and the items; Communality, proportion of variance of each item explained by the three factors; and ellipses, location of the item in the original factor structure of the SCQ in caregivers of dementia patients.19,20

*Using principal-components analysis with oblimin rotation for factor extraction (eigenvalue ≥2.0).
of patients (mean age of 66.9 years in stroke patients versus a mean age of 78.4 years in the dementia study), or type of care tasks (more physically demanding care tasks in stroke patients compared with dementia patients). Another explanation may be the statistical uncertainty due to random sample fluctuation. In view of these reasons for the differences found, and because of the lack of a clear underlying theoretical framework regarding the burden of caregiving, we do not recommend deleting or rephrasing items or redefining the original scale structure guided by one single study.

The SCQ is not an index like the Rankin Scale in which one scale score reflects one clearly defined clinical condition. Therefore, it is difficult to decide whether the SCQ burden score we found is high or low. Effect sizes may be helpful for the interpretation of burden scores, but more research is needed to estimate the clinical meaning more specifically. Comparison of levels and patterns of burden between caregivers of patients with different diseases may therefore be useful and may also clarify which specific aspects of patients’ dysfunction affect the various components of caregivers’ burden.

Our results showed a somewhat positively skewed distribution of the SCQ’s total scores. This was also observed in burden scores of caregivers of dementia patients. A tenable explanation for this concentration of total scores in the lower regions of burden is selection bias due to nonresponse (26% of group A and 19% of group B). No differences were found between participating and nonparticipating partners regarding patient characteristics in terms of age, sex, disability in ADL, and handicap. However, differences in partner characteristics could not be examined but seem plausible, particularly when we consider that some partners declined to participate because they felt too ill. Further studies are needed to assess the influence of partner characteristics on perceived burden. Assessment of “subjective” burden is also a possible explanation for the concentration of total scores in the lower burden regions. Partners often feel obliged to care for the patient and admitting the encountered problems makes it hard to keep up caregiving. A floor effect may also be an explanation for the concentration in the lower burden regions. As a result of a floor effect, differences in interpartner burden, as well as decrease of intrapartner burden, may not be detectable because these differences and changes occur beyond the lower limit of the scale. Although the concentration of SCQ total burden scores in the lower scale regions needs further investigation, the SCQ proved to be able to demonstrate the relationship between patients’ impaired functional health and higher scores of caregiver burden. Furthermore, the absence of a ceiling effect is a great advantage because it offers the possibility to use the SCQ as a tool to assess higher or increased levels of burden.

Although our data support relevant metric qualities of the SCQ, future studies are needed to evaluate its convergent validity. Therefore, the SCQ should be compared with other burden scales that incorporate the same or other dimensions of burden. Such an instrument might be the Caregiver Strain Index, which showed to be reliable and valid in carers of recently hospitalized hip surgery and older heart patients.

The SCQ proved to be a reliable and valid instrument for assessing the burden of caregiving as experienced by partners of stroke patients. Our study results showed that the SCQ is suitable for use in cross-sectional stroke outcome studies and may help to identify caregivers at risk for high levels of burden. As expected, partners caring for patients with an impaired cognitive function or serious handicap are particularly at risk. Furthermore, the SCQ is able to identify the specific characteristics of caregiving that put the greatest demand on the carers of stroke patients. Our findings indicate that the partners are especially burdened by the consequences of caregiving for their own personal life (subscale 3), more specifically, the burden of feeling heavily responsible, constantly worried, and that patients rely on their care only. Knowledge of risk groups and caregiving-related problems may offer useful guidelines for the development of interventions to provide support to caregivers.
Appendix

**Sense of Competence Questionnaire (SCQ)^{19,20}**

**Subscale 1: Satisfaction With... as a Recipient of Care**
8. I feel embarrassed over my... 's behavior.  
10. My... appreciates my constant care more than the care others give him/her.  
14. I feel that my... makes requests which I perceive to be over and above what he/she needs.  
16. I feel resentful about my interactions with my...  
25. I feel that my... behaves the way he/she does to have him/her own way.  
26. I feel that my... behaves the way he/she does to annoy me.  
27. I feel that my... behaves the way he/she does to manipulate me.

**Subscale 2: Satisfaction With One's Own Performance as a Caregiver**
2. It is clear to me how much care my... needs.†  
3. I'm capable to care for my... needs.†  
4. I feel that I don't do as much for my... as I could or should.  
5. I feel angry about my interactions with my...  
6. I feel that in the past I haven't done as much for my... as I could have or should have.  
7. I feel guilty about my interactions with my...  
9. I feel nervous or depressed about my interactions with my...  
11. My... benefits from everything I do for him/her.†  
15. The involvement with my... leaves me enough time for myself.†  
17. I feel pleased about my interactions with my... †  
18. I feel useful in my interactions with my... †  
19. I feel strained in my interactions with my...  
23. I wish that my... and I had a better relationship.

**Subscale 3: Consequences of Involvement in Care for the Personal Life of the Caregiver**
1. The responsibility for my... weighs heavily upon me over and above the responsibilities for my family, my job, etc.  
12. I feel that I cannot leave my... alone, he/she needs me continuously.  
13. I worry all the time about my...  
15. The involvement with my... leaves me enough time for myself †  
20. I feel that my health has suffered because of my involvement with my...  
21. I feel that the present situation with my... allows me as much privacy as I'd like.†  
22. I feel that my social life has suffered because of my involvement with my...  
24. I feel that my... seems to expect me to take care of him/her as if I were the only one he/she could depend on.  
†Items that need to be recoded in the opposite direction.

Response categories: 1, disagree very much; 2, disagree; 3, agree; 4, agree very much. The higher the score, the higher the level of burden.

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