**Supplementary material**

Table S1. Correlations with EQ-5D-3L and QASCI score with each other’s and sociodemographic variables of informal caregivers and PwD, (n=187)

|  |  |  |
| --- | --- | --- |
|  | **EQ-5D-3L** | **QASCI** |
| **Caregiver characteristics** |  |  |
| Gender | -0.216/\*\*\* | 0.149/\*\* |
| Age  | -0.314/\*\* | 0.150/\*\* |
| Educational level | 0.334/\*\*\* | -0.210/\*\* |
| Professional active | 0.262/\*\*\* | -0.206/\*\* |
| Familiar relationship (wife) | -0.224/\*\*\* | -0.229/\*\* |
| Familiar relationship (daughter) | -0.61 | -0.043 |
| Familiar relationship (husband) | -0.004 | -0.022 |
| Familiar relationship (son) | 0.245/\*\*\* | 0.234/\*\* |
| Years of care | -0.160/\*\* | 0.233/\*\*\* |
| Hours of care | -0.306/\*\*\* | 0.351/\*\*\* |
| EQ-VAS | 0.610/\*\*\* | -0.449/\*\*\* |
| EQ-5D-3L | - | -0.444/\*\*\* |
| Mobility, (EQ-5D-3L) | - | -0.030 |
| Self-care, (EQ-5D-3L) | - | -0.019 |
| Usual activities, (EQ-5D-3L) | - | 0.313/\*\*\* |
| Pain/discomfort, (EQ-5D-3L) | - | 0.519/\*\*\* |
| Anxiety/depression, (EQ-5D-3L) | - | 0.519/\*\*\* |
| QASCI score | -0.476/\*\*\* | - |
| Emotional burden, (QASCI) | -0.452/\*\*\* | - |
| Implications in personal life, (QASCI) | -0.514/\*\*\* | - |
| Financial burden, (QASCI) | -0.286/\*\*\* | - |
| Reactions to demands, (QASCI) | -0.187/\*\* | - |
| Perception of efficacy and control mechanisms, (QASCI) | -0.241/\*\*\* | - |
| Family support, (QASCI) | -0.136 | - |
| Satisfaction with role and family member, (QASCI) | -0.075 | - |
| **PwD characteristics**  |  |  |
| Gender | 0.166/\*\* | -0.034 |
| Age | -0.206/\*\*\* | 0.063 |
| Educational level | 0.200/\*\*\* | -0.086 |
| Years since diagnosis | -0.097 | 0.050 |
| Attend to day center | 0.064 | 0.047 |
| EQ-5D-3L | 0.233/\*\*\* | -0.363/\*\*\* |
| Mobility  | -0.167/\*\* | 0.253/\*\*\* |
| Self-care | 0.062 | 0.270/\*\*\* |
| Usual activities | -0.109 | 0.317/\*\*\* |
| Pain/discomfort | -0.117 | 0.183/\*\* |
| Anxiety/depression | -0.267/\*\*\* | 0.248/\*\*\* |
| EQ-VAS | 0.319/\*\*\* | -0.367/\*\*\* |
| QoL-AD | 0.278/\*\*\* | -0.471/\*\*\* |
| BDRS score | -0.170/\*\* | 0.401/\*\*\* |
| Changes in everyday life (BDRS) | -0.118 | 0.302/\*\*\* |
| Changes in habits (BDRS) | -0.149/\*\* | 0.321/\*\*\* |
| Changes in personality (BDRS) | -0.137 | 0.324/\*\*\* |
| MMSE (n=43) | 0.233 | 0.240 |

*\*\* p<0.05, \*\*\*p<0.01.* EQ-5D-3L, EuroQol 5-dimensions 3-level; EQ-VAS, EuroQol Visual Analogue. QASCI: Informal Caregiver Burden Assessment Questionnaire. QoL-AD: Quality of life in Alzheimer’s Disease. BDRS: Blessed Domain Rating Scale. Comparisons of the EQ-5D-3L index were analyzed using the Spearman’s Coefficient. Comparisons of the QASCI score were analyzed using the Pearson’s Coefficient.

Table S2. Influence of informal caregivers’ and PwD characteristics in caregivers’ QoL (EQ-5D-3L), model 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ***B*** | ***Std. Error*** | ***t*** | ***p*** |
| ***Caregiver characteristics*** |   |   |   |   |
| Age | -0.005 | 0.002 | -2.417 | **<0.05** |
| Gender (compared to female) | 0.058 | 0.038 | 1.526 | 0.129 |
| **Familiar relationship (compared with other family members)** |   |  |  |   |
| Husband/wife | 0.378 | 0.102 | 3.722 | **<0.001** |
| Son/daughter | 0.383 | 0.079 | 4.818 | **<0.001** |
| Brother/sister | 0.553 | 0.125 | 4.435 | **<0.001** |
| Grandchild | 0.413 | 0.225 | 1.834 | 0.068 |
| Nephew | 0.5 | 0.332 | 1.506 | 0.134 |
| Son/daughter-in-law | 0.391 | 0.198 | 1.976 | 0.05 |
| Emotional burden (QASCI) | -0.201 | 0.13 | -1.544 | 0.124 |
| Implications in personal life (QASCI) | -0.49 | 0.143 | -3.419 | **<0.05** |
| ***PwD characteristics*** |   |   |   |   |
| Age | -0.006 | 0.003 | -2.129 | **<0.05** |
| **Mobility (comparing with extreme problems)** |   |   |   |   |
| No problems | -0.065 | 0.05 | -1.309 | 0.192 |
| Some problems | 0.051 | 0.043 | 1.181 | 0.239 |
| **Pain/discomfort (comparing with extreme problems)** |   |   |   |   |
| No problems | 0.125 | 0.047 | 2.681 | **<0.05** |
| Some problems | 0.071 | 0.039 | 1.809 | **<0.05** |

PwD, Person with dementia. SD, standard deviation. QASCI: Informal Caregiver Burden Assessment Questionnaire. r2=0.44, Adjusted r2=0.39

Table S3. Influence of informal caregivers’ and PwD characteristics in caregivers’ overall burden (QASCI score), model 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | ***B*** | ***Std. Error*** | ***t*** | ***p*** |
| ***Caregiver characteristics*** |   |   |   |  |
| **Activities of daily living (compared with extreme problems)** |   |   |   |   |
| No problems | 0.002 | 0.026 | 0.087 | 0.931 |
| Some problems | 0.002 | 0.023 | 0.078 | 0.938 |
| **Pain/discomfort (compared with extreme problems)** |   |   |   |   |
| No problems | -0.095 | 0.028 | -3.362 | **<0.001** |
| Some problems | -0.09 | 0.02 | -4.439 | **<0.001** |
| **Anxiety/depression (compared with extreme problems)** |   |   |   |   |
| No problems | -0.04 | 0.028 | -1.441 | 0.152 |
| Some problems | -0.029 | 0.023 | -1.263 | 0.209 |
| **Hours of care (compared with more than 10 hours)** |   |   |   |   |
| Less than 1 hour | -0.05 | 0.032 | -1.581 | 0.116 |
| 2 to 4 hours | -0.027 | 0.028 | -0.978 | 0.33 |
| 5 to 7 hours | -0.018 | 0.025 | -0.74 | 0.46 |
| 7 to 10 hours | 0.006 | 0.022 | 0.263 | 0.793 |
| **Familiar relationship (compared with other family members)** |   |   |   |   |
| Husband/wife | 0.186 | 0.087 | 2.142 | **<0.05** |
| Son/daughter | 0.168 | 0.077 | 2.17 | **<0.05** |
| Brother/sister | 0.184 | 0.102 | 1.803 | **<0.05** |
| Grandchild | 0.2 | 0.084 | 2.388 | **<0.05** |
| Nephew | 0.401 | 0.16 | 2.5 | **<0.05** |
| Son/daughter-in-law | 0.288 | 0.096 | 2.993 | **<0.05** |
| **Education level (compared to university)** |   |   |   |   |
| Did not study | -0.045 | 0.045 | -1 | 0.319 |
| 4-years of school | 0.009 | 0.024 | 0.371 | 0.711 |
| 6-years of school | 0.034 | 0.032 | 1.053 | 0.294 |
| 9-years of school | -0.039 | 0.035 | -1.106 | 0.27 |
| 12-years of school | -0.036 | 0.021 | -1.725 | 0.087 |
| **Professional situation (compared to disability pension)** |   |   |   |   |
| Full-time | 0.106 | 0.043 | 2.463 | **<0.05** |
| Part-time | 0.157 | 0.049 | 3.204 | **<0.05** |
| Student | 0.048 | 1.168 | 0.041 | 0.967 |
| Domestic | 0.175 | 0.064 | 2.758 | **<0.05** |
| Unemployed | 0.151 | 0.047 | 3.182 | **<0.05** |
| Medical leave | 0.077 | 0.056 | 1.386 | 0.168 |
| Early retirement | 0.132 | 0.043 | 3.091 | **<0.05** |
| Unanticipated retirement | 0.077 | 0.041 | 1.895 | 0.06 |
| ***PwD characteristics*** |   |   |   |  |
| **Mobility (comparing with extreme problems)** |   |   |   |   |
| No problems | -0.022 | 0.031 | -0.719 | 0.474 |
| Some problems | 0.015 | 0.023 | 0.62 | 0.536 |
| **Pain/discomfort (comparing with extreme problems)** |   |   |   |   |
| No problems | -0.032 | 0.022 | -1.416 | 0.159 |
| Some problems | -0.022 | 0.021 | -1.038 | 0.301 |
| **Self-care (comparing with extreme problems)** |   |   |   |   |
| No problems | 0.034 | 0.037 | 0.919 | 0.36 |
| Some problems | 0.084 | 0.022 | 3.743 | **<0.001** |
| **Changes in daily habits (BDRS)** | 0.007 | 0.004 | 1.647 | 0.102 |
| **Changes in personality (BDRS)** | 0.015 | 0.005 | 3.176 | **<0.05** |
| **QoL-AD score** | -0.01 | 0.003 | -3.923 | **<0.001** |

PwD, Person with dementia. SD, standard deviation. QoL-AD: Quality of life in Alzheimer’s Disease. BDRS: Blessed Domain Rating Scale. r2=0.65, Adjusted r2=0.57*.*